



Digital Transformation in Accounting Profession; An Application in TRA 2 Region[#]

Alper Tazegul^{1*}, Saliha Gul Cimşit²

¹Faculty of Economics and Administrative Sciences, Kafkas University, Kars, Türkiye, ²Institute of Social Sciences, Kafkas University, Kars, Türkiye. *Email: alper.tazegul2004@gmail.com

Received: 21 January 2025

Accepted: 28 May 2025

DOI: <https://doi.org/10.32479/irmm.19789>

ABSTRACT

This study aims to determine the impact of digital transformation on the accounting and auditing profession from the perspective of accounting professionals. In this regard, the advantages, disadvantages, benefits and drawbacks of digital transformation were evaluated according to the opinions of professional members working in Kars, Ardahan, Iğdır ve Ağrı (TRA 2) region. Survey methodology was used for data collection. Five-point Likert scale was used in the survey questions. The collected data were analyzed using SPSS 20.0 software. According to the results of the analysis, it was found that digitalization has contributed significantly to the accounting profession and transactions have become faster and more efficient. However, in order to reap the benefits of digital transformation, it is observed that more training is needed. The need to employ trained and experienced staff to benefit from these opportunities comes to the fore in the research, which assesses that digital transformation will provide new opportunities and career paths for professionals. While a significant proportion of professional members who participated in the research stated that digitalization will add value to the profession, their assessment is that if professional development is in place, it will be easier for professional members to adapt to innovation and their transactions will be faster and more efficient.

Keywords: Digital Transformation, Accounting Profession, Accounting Auditing

JEL Classifications: M41, M49, C40

[#] This study is derived from the thesis entitled “Digital Transformation in Accounting and Auditing Profession; An Application in TRA 2 Region with the Perspectives of Accounting Professionals”, conducted under the supervision of Assoc. Prof. Alper Tazegül

1. INTRODUCTION

In the era of rapid technological progress, increasing penetration of digital technologies, and the dawn of the Fifth Industrial Revolution, the importance of digital transformation in maintaining the continuity of accounting and auditing has grown significantly. Digitalization and digital transformation have brought about significant changes in all sectors, regardless of their size and activities (Lazarova, 2019). Digital transformation represents a new structure within organizations, not only through technology itself, but also through its empowering capabilities (Meraghni et al., 2021). In order to keep up with these changes, business models are being reshaped through digital transformation. However, like any other field, accounting and auditing has

encountered new advantages and disadvantages in the face of digitalization.

Prior to digital transformation, accounting professionals performed routine tasks (e.g., issuing paper invoices and receipts) manually; now they can perform these tasks digitally, making month-end tracking much easier. The accounting profession has been affected by changes in the use of smart technologies and big data, especially in ways that require human-machine interaction (Leitner-Hanetseder et al., 2021). The digitalization of business has become widespread for companies seeking to leverage information technologies (Coman et al., 2022). As accountants use digital technologies such as artificial intelligence and interact with these machines, the nature of their work is evolving. This

transformation within the accounting organization significantly increases the efficiency and effectiveness of accounting processes (Borislav, 2018).

Recent developments in robotics and artificial intelligence are reshaping the world (Todorova, 2018). The rapid advancement of smart technologies has brought numerous advantages in terms of automating organizations and business processes. Leveraging these advantages, artificial intelligence algorithms and techniques enable processes such as data extraction, pattern recognition, classification, prediction, and optimization.

The involvement of the accounting profession in the fourth industrial revolution (Industry 4.0) (Slyozko et al., 2019) requires the monitoring, integration, and optimization of information and communication technologies. Communication between individuals, companies, and institutions is increasingly based on the exchange of digital data. The availability of digital services is a growing trend at the enterprise level.

These developments also have an impact on accounting and auditing. Accounting and auditing benefit directly and continuously from technological advances in big data. Digital transformation is also seen as an opportunity because it frees accounting professionals from burdensome tasks that can be performed by machines, allowing accountants to focus on value-added activities (Gonçalves et al., 2022). This process has been significantly accelerated by post-COVID-19 developments (Yoon, 2020).

As a natural outcome of the digital age, digitalization has had a profound impact on the accounting profession. Many professions are expected to lose relevance or undergo significant transformation in the digitalization process. This study examines the readiness of the accounting profession for digital transformation and discusses the advantages and disadvantages of digitalization from both the literature and the perspective of accounting professionals. The study begins with an introduction that explains the core dynamics of digitalization. Subsequent sections address the impact of digitalization on the accounting profession, and the final section analyzes survey data collected from accounting professionals. The study concludes with an evaluation of these analytical findings.

2. DEVELOPMENTS IN ACCOUNTING PRACTICES WITH DIGITALIZATION

Digital technology has the potential to shape the future strategies and competitive landscapes of organizations in the marketplace. The continuous development of digital technology has had a transformative impact on various professions. Accounting, one of the oldest and most traditional professions, has long maintained its core principles and methods until the advent of digital technology. With digital technology, the industry has undergone significant changes (Rastogi, 2022). Accounting and its practitioners have been among the most affected by this transformation compared to other fields (Çarıkcı, 2020). Developments in intelligent automation have changed the practices of many traditional professions, including accounting (Zhang et al., 2020). For example, before

technological advancements and computers became commonplace, accounting records were kept manually in ledgers, making access to specific information cumbersome and time-consuming. With industrial advances, record keeping, storage, and access to these records have been simplified, helping to reduce the informal economy by facilitating preventive measures.

Technological factors are expected to be the most influential in transforming the accounting profession in the coming years (Mălăescu and Avram, 2018). As accounting practices have started to be performed digitally, income and expenses are recorded digitally, invoices are automatically generated through portals, sent by email and easily accounted for. In the near future, it is expected that all business cash transactions will be recorded through artificial intelligence (Mert et al., 2022). With artificial intelligence expected to make a positive contribution to the accounting profession (Eznwa & Nkem, 2021), the emergence of tireless, error-free “accounting robots” working around the clock may not be too far away.

While the idea of robotic accounting applications assisting with record keeping, tracking, and auditing raises both excitement and concern, these technologies offer accountants the advantage of time and accuracy. In this scenario, accountants could focus more on value-added activities such as analysis, consulting, interpretation, and auditing rather than manual record keeping (Tekbaş, 2022). Artificial intelligence increases the speed and efficiency of internal business processes (Yaya and Bhuana, 2024). Through this transformation, the accounting profession is evolving towards account management (Bakulina et al., 2020), and developments in accounting practices indicate progress towards “accounting engineering.” The accounting profession is one of the industries where digital growth is observed and anticipated (Begum, 2019). The competencies of accounting professionals who embrace digitalization to adapt to the digital business world will also evolve (Ogaluzor, 2019).

3. LITERATURE REVIEW

Table 1 summarizes some of the studies in literature that examine the topic of the accounting profession and digitalization and are considered relevant to the purpose of this research. The studies are categorized by researcher, country, publication date, publication type, and content/findings.

4. DATA AND METHODOLOGY

In the research, the survey method was used to collect primary data. The survey, prepared in line with the research’s objectives, consists of five sections. The first section includes participants’ demographic characteristics and job-related information, the second section contains questions regarding the professionals’ approach to elements related to digitalization, the third section consists of questions about the accounting applications used, and the fourth and fifth sections contain scale questions showing the advantages and disadvantages of digitalization from the perspective of professionals. A 5-point Likert Scale was used in the

Table 1: Literature review

Author (s)	Country	Publication date	Publication type	Content/Findings
Surya	Indonesia	2024	Journal articles	The study examined the transformative impact of digital technologies on the accounting profession and collected data through surveys. The research concluded that success in the rapidly changing field of digital transformation in accounting requires the acquisition of new skills, the adoption of technology, and comprehensive strategies that interact with regulatory and technological developments.
Jackson and Allen	Australia	2024	Journal articles	Using the Technology-Organization-Environment model, the survey data was analyzed and revealed that collaboration between different organizations is essential to prepare accounting professionals for technological change.
Yaya and Bhuana	Indonesia	2024	Journal articles	Unlike similar studies, this study argues that technological advances do not threaten the accounting profession, but rather facilitate the work of accountants.
Al-Okaily et al.	Jordan	2024	Journal articles	The study, which examines the role of digital accounting transformation in improving job performance in the banking sector, suggests that the adoption of digital accounting has a significant impact on organizational performance.
Han et al.	United Kingdom	2023	Journal articles	The study reviews the literature on the impact of blockchain technology on accounting, and on AI-assisted auditing in particular.
Sidorova et al.	Russia	2023	Journal articles	The study using survey data from 254 participants aimed to explore the use of digital transformation in teaching accounting. The study concluded that learning through simulated tasks in real workplace environments has a positive impact on students' perceptions of their professional activities.
Almeida and Carvalho	Portugal	2022	conference	The ability of accounting education to equip students with technological and digital skills to meet the future demands and challenges of the profession was analyzed through interviews and focus groups with accountants and those who work with them. The research concluded that the future accountant will have a more technology-oriented profile.
Coman et al.	Romania	2022	Journal articles	This study, which collected data through surveys, concluded that digitalization is more than just a traditional transformation.
Meraghni et al.	Algeria	2021	Journal articles	This study examining the impact of digital transformation on accounting information systems within organizational structures concluded that awareness of the importance of digital transformation is low.
Eznwa and Nkem	Nigeria	2021	Journal articles	Research on the impact of artificial intelligence on the accounting profession, using a Likert-scale survey, found that accounting professionals need to integrate AI to maximize their work output.
Andreassen	Norway	2020	Journal articles	A case study within the technology-focused financial sector assessed the role of management accountants.
Yoon	Korea	2020	Journal articles	This study, which examined websites and professional reports of Korean companies that are considering transforming their accounting processes through technology, concluded that the afore-mentioned accounting technologies are inevitable and cannot be delayed.
Bakulina et al.	Russia	2020	Conference	The study on the impact of the digitalization of the agricultural economy on the accounting profession concluded that the accounting profession has been transformed to meet the needs of a digital society.
Zhang et al.	China	2020	Journal articles	A comprehensive assessment of technological developments used by accounting professionals was conducted.
Soğuksu	Turkey	2020	Journal articles	Using empirical findings based on content analysis, surveys, and interviews, a study examined, compared, and identified shortcomings in audit software used in accounting audits. It was found that organizations are developing custom, computer-based, independent audit software to better meet organizational needs.
Bilcan et al.	Romania	2019	Journal articles	This study, which aimed to explore the boundaries of digital transformation through the lens of cyber-accounting, concluded that true digital transformation will occur in the long term with the establishment of a new platform.
Slyozko et al.	Ukraine	2019	Journal articles	The study analyzing the transformation of the accounting profession concluded that the profession will change significantly under the influence of the new revolution.
Ogaluzor	Nigeria	2019	Journal articles	The study, which aimed to determine whether digitalization is a threat or an asset for accountants, collected data through surveys and tested hypotheses. The results of the analysis indicated that digitalization has a positive impact on the work of accountants.

(Contd...)

Table 1: (Continued)

Author (s)	Country	Publication date	Publication type	Content/Findings
Kokina and Blanchette	United States of America	2019	Journal articles	Study on the emergence of robotic process automation in accounting and finance concluded that organizations struggle with robotic process automation due to its complexity, which is related to understanding a process at the keystroke level and identifying potential errors in each process segment.
Yıldız and Ağdeniz	Turkey	2019	Journal articles	The study, which aimed to provide information on the technological infrastructure of Audit 4.0 - including the Internet of Things, Big Data and Artificial Intelligence - concluded that auditors need to have knowledge of these technologies and develop the ability to actively use them in audits if the profession is to survive in the future.
Borislav	Bulgaria	2018	conference	This study, which examined the impact of information and communication technologies on accounting activities in Bulgarian companies, concluded that the digitalization of accounting activities is essential.
Todorova	Bulgaria	2018	Journal articles	Finally, this study discussed the challenges facing the accounting profession and focused on possible future developments in the context of artificial intelligence.

Source: Authors' research

survey questions. The survey comprises a total of 32 questions. In creating the content of the survey used in the study, the following sources were utilized (Mert et al., 2022; Yakut, 2022; Tekbaş, 2018; Şalcı, 2021).

Research Problems:

1. What are the opinions of accounting professionals on the changes brought about by technological developments related to Industry 5.0 in Big Data?
2. What are the opinions of accounting professionals regarding developments in digitalization and electronic applications?
3. Are there statistically significant differences in the opinions of accounting professionals regarding digital transformation in the accounting and auditing profession according to: (a) gender, (b) professional experience, (c) education level, and (d) income level.

The population of the research consists of accounting professionals working in the provinces of Ağrı, Ardahan, Iğdır, and Kars in the TRA2 region. The survey was conducted through face-to-face interviews and Google forms.

According to the information received from the Union of Chambers of Certified Public Accountants of Turkey (TÜRMOB) during the implementation of the survey, there are 179 Certified Public Accountants (CPA) in the TRA2 region who are registered with the Kars Chamber of CPAs (Kars, Ardahan and Iğdır provinces) and the Van Chamber of CPAs (Ağrı province). Considering that digital applications can be used by all professional members and the universe is accessible, it was decided to include all professional members in the TRA 2 region in the scope of the research.

After determining the scope of the research, a database was created by contacting the President of the Kars Chamber of CPAs and the Ağrı Regional Representative and obtaining the contact information of the companies. An online survey form was prepared and both e-mail and face-to-face survey questions were sent to the professional members. In this context, 19 out of 179 professional

members did not want to participate in the study and the opinions of a total of 160 professional members were received and analyzed. This represents 89% of the population.

5. RESULTS OF THE RESEARCH

This part of the study presents the frequency distributions of the opinions of the professionals who participated in the research through the questionnaire and the results of the analyses carried out to test the problems. The answers to the questions given by the professionals who participated in the research were analyzed on the assumption that they were sincere and objective.

First, the frequency and percentage distributions of the responses of the professionals to the statements in the questionnaire are presented. Then, analyses of differences were performed and interpreted. Independent samples t-test and one-way analysis of variance (ANOVA tests) were used for the difference analyses.

5.1. Findings on the Demographic Characteristics of the Professionals Participating in the Study

This section presents the distribution of the demographic characteristics of the participants, such as gender, age, education level, income level, occupation and experience.

Of the 160 professionals who participated in the study, 125 were male and 35 were female, as shown in Table 2. Regarding the age variable, there are more participants over the age of 46 (63). These age groups are 39-45 (39), 32-38 (35), and 25-31 (23) years old, respectively. The highest level of education is at the undergraduate level (130), followed by graduate (24) and vocational school (24). Looking at the variable of experience, there are more individuals with 10-20 years of experience (54) and 6-10 years of experience (46), while there are fewer individuals with 1-5 years of experience (31) and more than 20 years of experience (29). When examining income levels, it was found that income was divided into 5 subgroups. The highest participation rate was among participants with incomes in the range of 20,000-30,000 TL, followed by those in the range of

Table 2: Frequency and percentage distributions of demographic information of professionals

Gender	Frequency	%	Experience	Frequency	%
Male	125	78.1	1-5	31	19.4
Female	35	21.9	6-10	46	28.7
Age			10-20	54	33.8
25-31	23	14.4	20+	29	18.1
32-38	35	21.9	City		
39-45	39	24.4	Ağrı	33	20.6
46+	63	39.4	Ardahan	24	15
Education			Iğdır	52	32.5
High School	0	0	Kars	51	31.9
Vocational School	6	3.8	Income		
Bachelor's Degree	130	81.3	<10,000 TL	10	6.3
Master's Degree	24	15	10,000-20,000	57	35.6
Ph.D.	0	0	20,000-30,000	65	40.6
			30,000-40,000	25	15.6
			40,000+	3	1.9

Source: Authors' research

Table 3: Frequency analyses reflecting the views of professionals on digitalization

Questions	Strongly disagree		Disagree		Neither agree nor disagree		Agree		Strongly agree	
	n	%	n	%	n	%	n	%	n	%
1- I follow digital developments related to my profession	6	3.8	4	2.5	10	6.3	18	11	122	76
2- I follow developments related to digitalization in the world"	21	13	18	11	62	39	16	10	43	27
3- I follow the developments related to digitalization in Turkey	10	6.3	7	4.4	11	6.9	26	16	106	66
4- I support digitalization and technological advancements.	13	8.1	4	2.5	4	2.5	10	6.3	129	81
5- I am not interested in digitalization and technology news.	109	68	9	5.6	16	10	2	1.3	24	15
6- Digitalization concerns me in terms of my profession.	57	36	10	6.3	23	14	8	5	62	39
7- Digitalization makes it easier to practice my profession.	12	7.5	2	1.3	14	8.8	11	6.9	121	76
8- I easily adapt to digital developments related to my profession.	46	29	8	5	16	10	21	13	69	43
9- I believe that technological advancements will provide new opportunities and career paths for accounting professionals.	33	21	4	2.5	12	7.5	38	24	73	46
10- I do not have the necessary education and skills to adapt to digitalization.	44	28	14	8.8	23	14	10	6.3	69	43
11- I need training related to digitalization.	6	3.8	0	0	17	11	21	13	116	73
12- I can easily access educational materials related to digital developments in my profession.	12	7.5	6	3.8	50	31	18	11	74	46
13- I believe that accounting professionals need to adapt to change and transformation due to technological advancements.	6	3.8	0	0	17	11	12	7.5	125	78
14- I think that professionals who do not adapt to technology and digitalization will fall behind in competition	10	6.3	2	1.3	23	14	12	7.5	113	71
15- Technological advancements have a negative impact on the accounting profession.	100	63	19	12	23	14	2	1.3	16	10
16- Digitalization and technological developments will make the accounting profession more efficient.	22	14	0	0	12	7.5	15	9.4	111	69
17- The development of digitalization makes me feel like I won't be able to continue my profession	78	49	16	10	28	18	6	3.8	32	20
18- The accounting profession is among the professions that will disappear in the future due to digitalization.	97	61	12	7.5	18	11	4	2.5	29	18
19- The accounting profession is one of the quickest to adapt to digitalization and technological advancements.	25		16		12		7.5		24	

Source: Authors' research

10,000-20,000 (57), 30,000-40,000 (25), <10,000 (10), and more than 40,000 (3). When Table 3 is analysed:

1. It was found that three-quarters of professionals said they closely follow digital developments related to their profession.
2. Nearly half of the professionals surveyed said they also follow digital developments worldwide.
3. It is observed that almost all of the professionals who participated in the study follow the developments related to digitalization in Turkey.
4. The results show that almost all professionals support digital and technological developments.
5. The number of professionals who show little interest in digitalization and technology news is quite low.
6. Although most participants expressed support for digitalization, many also expressed concern about its impact on their professions.
7. The majority of participants stated that the applications brought by digitalization make their profession easier to practice.
8. Almost half of the participants expressed their ability to easily

- adapt to digital advances.
9. A significant portion of accounting professionals believe that technological advances will open up new opportunities and career fields.
 10. Participants seemed uncertain about having adequate training and resources to adapt to digitalization.
 11. 75% of professionals expressed a need for training related to digital advances.
 12. A significant portion of accounting professionals were found to lack access to educational materials on digital advancements.
 13. Nearly all accounting professionals believe that technological advances will require change and transformation within their profession.
 14. A significant portion of participants believe that professionals who do not adapt to technology and digitalization will fall behind in the competition.
 15. The majority of accounting professionals believe that technological advances will not have a negative impact on the accounting profession.
 16. Three-quarters of the participants believe that digitalization and technological developments will make the accounting profession more efficient.
 17. Only a small proportion of accounting professionals said that digitalization makes them feel that they may not be able to continue in their profession.
 18. A significant portion of participants disagreed with the notion that digitalization will eliminate the accounting profession in the future.
 19. Approximately half of accounting professionals believe that accounting is one of the professions that will adapt most quickly to digitalization and technological advances.

6. ANALYSIS AND DISCUSSION

Table 4 presents descriptive statistics on the education, experience, and income levels of accounting professionals and examines how these factors influence their views on the digitalization of the accounting profession.

A one-way analysis of variance (ANOVA) was conducted to determine whether there were differences in the opinions of accounting professionals regarding elements related to digitalization in the accounting and auditing profession, as well as the advantages and disadvantages of digitalization, based on their education, experience, and income levels. In Table 4, the values with a significance level of 5% are shown in bold colour.

The study findings reveal statistically significant differences at the 5% levels based on the educational levels of accounting professionals. These differences are observed in the areas of having sufficient training and skills to adapt to digitalization ($P = 0.003$), the need for training related to digitalization ($P = 0.000$), accounting being among the professions that adapt most quickly to digital and technological advances ($P = 0.004$), facilitating tax compliance and easing tax audits ($P = 0.005$), improving efficiency ($P = 0.000$), experiencing difficulties in issuing invoices

Table 4: Difference analyses for the views of accounting professionals on digital transformation in the accounting and auditing profession

Features/Variables	Education	Experience	Income
I follow digital developments related to my profession			
Mean Square	1.954	5.856	0.891
F/t	2.020	6.609	0.907
(p)	0.136	0.000	0.461
I am keeping up with global digitalization trends.			
Mean Square Average	4.682	3.810	2.291
F/t	2.727	2.221	1.316
(p)	0.069	0.088	0.266
I follow the developments related to digitalization in Turkey			
Mean Square Average	6.331	10.954	0.508
F/t	4.823	9.193	0.364
(p)	0.009	0.000	0.834
I support digitalization and technological advancements.			
Mean Square Average	0.855	1.318	1.131
F/t	0.594	0.918	0.784
(p)	0.554	0.434	0.537
I am not interested in digitalization and technology news.			
Mean Square Average	1.210	7.867	13.537
F/t	0.551	3.792	7.160
(p)	0.578	0.012	0.000
Digitalization concerns me in terms of my profession.			
Mean Square Average	7.005	14.656	6.759
F/t	2.293	5.085	2.245
(p)	0.104	0.002	0.067
Digitalization makes it easier to practice my profession.			
Mean Square Average	1.801	0.704	0.389
F/t	1.289	0.497	0.272
(p)	0.278	0.685	0.895
I easily adapt to digital developments related to my profession.			
Mean Square Average	4.250	24.221	5.652
F/t	1.455	9.576	1.970
(p)	0.237	0.000	0.102
I believe that technological advancements will provide new opportunities and career paths for accounting professionals.			
Mean Square Average	5.582	5.047	3.448
F/t	2.346	2.130	1.441
(p)	0.099	0.099	0.223
I do not have the necessary education and skills to adapt to digitalization.			
Mean Square Average	16.558	0.867	4.705
F/t	6.050	0.294	1.643
(p)	0.003	0.830	0.166
I need training related to digitalization.			
Mean Square Average	14.680	2.772	0.525
F/t	19.761	3.141	0.565
(p)	0.000	0.027	0.688
I can easily access educational materials related to digital developments in my profession.			
Mean Square Average	7.251	12.312	5.189
F/t	4.785	8.915	3.472
(p)	0.010	0.000	0.010
I believe that accounting professionals need to adapt to change and transformation due to technological advancements.			
Mean Square Average	0.293	4.271	0.344
F/t	0.317	5.026	0.370
(p)	0.729	0.002	0.830
I think that professionals who do not adapt to technology and digitalization will fall behind in competition			
Mean Square Average	1.687	12.590	0.910
F/t	1.255	11.119	0.669
(p)	0.288	0.000	0.614

(Contd...)

Table 4: (Continued)

Features/Variables	Education	Experience	Income
Technological advancements have a negative impact on the accounting profession.			
Mean Square Average	3.948	8.397	9.765
F/t	2.355	5.327	6.523
(p)	0.098	0.002	0.000
Digitalization and technological developments will make the accounting profession more efficient.			
Mean Square Average	3.505	1.490	4.015
F/t	1.791	0.750	2.087
(p)	0.170	0.524	0.085
The development of digitalization makes me feel like I won't be able to continue my profession.			
Mean Square Average	1.682	2.634	6.882
F/t	0.671	1.056	2.887
(p)	0.513	0.370	0.024
The accounting profession is among the professions that will disappear in the future due to digitalization.			
Mean Square Average	1.113	12.645	9.626
F/t	0.450	5.597	4.240
(p)	0.638	0.001	0.003
The accounting profession is one of the quickest to adapt to digitalization and technological advancements.			
Mean Square Average	12.579	1.232	3.552
F/t	5.727	0.525	1.548
(p)	0.004	0.666	0.191
It facilitates compliance with corporate regulations and laws.			
Mean Square Average	2.321	0.943	0.592
F/t	11.006	4.212	2.594
(p)	0.000	0.007	0.039
It ensures tax compliance and makes tax audits easier.			
Mean Square Average	3.632	2.637	0.490
F/t	5.556	4.033	0.704
(p)	0.005	0.009	0.591
It speeds up tasks in the electronic environment.			
Mean Square Average	0.109	2.464	0.183
F/t	0.278	7.072	0.464
(p)	0.757	0.000	0.762
It reduces errors in transactions carried out in the digital environment.			
Mean Square Average	0.067	0.983	1.666
F/t	0.052	0.779	1.339
(p)	0.949	0.507	0.258
It increases efficiency.			
Mean Square Average	8.642	2.747	0.339
F/t	15.174	4.352	0.499
(p)	0.000	0.006	0.736
Archiving and storage costs decrease with e-applications.			
Mean Square Average	1.015	4.322	1.072
F/t	0.888	3.998	0.937
(p)	0.414	0.009	0.444
Accounting fraud is minimized through e-applications.			
Mean Square Average	0.237	4.725	3.406
F/t	0.190	4.048	2.891
(p)	0.827	0.008	0.024
More reliable data is obtained through e-applications.			
Mean Square Average	6.242	7.851	2.074
F/t	4.934	6.531	1.585
(p)	0.008	0.000	0.181
Difficulty in keeping up with frequently updated regulations for e-invoicing.			
Mean Square Average	6.995	19.659	5.599
F/t	2.349	7.257	1.890
(p)	0.099	0.000	0.115

(Contd..)

Table 4: (Continued)

Features/Variables	Education	Experience	Income
Difficulty in issuing invoices within 7 days due to non-daily accounting records.			
Mean Square Average	20.421	22.923	15.669
F/t	7.267	8.654	5.792
(p)	0.001	0.000	0.000
Difficulty in finding educated and experienced employee.			
Mean Square Average	3.820	1.074	1.706
F/t	7.981	2.106	3.482
(p)	0.000	0.102	0.009
Reduction in physical socialization.			
Mean Square Average	9.954	13.010	4.696
F/t	4.485	6.163	2.082
(p)	0.013	0.001	0.086
Exposure to unverified information.			
Mean Square Average	9.882	26.521	11.192
F/t	4.272	13.636	5.129
(p)	0.016	0.000	0.001

Source: Authors' research

(P = 0.001), and challenges in finding trained and experienced personnel (P = 0.000).

There were also statistically significant differences (at the 5% significance level) in views based on level of professional experience. Differences were found in following digital developments in accounting (P = 0.000), following developments in digitalization in Turkey (P = 0.000), concerns about the impact of digitalization on the profession (P = 0.002), the ease of adapting to digital developments in the profession (P = 0.000), the ease of accessing training materials on digital developments (P = 0.000), the need to transform in response to technological developments (P = 0.002), the potential competitive disadvantage for professionals who do not adapt to technology and digitalization (P = 0.000), concerns about the negative impact of technological developments on accounting (P = 0.002), fears of accounting becoming obsolete with digitalization (P = 0.001), the acceleration of processes in electronic environments (P = 0.000), the reliability of data obtained through electronic applications (P = 0.000), difficulties in keeping up with frequently updated e-invoicing regulations (P = 0.000), problems with invoices due to delays in daily accounting records (P = 0.000), reduced physical socialization (P = 0.001) and exposure to unverified information (P = 0.000).

Additionally, statistically significant differences at 5% were observed in the views of accounting professionals based on income levels. These differences were noted in interest in digitalization and technology news (P = 0.000), concerns about the negative impact of technological developments on accounting (P = 0.000), fears that digitalization could lead to the obsolescence of the profession in the future (P = 0.003), challenges with invoicing due to the seven-day timeframe caused by delays in daily accounting records (P = 0.000), and exposure to unverified information (P = 0.000).

In conclusion, the study's results suggest that there are significant differences in the opinions of accounting professionals regarding

elements related to digitalization and the advantages and disadvantages of digitalization, based on their educational backgrounds, professional experiences, and income levels.

7. CONCLUSIONS

The innovations brought about by advances in digital technology in various industries have sparked greater interest in digital transformation, making artificial intelligence an essential component of business processes. As digital technology continues to evolve, it has the potential to revolutionize various professions by influencing market strategies and competitive capabilities. Accounting is one of these professions affected by digital transformation, due to factors such as the efficiency of work processes and the needs and expectations of users of financial statements. Electronic applications, which are essential for improving tax compliance, provide companies with fast access to data while saving time for taxpayers. In addition, digitalization offers significant benefits such as reduced printing costs and digital storage options. Invoices and returns can be easily transmitted electronically to the appropriate individuals or institutions, facilitating collection tracking and accounting, and increasing reliability. However, it can be a challenge to find staff with sufficient training and expertise to use these systems effectively.

This study evaluates the impact of digital transformation in the accounting profession, based on insights gathered through a survey. The results show that accounting professionals have different views on the need for digitalization and training in this area, with professionals perceiving themselves as better equipped for digitalization as their level of education increases. This is particularly evident among those with a postgraduate education, reflecting the content of their advanced studies. Accounting professionals with a bachelor's degree tend to view their profession as one of the fastest to adapt to digitalization and technological advances, in line with other research findings. While there are significant differences in opinions based on education level regarding the regulatory compliance, evidentiary, and audit facilitation that digitalization provides, there is consensus across education levels on the benefits of this aspect. Bachelor's degree holders are also more positive about the potential of digitalization to increase efficiency, while acknowledging the difficulty of finding experienced employees.

Overall, the study results suggest that higher levels of education foster a more positive view of digitalization, which can be attributed to the competencies acquired at each level. In terms of their profession, accounting professionals' views on digital advances also vary according to their level of experience. Inexperienced professionals tend to follow digital developments more closely than their more experienced counterparts, express less concern about digitalization in the profession, and believe they can adapt to these changes more easily. They also find it easier to keep up with digital developments, express a need for change and transformation, and are more likely to adapt. Regarding the potential negative impact of technological advances on the accounting profession, both experienced and inexperienced

professionals do not express concerns, while inexperienced professionals are more positive.

Analysis based on income level shows minimal significant differences, indicating that accounting professionals across income levels generally have similar views on digitalization. While the results of this study highlight that accounting professionals support digital transformation, they also underscore the importance of continuous professional development to reap the full benefits of digitalization. With proper professional development, professionals can adapt to innovation more quickly and efficiently.

Despite its contributions, this study has limitations. Digitalization is a transformative force that affects all fields, and studies that assess digitalization from the perspective of accounting professionals will be valuable for the future of the profession. This research is based on the views of professionals in a limited geographic area. To achieve more generalizable results, future researchers are encouraged to conduct similar studies over a broader area with a larger sample size of professionals.

REFERENCES

- Almeida, A.C., Carvalho, C. (2022), The Adequacy of Academic Curricula for Digital Transformation in Accounting Education. In: 17th Iberian Conference on Information Systems and Technologies. Spain. p1-7.
- Al-Okaily, M., Alsmadi, A.A., Alrawashdeh, N., Al-Okaily, A., Oroud, Y., Al-Gasaymeh, A.S. (2024), The role of digital accounting transformation in the banking industry sector: An integrated model. *Journal of Financial Reporting and Accounting*, 22(2), 308-326.
- Andreassen, R.I. (2020), Digital technology and changing roles: A management accountant's dream or nightmare? *Journal of Management Control*, 31(3), 209-238.
- Bakulina, G., Kalinina, G., Luchkova, I., Pikushina, M., Gracheva, A. (2020), Transformation of the Accountancy Profession during Digitalization of Agriculture. *International Scientific-Practical Conference Agriculture and Food Security: Technology, Innovation, Markets, Human Resources*. p1-5. Available from: https://www.bio-conferences.org/articles/bioconf/full_html/2020/01/bioconf_fies2020_00188/bioconf_fies2020_00188.html [Last accessed on 2024 Jun 05].
- Begum, D. (2019), Digital transformation of accounting in India. *Emperor International Journal of Finance and Management Research*, 5(10), 6-12.
- Bilcan, F.R., Oncioiu, I., Stoica, D.A., Stanciu, A. (2019), Digital transformation of managerial accounting-trends in the new economic environment. *EIRP Proceedings*, 14(1), 266-274.
- Borislav, B. (2018), The Digital Transformations in the Accounting Systems of the Bulgarian Enterprises. In: Dimiter G.V., editor. *Proceedings of the 8th International Conference on Application of Information and Communication Technology and Statistics in Economy and Education*. Bulgaria: Publishing Complex-Unwe. p225-237.
- Çarıkcı, O. (2020), The Effect of Digitalization (E-Transformation) on Stress and Job Satisfaction of Accountants in Accounting Profession: A Structural Equation Modelling Study. In: Çürük, T., editor. *Current Accounting Studies*. Kerala: Akdemisyen Bookstore.
- Coman, D.M., Ionescu, C.A., Duic, A., Coman, M.D., Uzla, M.C., Stanescu, S.G., State, V. (2022), Digitization of accounting: The premise of the paradigm shift of role of the professional accountant. *Applied Sciences*, 12, 3359.
- Eznwa, E., Nkem, H.U. (2021), Impact of artificial intelligence (AI)

- on accountancy profession. *Journal of Accounting and Financial Management*, 7(2), 15-25.
- Gonçalves, M.J.A., da Silva, A.C.F., Ferreira, C.G. (2022), The future of accounting: How will digital transformation impact the sector? *Informatics*, 9(1), 1-17.
- Han, H., Shiwakoti, R.K., Jarvis, R., Mordi, C., Botchie, D. (2023), Accounting and auditing with blockchain technology and artificial Intelligence: A literature review. *International Journal of Accounting Information Systems*, 48, 100598.
- Jackson, D., Allen, C. (2024), Enablers, barriers and strategies for adopting new technology in accounting. *International Journal of Accounting Information Systems*, 52, 100666.
- Kokina, J., Blanchette, S. (2019), Early evidence of digital labor in accounting: Innovation with robotic process automation. *International Journal of Accounting Information Systems*, 35, 100431.
- Lazarova, V. (2019), Digitalization and digital transformation in accounting. *Ikonomiceski i Sotsialni Alternativi*, 2, 97-106.
- Leitner-Hanetseder, S., Lehner, O.M., Eisl, C., Forstenlechner, C. (2021), A profession in transition: Actors, tasks and roles in AI-based accounting. *Journal of Applied Accounting Research*, 22(3), 539-556.
- Mălăescu, A.M., Avram, M. (2018), The accounting profession in the digital age. *Annals of the University of Craiova, Economic Sciences Series*, 2(46), 5-12.
- Meraghni, O., Bekkouche, L., Demdoun, Z. (2021), Impact of digital transformation on accounting information systems-evidence from Algerian firms. *Economics and Business*, 35(1), 249-264.
- Mert, H., Güner, M., Duyar, G. (2022), Research on CPA's in Istanbul for the development of the digitalization process and its effects on accounting applications. *Accounting and Auditing Review*, 22(66), 195-218.
- Ogaluzor, O.I. (2019), Digitizing and the job of the accountant: A threat or a companion? *International Journal of Business Marketing and Management*, 4(11), 28-39.
- Rastogi, H. (2022), How has Digital Transformation Impacted Accounting? *Analyticssteps*. Available from: <https://www.analyticssteps.com/blogs/how-has-digital-transformation-impacted-accounting> [Last accessed on 2024 May 15].
- Şalcı, İ. (2021), Digital Transformation (E-Applications) and Related Innovations for Accountants. Master Thesis, Işık University.
- Sidorova, M., Kopus, T., Yurasova, I. (2023), Digital transformation for teaching management accounting: Training with a simulation in an authentic professional environment. *Accounting Education*, 33(5), 61-648.
- Slyozko, T., Kurilo, L., Mazina, O. (2019), Transformation of the accounting profession in terms of the economy of the future. *ACC Journal*, 25(3), 34-45.
- Soğuksu, Z.Y. (2020), Digital transformation in auditing: Audit software. *Journal of Accounting and Taxation Studies*, 13(2), 281-308.
- Surya, B.T.M. (2024), Revolutionizing accounting through digital transformation: The impact of technology. *Engineering Science Letter*, 3(01), 6-10.
- Tekbaş, İ. (2018), The Effects of Digitalization at the Accounting Profession and the Accounting Members and the Proposal for a New Expression: Financial Engineering. Master Thesis, İstanbul Okan University.
- Tekbaş, İ. (2022), Digital Transformation of Accounting and Financial Consultancy. Austin: Ceres Education and Publishing.
- Todorova, E.P.S. (2018), How artificial intelligence is challenging accounting profession. *Journal of International Scientific Publications*, 12(1), 126-141.
- Yakut, M.Ş. (2022), Analysis of the effects of digital literacy on the productivity of accounting professionals. *Journal of Business Research Turk*, 14(1), 749-766.
- Yaya, L.M., Bhuana, K.W. (2024), Depth interviews of accounting and artificial intelligence: Sustainability of accountant in Indonesia. *Calitatea*, 25, 200.
- Yıldız, B., Ağdeniz, S. (2019), The technological substructure of audit 4.0. *Accounting and Auditing Perspective Magazine*, 19(58), 83-102.
- Yoon, S. (2020), A study on the transformation of accounting based on new technologies: Evidence from Korea, *Sustainability*, 12, 8669.
- Zhang, Y., Xiong, F., Xie, Y., Fan, X., Gu, H. (2020), The impact of artificial intelligence and blockchain on the accounting profession. *IEEE Access*, 8(1), 110461-110477.