A scale development study on the expectations of university students from the accounting course in the digitalization process

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Abstract: Digitization has become an inevitable part of life, affecting all systems. Today, when technological developments are increasing rapidly, and almost everything can be done with mobile devices, all sectors and individuals have started to take more place in digital environment. Since the 20th century, the accounting profession has undergone significant changes, especially with the spread of the internet and technological developments, and many accounting practices have been transferred to digital environments. The traditional methods of accounting education cause the candidate students to grow away from the digital sector. For this reason, the digital transformation process in the accounting profession should also be started in accounting education. To train professionals who will meet the needs in the digital age, accounting education should be supported by changing technology, and students should be equipped in this regard by using digital education technologies such as augmented reality (AR) and simulation in courses. In the study, a scale was developed to determine the expectations of the students from the accounting course during the digitalization process. As a result of the study, it was determined that the scale was divided into two sub-dimensions: expectations from digital education technologies and expectations from traditional expression in the accounting course.

Keywords: digital transformation, digital education technologies, accounting education.
JEL classification: M40, I20

Сажетак: Дигитализација је постала неизоставан део живота, који утиче на све системе. Данас, када развој технолошких достигнућа све више убрзава, и скоро све се може урадити путем мобилних уређаја, сви сектори и појединци почели су да заузимају више места у дигиталном окружењу. Од 20. века, рачуноводствена професија је прошла кроз значајне промене, нарочито са ширењем интернета и технолошких достигнућа, а многи облици рачуноводствене праксе пренети су у дигитално окружење. Традиционални методи образовања удаљавају апсолвенте од дигиталног сектора. Због тога, процес дигиталне трансформације треба започети и у образовању будућих рачуновођа. Да би се образовали професионалци који ће задовољити потребе дигиталне ере, образовање рачуновођа треба подржати променом технологије, а студенте треба оспособити у том погледу укључивањем дигиталних образовних технологија као што су проширена стварност (ПР) и симулација у предмете студијских програма. У овом

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истраживању је развијена скала за утврђивање очекивања студената на катедри за рачуноводство током процеса дигитализације. Као резултат истраживања, утврђено је да је скала подељена у две под-димензије: очекивања од дигиталних образовних тернологија и очекивања од традиционалног изражавања у студијском програму Рачуноводство.

Кључне речи: дигитална трансформација, дигиталне образовне технологије, образовање рачуновођа
ЈЕЛ класификација: M40, I20

Introduction

In its simplest form, digitization is the transfer of information to a digital environment that can be read by computers, tablets, mobile phones, etc. Digitization and digital transformation, which express the last point reached by technological change and developments, affect every aspect of life. Industry 4.0 technologies, which are a new dimension of digitalization, irreversibly affect every field and force digital transformation.

With digitalization, the qualifications of professions differ depending on the developments in every field around the world (Alkayış, 2021: 230). The spread of digital technologies and their effects on the business world are changing accounting practices and the competencies required by professional accountants (ACCA, 2016). Especially after the 1980s, the development of technology and digitalization began to transform the structure of the accounting profession (Allahverdi, Alagöz, & Alagöz, 2021). Examples of technological developments that affect the accounting profession and shape its future are digital technologies such as accounting software, artificial intelligence, robotic processes, cloud technology, blockchain database, industry 4.0, big data, internet of things etc. (Kaya & Utku, 2021). In the accounting profession, digital documents prepared and presented in a virtual environment such as e-ledger facilitate accounting processes. In addition, accounting functions such as documentation, recording, analysis, reporting and interpretation are rapidly becoming digital, and the digital transformation process is starting in the accounting profession.

Digitization of the accounting profession will ensure that documents, records, reports, archives, audits, etc. processes are fast, easy, error-free, and accessible to all information users at the least cost. These developments will also improve professional accountants' job descriptions, qualifications, and tools (Dursun, Ektik, & Tutcu, 2019). In short, the job descriptions of professional accountants will also change. (Frey & Osborne, 2017). Therefore, professional accountants should be familiar with digital technologies (Sarıçiçek, 2020). The digital transformation in the accounting profession also forces the accounting professionals to digital transformation and requires the professional members to master digital technologies. At this point, accounting education plays a key role.

Accounting education is also affected by the changes in the accounting profession in the digital age. It is necessary to equip students with age-appropriate knowledge and skills to increase their intellectual capacity and enable them to think more systematically. This makes the search for change indispensable in accounting education. Future accountants

must be flexible in design, integration, and creativity. Educators need to go beyond the standards and use new education-teaching and assessment methods (Qin, Liu, & Grosvenor, 2016). However, it is tough for accounting professionals to respond to innovations by teaching these developments only theoretically. In this respect, it is necessary to make learning more permanent by giving applied and technology-supported accounting education (Büyükarıkan, 2021). Especially since students who take accounting courses can easily access basic subjects via the internet, some changes should be made in their learning methods, and techniques. It is necessary to give importance to applications by using information communication techniques during the course. In short, accounting education also needs to be digitized (Rasgen & Gönen, 2019; Shukla & Sharif, 2017). Because students' taking accounting education with technology support in parallel with the changing technology will make it easier for them to adapt to technology while performing their profession.

Digital education technologies, including various learning methods, have been used in higher education institutions (Rutz et al., 2003). Examples of these technologies are simulation, which provides permanent learning without the time and resource constraints, and artificial intelligence and autonomous robots, used as assistant instructors in science, mathematics, and foreign language (Extreme, 2018). In addition, computers, interactive boards, cameras, videos, animations, games, tablets, e-books, AR books, online library resources, Google Glass, and 3D printers/documents are digital education technologies that can be used in today's educational environments. To initiate the digital transformation process in accounting education, these technologies should be used in addition to theoretical education. The study aimed to develop a scale to measure the expectations of students from accounting courses in the digital age. For this purpose, a pilot study was conducted on the students who took accounting courses after receiving expert opinions. At the end of the pilot study, the scale was revised. Data were collected twice at different times from the students of the departments where accounting courses were taught at Karabuk University. According to the findings, the developed scale can be used in accounting education to determine the expectations of students from the accounting course in the digital transformation process.

1. Literature review

Some studies on the use of technology in accounting education are summarized below:

Coşkun (2008) stated that besides teaching accounting courses with traditional methods, educational tools such as power points and accounting programs should be used, and they should be transferred to the digital environment. In addition, it was emphasized that the preparation of web pages for accounting courses and formal education would contribute to learning.

Hacırüstemoğlu (2008) stated in his study that electronic applications in accounting education should be included in the curriculum. In addition, it was emphasized that a classroom environment where technological tools are used to ensure active participation of the students by supporting the course with tools such as power points should be preferred.

Pan and Seow (2016) aimed to determine how accounting graduates should be prepared for the digital age and how students should improve their skills and nativeness in the digitalization process. Academic studies published between 2004 and 2014 were analyzed for this purpose. As a result of the study, it was determined that the technologies used in accounting should be included in the curriculum, and four courses should be opened, namely, business process analysis, information technologies, forensic accounting, corporate accounting systems, and business analytics.

Yürekli and Şahiner (2017) investigated the relationship between industry 4.0 and accounting education. It was concluded that there is a relationship between them, and with the widespread use of industry 4.0 in accounting, accounting education will also change in parallel with these developments.

Evans and Paisey (2018) aimed to determine the differences in accounting education from past to present and the changes it has undergone due to technological developments. At the end of the study, predictions were made about the future of accounting education in the light of digitalization and globalization.

Güney and Kara (2018) conducted a study to determine the views of academicians who teach accounting courses in the light of technological developments about whether accounting courses are compatible with these developments. It has been concluded that learning methods that will improve the mental, logical, and financial analysis skills of the students taking accounting courses and cover the requirements of the changing accounting profession should be used.

Şahin and Uyar (2019) examined the usability of hologram technology in accounting education the study. At the end of the study, the convenience, innovation, and benefits of hologram technology to accounting education were evaluated.

Yaşar and Alkan (2019) examined how digital games can be used in accounting education. The authors aimed to raise awareness for alternative ideas to traditional accounting education in the digital transformation process.

Kurnaz et al. (2020) aimed to determine the effect of digital transformation on accounting education and whether the existing accounting courses in educational institutions are sufficient. As a result of the study, it has been determined that digital technologies are essential for accounting education. Still, these technologies are not sufficiently included in accounting education, and therefore professionals who can meet the needs of businesses cannot be trained.

Apalı et al. (2021) aimed to determine the differences between the students' success, focus, and interest levels in the accounting courses taught with traditional and

contemporary methods in the accounting and finance management department. The study determined that there was a significant difference between the two methods in terms of success, focus, and interest.

Erdoğan and Erdoğan (2021) examined the contribution of the Menti application, an interactive presentation tool, to the effectiveness of the course, together with the traditional methods of General Accounting 1 and Introduction to Business Finance. As a result of the study, it was determined that the student's opinions about the course in which the traditional way of teaching and the Menti application were used together were more positive, and the level of understanding and success of the course was higher than the course taught only in the traditional way.

Kaya and Utku (2021) suggested a course that complements theoretical accounting education and includes technological developments that affect the field of accounting in the digital age. The 14-week content of this course, called Accounting Information Technologies and E-Applications, has prepared information such as descriptive information, ECTS, credits, and learning outcomes.

Kurtlu (2021) examined the possible effects of AR and simulation technologies on accounting education. In the study, it has been concluded that the use of these technologies in accounting education will increase participation and interest in the course and provide permanent learning.

Yükçü et al. (2021) applied a questionnaire to the relevant academicians in which cost accounting subjects were explained through a simulation. In the study, it was concluded that the academicians who participated in the survey had an innovative attitude but did not give up their traditional teaching habits. It was emphasized that this situation was caused by the fact that the academicians were familiar with the courses taught in a conventional way throughout their education life. In addition, it was stated that academics, although innovative, could not display a definite attitude towards change.

2. Methodology

In this part of the study, the data collection process, the characteristics of the study group, and the scale development process were discussed.

2.1. Population and sample

The population of the study consists of students studying in Business Administration, Tourism Management, Finance and Banking, International Trade and Finance, Actuarial Sciences, Political Science and Public Administration, Entrepreneurship, Tourism Guidance, and Economics programs at Karabuk University. The reason for including these programs in the research is that they have accounting courses. However, sampling was

needed in cases where it was not possible to reach all the elements that make up the population. As it is known, different generally accepted techniques have been developed for sample selection (Padem, Göksu, & Konaklı, 2012). Therefore, depending on the purpose of the study, a simple random sampling method was preferred in this study. In simple random sampling, every possible combination of elements in the population has an equal probability of being included in the sample. Generally, the researcher assigns a number to each item within the framework of the sample, which is formed as a list. Then, the researcher generates random numbers as much as the number of items he wants in the sample or uses a computer program or random number lists to randomly select items from the list he has created (Baltacı, 2018: 240). In this research process, a list of students studying in the programs mentioned above was created, and individuals were randomly selected within the framework of this list.

Although Explanatory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) have similarities in scale development studies, they are different mathematically and conceptually. For this reason, it is stated that the data collection process should be carried out on other sample groups (Fokkema & Greiff, 2017). Based on this assumption, data were collected from the sample group twice, at separate times, apart from the pilot study. Tabachnick and Fidell (2007) stated that it is sufficient for the sample group to be above 150, provided that some factor loads are more significant than 0.80 during the scale development process. However, it is more reliable if the sample size is at least 300. Indeed, Comrey and Lee (1992) stated that 50 is too weak; 100 of them are poor; 200 are fair; 300 are good; 500 is very good; rated 1000 and above are excellent for the adequacy of the sample size. After the pilot study, a total of 342 students participated in the first phase of the research, which was conducted in February 2022. Of the students participating in the study, 198 (57.9%) were female, and 144 (42.1%) were male. Of the participants, 43 (12.6%) were in Business Administration, 42 (12.3%) in Tourism Management, 42 (12.3%) in Finance and Banking, 32 (9.4%) International Trade and Finance program students. On the other hand, 33 (9.6%) of the participants were in Actuarial Sciences, 45 (13.2%) in Political Science and Public Administration, 36 (10.5%) in Entrepreneurship, 38 (11.1%) in Tour Guiding, and 31 (9.1%) of them are students of Economics program. The second phase of the research was carried out in March 2022. As in the first phase, 342 students voluntarily participated in the second phase. Of the students participating in the study, 154 (45%) were female, and 188 (55%) were male. Of the participants, 50 (14.6%) were in Business Administration, 55 (16.1%) in Tourism Management, 33 (9.6%) in Finance and Banking, 30 (8.8%) International Trade and Finance program students. On the other hand, 32 (9.4%) of the participants were in Actuarial Sciences, 37 (10.8%) in Political Science and Public Administration, 31 (9.1%) in Entrepreneurship, 42 (12.3%) in Tour Guiding, and 32 (9.4%) are active students in economics program.

2.2. Data collection tool

In the study, first, a literature review was conducted for scale development. Based on research on technological educational tools in education, an item pool of 22 items was developed. To determine whether 22 items are valid in terms of consistency, the opinions of 4 academicians and 1 literary scholar were taken. After receiving expert opinions, the pilot study was applied to a group of 150 students who took accounting courses. According to the data obtained from the pilot study, final adjustments were made on the scale. As a result of this arrangement, an 11-item scale form was prepared. The items in the scale form were designed in a 5- point Likert type (1=Strongly Disagree; 5=Strongly Agree). After redesigning the scale, it was applied to 342 students who took accounting courses in 2 stages. The scale of expectations from the accounting course in the digital transformation process is shown in Appendix 1.

2.3. Data analysis

The data obtained from the students as a result of the pilot and main study were analyzed through SPSS 20 and AMOS 20 statistical package programs. Explanatory Factor Analysis was performed to test the structural validity and reliability of the data collected during the pilot study. The Cronbach -Alpha coefficient was examined for scale reliability. Attention was paid to whether the reliability coefficient met the 0.70 rule. Barlett and Kaiser-Meyer-Olkin values were examined to decide whether the data were suitable for factor analysis. Bartlett's value should be $p<0.05$ or $p<0.01$ (Hair et al., 2010: 99). The Kaiser-Meyer-Olkin (KMO) value, on the other hand, is considered suitable for factor analysis if it gives a result above 0.60 (Tabachnick & Fidell, 2007). While sizing the scale, care was taken to ensure that the Eigen Value was above 1. Factor loadings of 40 and above were taken into account (Büyüköztürk, 2006). After the pilot study, the questionnaire was applied twice to the students who took the accounting course. Both explanatory and confirmatory factor analyses were applied to the data collected from 342 people. In confirmatory factor analysis, the Chi-Square Test of Fit ($\chi2$), which is widely considered, is the Square Root of Standardized Errors (SRMR), Goodness of Fit Index (GFI), Normed Fit Index (NFI), Comparative Fit Index (CFI), and Mean of Approximate Errors. Square root (RMSEA) compliance criteria are considered (Schumacker & Lomax, 2004; Byrne, 2010; Meydan & Şeşen, 2011; Kline, 2011). A Chi-Square/Degree of Freedom ($\chi2$/sd) below 3 indicates that the model has a good fit (Kline, 2011). While the SRMR is below 0.08 is acceptable, a value below 0.05 means that the fit criteria are good (Şimşek, 2007). However, the CFI value (Schumacker & Lomax, 2004), the NFI value (Raykov & Marcoulides, 2006), and the GFI value should be greater than 0.90 (Byrne, 2010). In addition, the RMSEA value being below 0.08 means that the model has acceptable fit values (Kline, 2011).

3. Findings
3.1. Findings of the First Field Study

Varimax Rotation Explanatory Factor Analysis was applied to the data obtained in the first field study. Kaiser-Meyer-Olkin (KMO) and Bartlett Sphericity Test results were examined to determine suitable data for factor analysis (Tabachnick & Fidell, 2007). As a result of the analysis, it was determined that the KMO value was 0.87, and the Bartlett test value was also significant ($\chi2=1292.957$; $p<0.001$). A significant Bartlett value and a KMO above 0.60 showed that the data were suitable for factor analysis. Findings related to Explanatory Factor Analysis are shown in Table 1.

Table 1: Findings Related to Factor Analysis

Items	1. Expectations from digital education technologies	2. Expectations from traditional expression
q3 - I think that 3D – real-size technological training tools should be used for invoices, receipts, etc. documents in the accounting course	0.785	
q7 - I think that an online accounting program/module should be used in the accounting course.	0.753	
q8 - I think that the theoretical information given in the accounting course should be explained with technological applications.	0.737	
q2 - I think that the lecture notes about the accounting course should be accessed from digital platforms such as online library resources	0.735	
q1- I think that subjects such as stock control, production process, etc. should be explained through a simulation in the accounting course	0.735	
q6- I think that subjects such as establishing an enterprise and end-of-term transactions should be enriched with games and animations in the accounting course.	0.735	
q5- I think that the topics that I want to repeat in the accounting course should be accessed from the sources of books with enriched content (AR books)	0.723	
q4- I think that in the accounting course, the teacher should be reached through digital platforms such as Google Glass outside the classroom	0.647	
q10- Educational materials (board, pencil, projector, power point presentation, etc.) are sufficient for the accounting course.		0.820
q11- Theoretical course hours are sufficient for the accounting course.		0.806

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q9- I think it is sufficient to explain the accounting course with traditional methods.		0.766
Eigen Value	4,324	1,936
Variance Disclosure Ratio	39,307	17,596
Total Variance Disclosure Ratio		56,903
Kaiser-Meyer-Olkin (KMO)		0.878
Bartlett Test: χ^2		1292,957; p<0.001

Source: the authors' calculation

As seen in Table 1, the scale explains 56.903% of the total variance and consists of 2 factors with an eigenvalue above 1. In addition, the factor loads of the expressions measuring the expectation about the accounting course are at an acceptable level. It has been stated in the literature that a load value of 0.35 or more for scale expressions measuring a particular phenomenon is sufficient for the usability of the scale (Büyüköztürk, 2006).

The item-total correlation results of the expectation scale for the accounting course are shown in Table 2 and Table 3 as dimensions.

Table 2: Item-total correlation results of the expectation from digital education technologies sub-dimension

Items	scale mean if item deleted	scale variance if item deleted	corrected item - total correlation	Cronbach's alpha if item deleted
q1- I think that subjects such as stock control, production process, etc. should be explained through a simulation in the accounting course	26.0117	38.399	0.635	0.861
q2 - I think that the lecture notes about the accounting course should be accessed from digital platforms such as online library resources	25.7836	39.449	0.639	0.860
q3 - I think that 3D – real-size technological training tools should be used for invoices, receipts, etc. documents in the accounting course	25.9211	38.407	0.697	0.854
q4 - I think that in the accounting course, the teacher should be reached through digital platforms such as Google Glass outside the classroom	26.0585	40.560	0.548	0.869

q5 - I think that the topics that I want to repeat in the accounting course should be accessed from the sources of books with enriched content (AR books)	25.8012	40.406	0.626	0.861
q6 - I think that subjects such as establishing an enterprise and end-of-term transactions should be enriched with games and animations in the accounting course.	25.9678	39.063	0.641	0.860
q7 - I think that an online accounting program/module should be used in the accounting course.	25.9357	39.521	0.659	0.858
q8 - I think that the theoretical information given in the accounting course should be explained with technological applications.	25.8392	39.778	,642	,860

Source: the authors' calculation

Table 3: Item-total correlation results of the expectation from traditional expression sub-dimension

Items	scale mean if item deleted	scale variance if item deleted	corrected item - total correlation	Cronbach's alpha if item deleted
q9 - I think it is sufficient to explain the accounting course with traditional methods.	6.3801	5,456	0.501	0.673
q10 - Educational materials (board, pencil, projector, power point presentation, etc.) are sufficient for the accounting course.	6.3713	5.014	0.573	0.585
q11 - Theoretical course hours are sufficient for the accounting course.	5.9211	5.164	0.540	0.626

Source: the authors' calculation

Item-total correlation is used to improve the Cronbach Alpha value. Nunnally (1978) states that items with an item-total correlation value of less than 0.40 should be removed from the scale. The analysis determined that the item-total correlation score of no item was below 0.40, and the values ranged between 0.501 and 0.697. In addition, the Cronbach Alpha coefficient was found to be 0.876 for the "Expectations from digital education technologies" sub-dimension, 0.718 for the "Expectations from traditional expression " sub-dimension, and the Cronbach Alpha coefficient for the overall scale was 0.783. The fact that these results are in the range of a=0.70 indicates that the scale used is highly reliable (Kayış, 2009).

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3.2. Findings of the second field study

Factor analysis was applied again to the data obtained from the students who took accounting courses. As a result of the analysis, it was determined that the KMO value was 0.87, and the Bartlett test value was also significant ($\chi2$=1282.848; p<0.001). It was determined that the Bartlett value was substantial and the KMO was above 0.60, which was suitable for factor analysis. The findings of the Explanatory Factor Analysis applied to the data related to the main study are shown in Table 4.

Table 5: Findings related to factor analysis

Items	1. Expectations from digital education technologies	2. Expectations from traditional expression
q3- I think that 3D – real-size technological training tools should be used for invoices, receipts, etc. documents in the accounting course	0.777	
q7- I think that an online accounting program/module should be used in the accounting course.	0.749	
q1- I think that subjects such as stock control, production process, etc. should be explained through a simulation in the accounting course	0.739	
q8- I think that the theoretical information given in the accounting course should be explained with technological applications.	0.733	
q6- I think that subjects such as establishing an enterprise and end-of-term transactions should be enriched with games and animations in the accounting course.	0.731	
q2- I think that the lecture notes about the accounting course should be accessed from digital platforms such as online library resources	0.726	
q5- I think that the topics that I want to repeat in the accounting course should be accessed from the sources of books with enriched content (AR books)	0.720	
q4- I think that in the accounting course, the teacher should be reached through digital platforms such as Google Glass outside the classroom	0.640	

q10- Educational materials (board, pencil, projector, power point presentation, etc.) are sufficient for the accounting course.		0.826
q11- Theoretical course hours are sufficient for the accounting course.		0.813
q9- I think it is sufficient to explain the accounting course with traditional methods.		0.763
Eigen Value	4,271	1,961
Variance Disclosure Ratio	38,830	17,828
Total Variance Disclosure Ratio		56,658
Kaiser-Meyer-Olkin (KMO)		0.872
Bartlett Test: χ^2		1282,848; p<0.001

Source: the authors' calculation

As seen in Table 4, the scale, which measures the expectation about the accounting course, explains 56,658% of the total variance. It is seen that it consists of 2 factors with an eigenvalue above 1. The factor loads of the expressions measuring the expectation about the accounting course are at an acceptable level. It has been stated in the literature that a load value of 0.35 or more for scale expressions measuring a particular phenomenon is sufficient for the usability of the scale (Büyüköztürk, 2006).

Since the confirmatory factor analysis was performed with another sample, it was deemed appropriate to calculate the reliability value of the sub-dimensions and the scale. In Table 5, general and dimensional reliability results of the expectation scale regarding the accounting course are given.

Table 5: Reliability results of the expectation scale for the accounting course

Dimensions	Number of Expressions	Cronbach's Alpha
Expectations from digital education technologies	8 Pieces	0.872
Expectations from traditional expression	3 Pieces	0.725
Total	11 Pieces	0.780

Source: the authors' calculation

In Table 5, the Cronbach scale of the whole scale was found to be 0.78. It is seen that the reliability coefficient of the expectations sub-dimension from digital education technologies is 0.87, and the coefficient of the expectations from the traditional narrative sub-dimension is 0.72. According to these values, it is possible to say that the internal reliability coefficients of the scale and its sub-dimensions are at a reasonable level (Tabachnick & Fidell, 2007).

After the explanatory factor analysis and reliability results were found to be at an acceptable level, confirmatory factor analysis with AMOS was applied to the 11-item scale. The obtained findings are shown in Figure 1.

Figure 1: Confirmatory Factor Analysis Findings Regarding the Expectation Scale
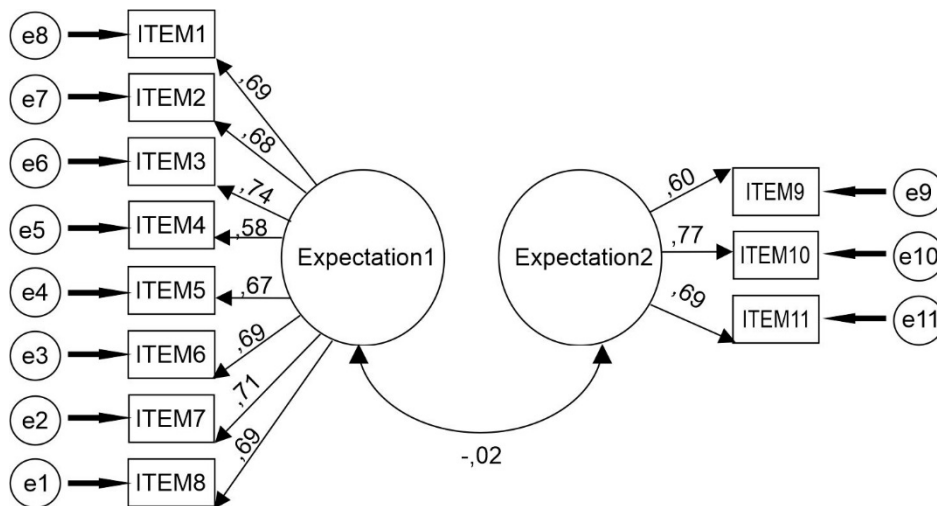
Source: the authors' calculation

As a result of the confirmatory factor analysis, it can be said that the fit criteria ($\chi2$ = 85,214 (sd = 43, p < .001), ($\chi2$/sd) = 1,982, RMSEA = 0,054, GFI = 0,957, CFI = 0,966, NNFI= 0,934) of the model shown in Figure 1 meet the desired conditions and the fit criteria of the model are good.

Table 6: Relationship between first and second fieldwork

		Second Field Study
First field study	Pearson correlation	0.707**
	Sig. (2-tailed)	0,000
	N	0.342

Source: the authors' calculation

The correlation between the first and second field study arithmetic averages of the data obtained was examined. Obtained findings; showed a high correlation.

Conclusion

Digitization, which expresses the last dimension of technological developments, affects and changes every field irreversibly. One of these areas is the accounting profession. The accounting profession is rapidly digitizing with applications such as e-ledger and e-declaration. Therefore, the job descriptions of professional accountants are also changing rapidly. Professional accountants need to adapt to digital transformation in order to respond to the needs in the digitalization process. Accounting education plays a crucial role in raising suitable professionals for the age. However, today, explaining accounting education with traditional methods causes career candidates to grow away from the sector and the process. Accounting education should also be digitalized to train accountants compatible with the digitalized accounting profession. Digitalization in accounting education, on the other hand, will be possible with the use of digital education technologies such as augmented reality and simulation in accounting courses. As a result of this situation, which constitutes the main problem of the research, a scale development study was conducted to determine the expectations of the students from the accounting course during the digitalization process. The findings are summarized below.

The scale development study was carried out on 342 students who took accounting courses at Karabuk University. Before starting the field study, the relevant literature was scanned, and a 22-item question pool was created, expressing the expectation about the accounting course in the digitalization process. After receiving expert opinions and conducting a pilot study on 150 people, the questionnaire was given its final form. A two-stage field study was carried out at different times, with the final form consisting of a total of 11 items. The data obtained from the main study were evaluated, and it was seen that the scale items explained 56,658% of the total variance. The factor loads of the items ranged from 0.64 to 0.82. It has been determined that the scale is divided into two sub-dimensions, the expectation from digital education technologies and the Expectation from traditional expression. The reliability level of the scale was found to be reasonably reliable. Based on

the analysis results obtained, the scale can be used in accounting education to determine the expectations of students from the accounting course in the digital transformation process.

When the related literature was examined, it was seen that the studies generally focused on determining the student/teacher opinions about the use of technology in accounting education. However, in the digitalized accounting profession, the digitalization of professionals is related to the expectations of the candidates' students as well as their opinions. In order to prepare the candidate students for the digitalized accounting profession, it is necessary to develop their intellectual knowledge and enable them to think analytically and systematically. For this, the first thing to do is to determine student expectations about the digitalization of accounting education. Thus, according to this expectation, a curriculum, that is compatible with technological developments and includes courses using digital technologies, can be created. It can be ensured that students receive more comprehensive education on the changes in the accounting profession and practices. In addition, the digitalization of accounting education will enable students to have the necessary knowledge and skills for the needs of the digital age and to have more opportunities to find a job after graduation.

In brief, the digitalization of accounting education largely depends on students' expectations regarding the use of digital education technologies in accounting courses. Accounting education will be digitalized to the extent that students' expectations about the use of digital education technologies in accounting courses are positive. Thus, it will be possible to train professional accountants who are compatible with the digital transformation process and can meet the needs of the sector. The starting point of this study is to determine the expectations of university students from the accounting course in the digital age. However, in the relevant literature, there is hardly a scale study that can be used to measure students' expectations from digital education technologies in accounting courses. In this respect, a scale development study was conducted to measure the expectations of students from the accounting course in the digital age. It is recommended that the developed scale be used in future studies to determine the expectations of students from digital technologies in other courses besides the accounting course.

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APPENDIX 1. Expectation scale from accounting course in the digital transformation process

1: Strongly disagree 2: Disagree 3: Neither Agree nor Disagree 4: Agree 5: Strongly Agree	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
q1- I think that subjects such as stock control, production process, etc. should be explained through a simulation in the accounting course	①	②	③	④	⑤
q2 - I think that the lecture notes about the accounting course should be accessed from digital platforms such as online library resources	①	②	③	④	⑤
q3 - I think that 3D – real-size technological training tools should be used for invoices, receipts, etc. documents in the accounting course	①	②	③	④	⑤
q4 - I think that in the accounting course, the teacher should be reached through digital platforms such as Google Glass outside the classroom	①	②	③	④	⑤
q5 - I think that the topics that I want to repeat in the accounting course should be accessed from the sources of books with enriched content (AR books)	①	②	③	④	⑤
q6 - I think that subjects such as establishing an enterprise and end-of-term transactions should be enriched with games and animations in the accounting course.	①	②	③	④	⑤
q7 - I think that an online accounting program/module should be used in the accounting course.	①	②	③	④	⑤
q8 - I think that the theoretical information given in the accounting course should be explained with technological applications.	①	②	③	④	⑤
q9 - I think it is sufficient to explain the accounting course with traditional methods.	①	②	③	④	⑤
q10 - Educational materials (board, pencil, projector, power point presentation, etc.) are sufficient for the accounting course.	①	②	③	④	⑤
q11 - Theoretical course hours are sufficient for the accounting course.	①	②	③	④	⑤

Source: the authors