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FINTECH ACCOUNTING AND INDUSTRY 4.0: FUTURE-PROOFING OR THREATS TO THE ACCOUNTING PROFESSION?

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Abstract. No development in recent years has changed companies and other organizations as much as digitization because it affects a wide variety of areas, including finance, accounting, and auditing. However, the current system of accounting digitization and automation in companies is very different. Although some companies are advanced in this regard, others are only just beginning their digitization and automation efforts. This study examines the status quo and development tendencies of digitization in accounting as well as the responsibilities of implementation for accounting digitization. For the empirical study, we apply the technology acceptance model (TAM) combined with trust and perceived risk as a theoretical basis to analyze professional accountants' perceptions regarding the digitalization of accounting finance activity (fintech accounting). The results indicate that the user trusts and uses the information gathered and uses the usability of the usability of adopting digital services. In the present case, the risk factor did not affect the perceived use of digital services. However, perceived usefulness did not influence the attituds of the respondents to make the use of digital services. Thus, the present study contributes to perspectives on the evolution of digitalization in the accounting profession while highlighting trends in the use of technologies provided to professional accountants by Industry 4.0.

Keywords: fintech, accounting, Industry 4.0, digitalization, blockchain, artificial intelligence.

JEL Classification: M41, G20.

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Introduction

Companies are making more progress in digitizing their finance and accounting systems. They use modern technologies for increasingly complex tasks in accounting and financial services. Since the board of directors and management still decides on the technological architecture of finance and accounting in most companies, the use of technology in accounting is becoming common than progressive. Mobile technologies are not yet in widespread use in the business environment. Also, the interest in these technologies is growing rapidly. Due to their compactness, smartphones are ideal for personal customer contact, be it in financial service/accounting or sales processing by the seller. However, integrating mobile technologies into everyday work also poses challenges for companies. The statements and problems relating to feasibility, data security, or general acceptance by employees must be understood and addressed by companies.

The new fintech services target multifunctional financial services provided by companies specializing in the use of evolving technologies like the near field communication (NFC), radio frequency identification (RFID), Internet of Things (IoT), big data, blockchain, and artificial intelligence (AI). Notably, the cybersecurity of these fintech services should be considered. The new technologies affect organizations and the human resources. According to Meier (2017), "Today, a fourth generation of even more innovative tools is shaking up our habits". Thus, professional accountants must evolve their business model to provide digital services (Lanzolla & Markides, 2021). Notably, professional accountants are at a critical juncture and intersection (Mališ et al., 2021) resulting from current technological advances. Robotics and AI are increasingly being used with data analysis (Richins et al., 2017), blockchains, flow automation, mobile applications, and collaboration platforms, which have been characterized by a significant change in the work process (Raphael, 2017). Thus, material work is being replaced by new technologies.

Digitization is considered the third phase of technological, which has brought significant changes in the financial accounting field. This revolution in the digitization of financial accounting services has been analyzed by researchers in the field who have been analyzing the relationship between technology and accounting since the early 2000s, however, this research is now outdated. With the introduction of Industry 4.0 (Granlund, 2011), it is a need to adapt to new dynamic technologies that bring new research opportunities to this field (Quattrone, 2016).

Fintech relies on advanced technologies such as the Internet of Things (IoT), artificial intelligence (AI), blockchain, near field communication (NFC), mobile wallets and more. It is estimated that these technologies will contribute to the development of fintech services, by facilitating the collection of data and information, democratic access, and prompt delivery of services (Barbu et al., 2021). Based on information and communication technologies, more and more financial transactions will be implemented electronically, without human mediation. Thus, we consider the TAM model to be suitable for the analysis of the acceptance of new technologies in the accounting field because the impact of the financial sector depends on technological innovation and its implementation and personalization. Fintech's technological innovation also brings with it several changes in the user's attitude towards new financial technologies, with a possible impact on traditional services.

Although Romania is one of the emerging countries, it is a pioneer in the field of the Internet, so fintech services also had a quick chance of being adopted by users. According to the Digital Evolution: Connected Consumer Monitor study conducted in November 2018, 16% of internet users in Romania used fintech services. With the advent of the health crisis, the use of fintech services has become vital to our health. Given that a series of studies have been done in Romania on the application of fintech in different fields, digitization (Tohănean et al., 2020; Ionașcu et al., 2022; Guşe & Mangiuc, 2022), blockchain, big data (Dima, 2021) the application of artificial intelligence (Pelau et al., 2021; Nichifor et al., 2021; Dinu, 2021), based on literature, we have identified a lack of attitude of professional accountants on fintech services. The present research aims to contribute to the literature and at the same time to analyze factors that could influence the perception of professional accountants in the adoption of financial services provided by Fintech. This paper comprehensively and concretely analyzes the influencing factors and their relationship with the adoption of Fintech services. Moreover, we apply the technology acceptance model to study the influence behind the adoption of Fintech services by professional accounting users. As expected, there may be a reluctance between different generations, but we cannot say that perceived usefulness influences the attitude toward use respective that perceived risk influences the perceived usefulness.

This paper analyses existing research on the digitization of financial services in the framework of Industry 4.0 framework and new fintech services. To promote a better understanding of new technologies, the paper presents different digital solutions followed by an empirical research on the adaptation of fintech accounting customer services technology in Romania. The novelty of the article aims at the analysis carried out in Romania; respectively, the results can help both professional accountants and stakeholders in order to better understand what digitalization and the challenges brought. The paper is structured as follows: introduction, literature review presents the relevant research for the scientific approach undertaken, research methodology, results, and conclusions.

1. Literature review

Industry 4.0 changes the way we work and the communication of society. The transformation is linked to Industry 4.0, which occurs in the level of industries and affects the neighboring world through the development and continuous progress of digital technologies (Zhao, 2018). AI is one of the new revolutions of Industry 4.0, which, merged with modern technology, helps to overcome several individual errors to exceed individual performance in various fields. The systems used are fitting increasingly advanced and accurate, with the ability to recognize voices and languages, which until recently were associated with human skills. Moreover, mobilized applications can make real-time translations, while glasses can be linked to Google Maps or additional exploration programs. Therefore, the solutions offered by AI get the possibility to change various and critical fields such as finance, accounting, auditing, education, research, and health, among others. AI is not a particular technology, but rather a broad set of tools to improve the revolution of different minerals through Industry 4.0 and new technologies.

Artificial intelligence (AI) is characterized as the intelligence displayed by machines. In supercomputer science, a "smart" machinery is a machine that manages to replace a flexible rational agent and maximize the potential for success in a certain goal in the shortest possible time (Pelau et al., 2021). Moreover, AI is used when a machine imitates the "cognitive" tasks that individuals associate with other individuals' opinions, such as "learning" and "dilemma-solving" (Issa et al., 2016; Lytras & Visvizi, 2021; Losbichler & Lehner, 2021; Nichifor et al., 2021). Since AI is currently applied in different areas of activity, accounting and auditing force also be influenced by this new trend. The first effects of AI in the accounting profession found in the literature (Raphael, 2017; Nehmer & Appelbaum, 2019; Al-Sayyed et al., 2021) can be summarized as follows: the advantage of machine learning can replace manual records in accounting (Pelau et al., 2021).

Blockchain is an another technology applied in Industry 4.0, which allows entities to generate their information based on financial records. Like AI, blockchain technology is consistently evolving and being applied in various fields of activity. Notably, finance, accounting, and auditing have remained recognized as zones that could profit from the advantages of blockchain technology (Fullana & Ruiz, 2021). Since blockchain technology was only emerged as a revolution following the financial crisis of 2008, the road to accepting this technology remains long and difficult (Fullana & Ruiz, 2021).

Cybersecurity has become increasingly important and relates to risks involved in technology and business. Therefore, a synthesis of the most common cybersecurity batteries is required (Ng et al., 2017): misuse or theft of financial information, intellectual property rights, continued activity through sabotage and revealing secrets. Thus, digital transformation means not only new technologies but also significant investments in information security and cybersecurity. We must also consider the tasks that the new technologies bring to human resources and the skills that a professional accountant must possess in the era of Industry 4.0.

The COVID-19 pandemic brought with it an explosion of data in the online environment due to the digitalization of activities due to the prevalence of remote work. Although data security has become increasingly important for companies and cybersecurity issues have recently declined, data security remains an issue for many companies. According to a study conducted by audit nullitytics in March 2021, the first three sectors afflicted by cybersecurity breaches are technology, the consumer cycle, and financial services, together totaling over 56% of all breaches reported since 2011 (Audit Analytics, 2021). On the same idea, big data is a novelty in the accounting profession. This requires a description of what big data means and what its benefits are for the accounting profession. In case a large data accelerates the process by which businesses are re-imagined, the accounting profession must reinvent itself.

The IoT links all the segments of the industrialized IoT process from the supply chain to the delivery into a uniform viewpoint of fabrication, process, and manufactured goods data (Ionaşcu et al., 2022). Using big data analytics and predictive developing, improved IoT devices in factory machines or warehouse tables can counteract errors and interruption, amplify plant execution, reduce assurance fees, increase construction yields, and improve consumer experiences.

The IoT contributes significantly to big data due to the enormous capacity, speed, and range of coordinated and unstructured data that companies accumulate daily. To benefit since

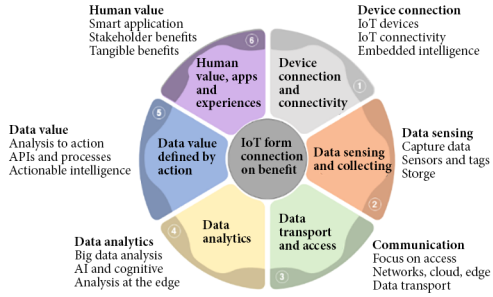

Figure 1. IoT form connection to benefit

big data in the IoT, big data analytics is required. Associated practices include prognostic analytics, content mining, cloud computing, data mining, data lakes, and Hadoop. Most companies use a mix of these methods to gain the best benefit from the IoT (Figure 1).

Big data implies to data establishes whose sizes exceed the capability of conventional database software instruments to catch, store, control, and analyze data (Dima, 2021). Big data and AI are the most common digital technologies used in the accounting profession, especially in the field of auditing (Montes & Goertzel, 2019), and mainly comprise big and convoluted data sets that are enigmatic to analyze and manipulate using standard methods and tools. Big data is generally characterized by the five V paradigma: volume, velocity, value, variety, and veracity (Balios, 2021).

Other accounting solution trends can be cloud-based. Cloud accounting refers to accounting software that is accessed via an internet browser. This already offers a high degree of flexibility. Since permanent installation on individuals' servers or workstation PCs is unnecessary, each employee who has been assigned a corresponding password can use such accounting software from any location (Dincă et al., 2019). Additionally, cloud accounting enables all data, receipts, and documents to be saved. These are linked to bookings and securely archived, which means they are available at any time for reporting and transmission to the tax office. Writing and sending offers, creating, checking, and sending invoices to customers, and the subsequent posting of business transactions with a debit balance are some activities that typically involve a great deal of time in companies (Figure 2).

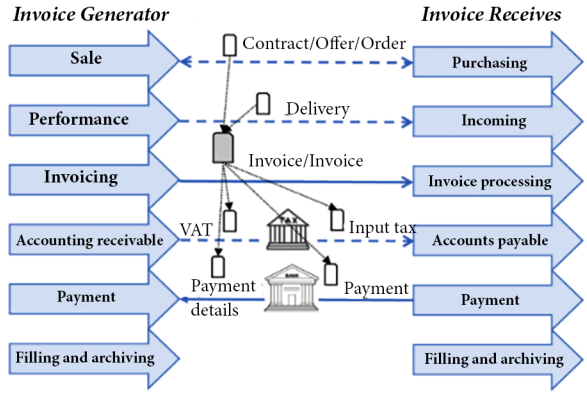

Figure 2. Business processes between the invoice generator and the invoice receivers

In the era of digital transformation, this use of resources can be effortlessly reduced. Many cloud-based solutions support users in precisely optimizing these processes and partially or completely automating manual processes. Fintech start-ups are stirring up the financial services industry. They use digital technologies much more than traditional financial service providers and thus conquer the interface with end customers. Traditional financial service providers are passed back in the value chain and downgraded to settlement factories. To counter this development, one must understand the business models with which fintech start-ups succeed in the market. The financial service sector is in a state of upheaval. New competitors are pushing their way onto the market faster and faster, enticing end customers with innovative services. Simultaneously, digital technologies are finding their way into the everyday lives of customers much faster than the processes of financial service providers, which makes it easy for new competitors to conquer the end-customer interface.

2. Hypothesis development

We chose to follow the technology acceptance model TAM model because it best explains the consumer's acceptance of new technologies. Therefore, we adopted the TAM model as a significant theory in exploring the factors that affect the attitude and intention of consumers in adopting FinTech products in Romania. As FinTech is another new technological paradigm in Romania, the impact of the financial sector depends on technological innovation, its implementation, and personalization. Based on the analysis, this paper studies the influence and relationship of the adoption behavior of professional accountants of new innovative technologies through the technology acceptance model (TAM) (Baciu et al., 2020; Schipor & Duhnea, 2020).

The TAM is often utilized by academics for various technological contexts (Davis, 1989; Davis et al., 1989; Venkatesh & Bala, 2008). Though in the primary periods technology acceptance researches have primarily focused on exactly how new technologies are adopted and promoted under conditions of pre-acceptance, subsequent researches have examined how persons persistently receive information technology, with a concentrate on implementation. Recent studies have expanded the areas of interest to include different individual behaviors of accepting information technology through emerging technologies such as IoT (Venkatesh & Bala, 2008; Guşe & Mangiuc, 2022; Baicu et al., 2020).

Perceived risk has been analyzed since the early 1960s when the concept was analyzed from the perspective of a relationship with human behavior. Risks are associated with the decisions we make, which can have positive or negative effects on behavior. A user's behavior toward the risks he is exposed to is analyzed from a multidimensional perspective in the literature and is applicable in different fields. Therefore, we note the importance of risks in the financial field of accounting (Hu et al., 2019). Since risk can also be perceived as a form of lack of trust, it can negatively influence the application of new IT technologies (Sikdar et al., 2015; Kim et al., 2016). In the research, where refer to the financial and confidentiality risk that professional accountants perceive in the digitalization of the profession. Financial risks may be associated with property damage, while privacy risks relate to business deal and more confidential data that may be released through digital services or cyber-attacks. Researchers

such as Khedmatgozar and Shahnazi (2018) consider that the level of risk assessment is among the most important factors that can influence the transition to digitized financial services. Fintech accounting services involve the use of technologies such as big data, AI, cloud computing, and risk is involved in adopting these new technologies in Industry 4.0.

H1: Perceived risk positively influences the perceived usefulness of new technologies in financial accounting services.

Trust is an idea related to the self-confidence, reliability, dependence, integrity, capacity, and hope of an entity. The main problem that Industry 4.0 faces is trust in the services offered, which include accounting services, fintech, audit, and many others (Rogers, 2016). Users' trust in the services provided may be influenced by the communication that entities have with their clients (Marella et al., 2020). Other research in this field has found that trust can also influence the decision to adopt new digitization technologies; therefore, we can note the influence it can have on attitude (Moon & Kim, 2016; Hu et al., 2019; Chuang et al., 2016).

H2: The trust in using IT services has a positive impact on the perceived usefulness of new technologies in financial accounting services.

Since attitude is generally characterized by a user's judgment of personal tendencies, the intent of behavior can be defined as someone's aim to adopt a particular behavior (Zhao, 2018). In the TAM, it was discovered that a constructive approach toward a new knowledge is the assumption of objectives to implement this technology (Rogers, 2016; Zhang et al., 2018). Researchers that applied the traditional TAM have observed a positive relationship between attitude and intention to adopt new technologies (Le & Cao, 2020).

H3: The user's attitude has a positive impact on the intention to use new technologies in financial accounting services.

In the TAM, the concept of perceived usefulness is considered a component that determines the degree of improvement of an activity through the adoption of new technologies (Venkatesh et al., 2003; Davis, 1989). Perceived usefulness describes the implementation of IT facilities by customers to streamline the work they perform. Thus, a positive impact can be achieved on the intention to use the technology offered by Industry 4.0 (Rogers, 2016). Empirical investigations have demonstrated that perceived utility can get a constructive impact on the aims of digital technology users (Le & Cao, 2020; Alshirah et al., 2021).

H4: Perceived usefulness has a positive impact on the intention to use newtechnologies in financial accounting services.

H5: Perceived usefulness has a positive impact on the attitude toward using new technologies in financial accounting services.

Perceivedease of use is an additional factor of the TAM model and defines the effort and degree of user involvement in applying digital technologies. Perceived ease of use aims to easily adapt users to new technologies. Researchers in various fields who have applied variable perceived ease of use in the TAM have shown significant correlations amid by the

perceived ease of use and the attitudes regarding the adoption of new technologies (Le & Cao, 2020). If users find digital services accessible, approachable, and simple to use, then they are additional predisposed to implement them (Rogers, 2016; Alshirah et al., 2021).

H6: Perceived ease of use has a positive impact on attitudes toward using new technologies in financial accounting services.

H7: Perceived ease of use has a positive impact on the perceived usefulness of new technologies in financial accounting services.

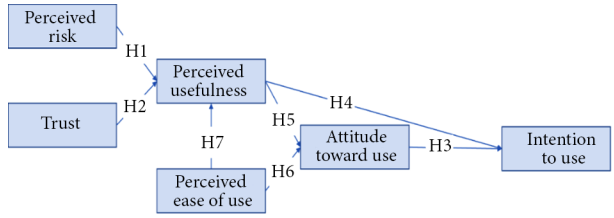

Figure 3. Research model

The enhancement of hypotheses fitted to improving investigation models (Figure 3). In the research model, we define the link among variables, which include three independent variables (i.e., "trust", "perceived risk", and "perceived ease of use") and three dependent variables (i.e., "perceived usefulness", "attitude toward use", and "intention to use".

3. Research methodology

The greatest advantage of online surveys when compared to interviews is likely that there is no requirement for the interviewer to be present, which results in lower data collection effort. Additionally, due to anonymity, the subjectively perceived need for socially desirable answers decreases, which means that truthful answers can be expected (Jerabek, 2015). According to Nind and Lewthwaite (2020), the absence of the interviewer means that there is no possibility of further questions. Using tried and tested survey systems also makes it possible to dispel uncertainty regarding whether the questionnaire was completed by a target person relevant to the survey and whether the person took sufficient time to complete it. Jerabek (2015) continued to address the risk of low response rates in online surveys due to their highly non-binding nature. However, if the questionnaire is designed to focus on a limited number of questions and their ease of understanding, the probability of termination can be reduced (Nind & Lewthwaite, 2020). By using a progress bar in the survey, the drop-out rate can also be minimized since the respondents can estimate the time it will take until the end of the questionnaire (Nind & Lewthwaite, 2020). The online questionnaire was established using the survey software "Google Forms" and was tested by three people. This pretest enabled the researchers to determine the expected duration of the survey, any comprehensibility problems, and the correctness of the structure.

The conceptualized research model based contains a total of 30 questions based on the literature (Venkatesh & Bala, 2008; Moon & Kim, 2016) which have being evaluated by

respondents on a five-point Likert level (level 1 indicates strong disagreement, while level 5 indicates strong agreement with the statement) for the six factors involved in the research with a total of 24 questions for each factor we have formulate 4 questions, additional we have the demographical questions. Before the official launch of the questionnaire, it was pretested with ten subjects who critically assessed the questions based on wording, sentence construction, and question formulation. These subjects were selected based on age, gender, educational level, experience, and affiliation. Subjects provided critical feedback that increased the questions' fluency, and, accordingly, the questionnaire was improved. The questionnaire was launched online via Google Forms, which generated a link to the specific questionnaire (Cantaragiu & Ghinea, 2020; Maiorescu et al., 2020). This link was distributed via social media in the first part of 2021, and it request to be completed only by respondents with work in de field of accounting ore related activities. The questionnaire was set up to be considered and completed only if all questions were answered. Baltar and Brunet (2012) state that the use of social networking sites can be effective for the study of "hard to reach" populations. Thus, considering the period of the survey, we consider that we are in this situation due to the health crisis that isolated the population of Romania. In order to obtain the highest possible response rate, we applied another method known in survey-based research, namely the so-called "snowball" sampling method. Why did we choose this method because we also members of a professional body, and this technique involves targeted sampling, in which researchers start with a small group of known respondents and extend the sample through this initial group which in turn identifies other study participants, thus moving away from the "snowball" effect (Vasenska et al., 2021). In other words, from a small "snowball" by rolling, we reach a larger "snowball".

After the data had been cleaned in Microsoft Excel, statistical analyses were performed using the programs SPSS. The most important results of the survey are providing in the findings and analysis section. Starting with the explanation of the descriptive features, a quality check of the structural model was conducted in a further step and the overall model was tested. It was extremely relevant to analyze the age, gender, education, experience, and affiliations that reveal the attraction of different generations for adopting Industry 4.0 technology among of the 246 respondents.

To obtain the empirical data to validate the model and test the hypothesis, quantitative questionnaires were issued to 600 individuals. Out of the 600 issued questionnaires, 246 fully completed valid responses were obtained (41% valid response rate).

Table 1. Sample description

	N	Percent
Gender		
Male	68	28%
Female	178	72%
Age		
Younger than 30 years	4	2%

End of Table 1

	N	Percent
30–40	36	15%
41–50	142	58%
51–60	52	21%
Older tham 60	12	5%
Educational level		
High school	4	2%
Graduate degree	68	28%
Postgraduate	174	71%
Experience		
<1 year	0	0%
1–5 years	18	7%
5–10 years	90	37%
>10 years	138	56%
Affiliation		
Audit firm – Big Four	8	3%
Audit firm – Not in the Big Four	12	5%
Self-employed	94	38%
Employee	96	39%
University accounting auditing professor	16	7%
IT expert in accounting/audit software	20	8%

Table 1 shows that of the 246 people, a total of 68 were male and 178 were female. The age groups are illustrated in Table 1, the most common group with 58% is the age group between 41–50 years. Followed by the age group with 31–60 years. Furthermore, questions were asked about the level of education of the subjects. Table 1 shows the level of education of the people. The largest group of 174 people (71%) who carried out this survey were those with a Postgraduate degree. The next group with 68 people (28%) indicated the level of education Graduate degree. Also, the experience in the field was analyzed. As the Table 1 indicate the most of the respondents with a number of 138 indicated that they have an experience of more than 10 years in the field of activity. At the same time, it is important to see the affiliation of the respondents, in this case Table 1 indicate the most answers from accountants who organize their activity as employee.

4. Results and discussion

The exploratory factor analysis is a multivariate analysis method with the aim of analyzing structures in extensive variable options. It is assumed that some variables also overlap in the

extensive variable sets. The factor analysis is characterized by the fact that the focus is on discovering descriptive and explanatory dimensions that are independent of one another. The most important point in factor analysis is to analyze the relationships between variables so that groups of variables that are highly correlated can be formed. In addition, these highly correlated variables are separated from other variables that are not highly correlated with one another. The group of variables that are highly correlated with each other are called "factors".

At the beginning, the Kaiser-Mayer-Olkin criterion is checked. On the one hand, it is examined to what extent the output variables belong together, and on the other hand, whether it makes sense to carry out the factor analysis at all. The KMO criterion (Kaiser-Meyer-Olkin criterion) is applied before a factor analysis is carried out and, if the test value is less than 0.5, it indicates that the execution of the factor analysis is questionable. If the result is greater than or equal to 0.5, then factor analysis is performed. The fact that the value is equal to or higher than 0.8 is a meritorious result and, when the value is higher than or equal to 0.9, an astonishing result.

Table 2 shows the KMO criterion for the "perceived risk" factor. The value 0.6 was reached. This means that the factor analysis could be performed. The result of the Bartlett test is also considered. Bartlett's result is a chi-square value. The significance value of 0.000 was reached. This means that there are some variables in the population that correlate with one another. The H0, which says that there is no significant relationship between the variables, is therefore rejected.

Table 2. KMO and Bartlett test

Measure of sample suitability according to Kaiser-Meyer-Olkin		0.600
Bartlett's test for sphericity	Approximate Chi square	47.227
	Df	10
	Significant according to Bartlett	0.000

The next factor to be examined is "trust". According to the KMO criterion, the value 0.719 is achieved in Table 3. This means that a good value has been achieved.

Table 3. KMO and Bartlett test

Measure of sample suitability according to Kaiser-Meyer-Olkin		0.719
Bartlett's test for sphericity	Approximate Chi square	104,86
	Df	10
	Significant according to Bartlett	0.000

Furthermore, the factor analysis for "perceived usefulness" is carried out. In Table 4 with the KMO criterion, the value 0.764 is achieved. This means that a good result has been achieved. The criterion shows the extent to which the variables belong together.

Table 4. KMO and Bartlett test

Measure of sample suitability according to Kaiser-Meyer-Olkin		0.764
Bartlett's test for sphericity	Approximate Chi square	104.23
	Df	10
	Significant according to Bartlett	0.000

The next factor analysis is carried out for the "perceived ease of use" factor. At the beginning, the result according to the KMO criterion is shown in Table 5. The value 0.609 was reached. This means that it makes sense to carry out the factor analysis.

Table 5. KMO and Bartlett test

Measure of sample suitability according to Kaiser-Meyer-Olkin		0.609
Bartlett's test for sphericity	Approximate Chi square	42.13
	Df	10
	Significant according to Bartlett	0.000

Furthermore, the factor analysis for the "attitude toward use" value follows. The KMO criterion shows the value 0.787 in Table 6. This means that it makes sense to continue with the factor analysis.

Table 6. KMO and Bartlett test

Measure of sample suitability according to Kaiser-Meyer-Olkin		0.787
Bartlett's test for sphericity	Approximate Chi square	104.86
	Df	10
	Significant according to Bartlett	0.000

As the last part of the factor analysis, the factor "intention to use" is examined. The value according to the Bartlett test in Table 7 is 0.682. This means that in the population some variables correlate with one another, and the factor analysis can be carried out.

Table 7. KMO and Bartlett test

Measure of sample suitability according to Kaiser-Meyer-Olkin		0.682
Bartlett's test for sphericity	Approximate Chi square	81.86
	Df	10
	Significant according to Bartlett	0.000

Additional in the study was the reliability test applied, that was articulated by a multiple reliability value (i.e., Cronbach's alpha value).

The reliability analysis focuses on the compilation of individual items in a test. This analysis helps to determine which item is helpful and, on the other hand, which item is superfluous. In this case, the reliability analysis was carried out to determine whether it is reliable to

Table 8. Reliability test

Construct	Mean	Std Deviation	Cronbach Alfa
Perceived risk	4.57	0.593	0.897
Trust	4.14	0.587	0.864
Perceived Ease of Use	4.05	0.767	0.935
Perceived Usefulness	4.14	0.853	0.886
Attitude toward use	3.89	0.587	0.904
Intention to use	4.05	0.866	0.876

summarize the items as suggested by the factor analysis. First, the value of Cronbach Alfa is checked. In the literature there are different opinions on the interpretation of Cronbach Alfa. For construct reliability to be confirmed, Cronbach's alpha values should be above 0.7, while composite reliability values should be preferably above 0.8 although values above 0.6 are acceptable (Hair et al., 2014). Looking at Table 8 it is observed that Cronbach's alpha values ranged from 0.864 to 0.935 were met, therefore, confirming the reliability of the constructs. Furthermore, the reliability analysis shows whether reliability will increase if some items are not taken into account and how the individual items influence the overall scale.

The quality criteria presented in Table 9 show that many of the common model fit criteria were met. The measure for the variance explained in the model (adjusted goodness of fit index (AGFI), 0.832), fulfills the minimum requirement of 0.8. To determine whether the model came sufficiently close to reality, we measured the root mean square error of approximation (RMSEA), which met the minimum requirement with a value of 0.07.

Table 9. Quality criteria

Index	Criterion	Value in the model
X2/df	P > 0.05	P = 0.000
Adjusted goodness of fit index (AGFI)	>0.8	0.832
Goodness of fit index (GFI)	>0.9	0.941
Normed fit index (NFI)	>0.9	0.907
Comparative goodness of fit index (CFI)	>0.9	0.952
Root mean square error of approximation (RMSEA)	<0.08	0.07

The structural equation model was applied to test the hypotheses and relationships in the proposed model. Specifically, seven associations were examined (i.e., the strength and significance of the directly impact of the independent and dependent variables). From a total of seven tested hypotheses, five have being supported and two were rejected (Table 10).

Based on the applied TAM, the present research analyzed the implications of using IT technologies in the accounting profession. This research considers trust in the technology and services provided as the main factor due to the impact of major financial scandals that led to reduced trust in the accounting profession. Due to these unpleasant events, the accounting profession is constantly developing and improving to provide reliable services to users.

Table 10. Hypotheses validation

Hypotheses	Estimates	Sig.	Supported
H1: Perceived risk -> Perceived usefulness	0.802	0.213	Rejected
H2: Trust-> Perceived usefulness	0.256	0.013	Supported
H3: Attitude toward use -> Intention to use	0.793	0.001	Supported
H4: Perceived usefulness -> Intention to use	0.557	0.021	Supported
H5: Perceived usefulness -> Attitude toward use	0.412	0.288	Rejected
H6: Perceived ease of use -> Attitude toward use	0.404	0.017	Supported
H7: Perceived ease of use -> Perceived usefulness	0.741	0.001	Supported

As shown in Table 4, using IT technologies can affect the use of these technologies. However, two of the seven hypotheses tested in this study were rejected. Thus, the perceived risks do not influence perceived usefulness due to a significance level greater than 0.05 being observed, which indicates the lack of a correlation between the two; therefore, H1 was rejected. In the interaction between users and professional accountants, the risk associated with confidentiality can play an important role. However, the present research shows that there is no association among risks and perceived usefulness.

Furthermore, perceived usefulness did not influence attitudes toward technology use due to the lack of a correlation indicated by a significance greater than 0.05; therefore, H5 was rejected. Instead, we observed a significant correlation between trust and the perceived usefulness of new digital technologies. Thus, the trust generated by digital services can improve the usefulness of the services provided. This conclusion is consistent with previous research (Sikdar et al., 2015) and validates H2. Moreover, we observed a positive correlation among perceived usefulness and the aim to use IT technologies; therefore, H4 was supported. Additionally, attitudes toward using digital services can affect the purpose to use the technologies offered by Industry 4.0. Since this correlation was confirmed by the results, H3 was supported. Similarly, the perceived ease of using digital applications offered by Industry 4.0 will affect the perceived usefulness and attitudes among people that are offered these services. Therefore, H6 and H7 were supported. However, we must consider the risks that we are exposed to when using digital technology. Researchers who have analyzed the impact of the perceived ease of using IT technologies determined that the early adoption of IT technology or services does not significantly impact attitude, behavior, or intention since users of the technology or services are unfamiliar with them because they have not used such technologies and do not know precisely what awaits them (Davis, 1989). Notably, this conclusion contradicts the findings of the investigation. Thus, we can determine that users of IT technologies place a strong emphasis on ease of use and then evaluate the potential benefits and risks. Ultimately, this influences their attitudes toward adopting the new technologies offered by Industry 4.0. The present research contributes to determining the intention to use IT technologies in the accounting profession.

Based on the literature and the results obtained, we consider that artificial intelligence plays an important role in the accounting field, which can facilitate the routine activity of the accountant, respective the blockchain technology can help the accountant to better manage-

ment of the activity. Technological innovation must be accessible and must provide security to be accepted and implemented by accountants.

Conclusions

The research gets three essential contributions to the field of accounting. First, we explain the notion of digitization and underline the potential implications of this ubiquitous concept for accounting. Second, we summarize the developing literature on digitization in accounting and compare relevant studies. Third, we highlight new avenues for research. Based on the literature – both theoretically and normatively – it seems logical that the accounting profession must overcome existing barriers and move from the traditional attitude to a digitized approach. However, it is crucial to reflect about the impact of this transition on the profession, which has not been fully investigated. In this context, the present research aimed to present an overview of the existing literature and contribute to a better understanding of what this transition means.

The slow pace of digital technology adoption is partly due to the highly regulated nature of the accounting profession. The clients of professional accountants expect adaptation to new technologies and the digitization of activity to obtain information in the shortest possible time. International auditing standards do not exclude or trigger the utilization of data analysis and other digital audit technologies in the audit process. However, such a transition from traditional to digitized activity is difficult due to professional reasoning that cannot be replaced by digital technologies. Accountants are required to provide consistent and high-quality data for decision-making. Simultaneously, they could be required to include additional superficially generated data linked with dangers associated to veracity and representativeness. This pressure involves accountants to evaluate the reliability of information. Furthermore, additional ethical dilemmas take place when accountants should use professional skepticism in their assessments of assumptions and the quality of inputs to digital processes. Such rational and ethical problems result in the requirement to present excessive concentrations of digital competence in which accountants may not have the required guidance. Accountants can perform a vital role in the development of designing technological applications since they are the main defenders of crucial company knowledge.

We suppose that this examination of the literature can serve as a useful opening goal for future exploration on this topic. Moreover, we believe that there are new possible directions for future research. For example, future research could focus on examining how digitization affects the limits of accounting and analyze the impact that new digital tools and techniques have on the production of knowledge for decision-making.

The company needs to pay attention and understand the behavior and perceptions to increase the number of users of FinTech services. Companies need to provide users with confidence and perceived risk factors. The researcher explores the relationship between trust and perceived risk to user behaviour using TAM as the basic theory of this research

Trust influences the perceived usefulness of the intention to use FinTech services, so we consider that trust has a special role in one's intention to use Fintech services, these results are in line with previous research in the field. Also, this paper finds that perceived useful-

ness and trust have positive influences on intention for the adoption of Fintech services. In addition, the significant relationship between intention to use and attitude toward use is consistent.

From a managerial perception, the study has important implications based on the useful information presented on new digital technologies in the domain of accounting and financial accounting services as well as methods for efficiently developing digital technologies in the field for sustainable development. The research aimed to identify the causal relationship between the technologies offered by Industry 4.0 in the financial accounting field and user trust, user-perceived risks, perceived usefulness, ease of use, attitude toward use, and intention to use these technologies. The present results also identify the important role that IT technologies play in providing transparent and reliable information. However, there is a perceived risk of confidentiality and cyber risk. In additional, high-level-quality information and customer services can immediately increase trust, immediately and implicitly reduce perceived risk, and implicitly enable further purposes simultaneously. Ultimately, managers should promote the culture of digitalization. Disruptions such as the COVID-19 pandemic have brought about a transition to mobile work, which has resulted in a greater reliance on the use of IT technologies.

Regarding the limits of this research, the collection of data could be extended to a larger sample. This study could also be improved by increasing the number of variables involved so that more detailed research can be performed on the elements that affect the intention to apply new IT skills. Thus, a more refined, detailed, and comprehensive perspective on the identified factors could lead to a new empirical study that analyzes the model of adopting services offered by Industry 4.0 within the financial accounting field in greater detail.

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