



Студенттер мен жас ғалымдардың  
**«ҒЫЛЫМ ЖӘНЕ БІЛІМ - 2018»**  
XIII Халықаралық ғылыми конференциясы

**СБОРНИК МАТЕРИАЛОВ**

XIII Международная научная конференция  
студентов и молодых ученых  
**«НАУКА И ОБРАЗОВАНИЕ - 2018»**

The XIII International Scientific Conference  
for Students and Young Scientists  
**«SCIENCE AND EDUCATION - 2018»**



12<sup>th</sup> April 2018, Astana

**ҚАЗАҚСТАН РЕСПУБЛИКАСЫ БІЛІМ ЖӘНЕ ҒЫЛЫМ МИНИСТРЛІГІ  
Л.Н. ГУМИЛЕВ АТЫНДАҒЫ ЕУРАЗИЯ ҰЛТТЫҚ УНИВЕРСИТЕТІ**

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The proceedings are the papers of students, undergraduates, doctoral students and young researchers on topical issues of natural and technical sciences and humanities.

В сборник вошли доклады студентов, магистрантов, докторантов и молодых ученых по актуальным вопросам естественно-технических и гуманитарных наук.

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Thus, on average, the business saves 1-2% of the turnover, switching from paper invoices to electronic invoices and optimizing the processes associated with this transition. Electronic invoices will be the key to automating the entire supply chain and efficient financial management of the enterprise [2].

According to the Directive of European Union, all member countries of the EU allow using electronic invoices. Invoices can be employed in transactions between a single state and also between members of the European Union. Besides, they are mandatory in 15 countries when there is interaction with the public sector.

Nowadays in Kazakhstan, in respect of all international experience, as well as the peculiarities of taxation, electronic invoice start developing in accounting system.

As a result, since July 1, 2014 in Kazakhstan, on a voluntary basis, organizations can issue invoices electronically.

Information system "Electronic invoices" (IS ESF) allows discharging and exchange invoices in electronic form between the participants of trading operations in real time.

In that case, the Tax Committee of the Ministry of Finance of the Republic of Kazakhstan established a working group to develop methodological issues related to the introduction of electronic invoices, which includes employees of the MF RK, as well as business representatives. So, their participants are: individuals; Individual entrepreneurs, individuals engaged in private practice; legal entities (their structural subdivisions).

This group works on determining the form of the electronic invoice, along with the procedure of issuing, sending, receiving, registering, processing, transferring and receiving an electronic invoice.

After that, on January 1, 2017, electronic invoices were carried out exclusively in electronic format for all VAT payers. The transition of electronic invoices to a mandatory statement is proposed in several stages. Since January 1, 2018 - large taxpayers subject to monitoring, since January 1, 2019 - VAT payers. Similarly, the introduction of accompanying invoices for all goods to begin with January 1, 2019, which is provided in the Tax Code from January 1, 2017.

A lot of questions which are related to the tax system, to be more specific most common changes in tax system, was presented in VII Conference of accountants of Kazakhstan in 2018. One of the main topic was about electronic invoice. On that Conference Alfia Suvorova (a software specialist of 1C) explained the actual issue of the implementation and application of electronic invoices in 2018 [1].

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### **ACCOUNTING PROFESSION IN THE DIGITAL AGE**

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Accounting is one of the professions that can adapt quickly to the requirements and competencies of the present times. It has a rooted tradition and historical background [1]. The accounting profession, which has undertaken the necessary transformations without breaking away from its basic principles in coordination with all technological transformations since the period of record-keeping was occurring by hand, plays a critical role in the decision-making processes of

enterprises as an important information system today [2]. The accounting information system can be defined as the collection, storage and processing of financial and non-financial accounting transactions through information processing technologies in order to support management decisions [3]. The accounting information system is integrated into the enterprise resource planning flow. Thus, the stronger information-flow can be provided. This transformation of accounting has led to the linking of information technology and the accounting profession to each other and strengthening this bond day by day. The relationship between IT and accounting affects the quantity and quality of information that will support decision-making processes.

It has been suggested that the accounting profession will face significant changes in the next three decades, and professional organizations, their members, and educational institutions should respond. The three changes – evolving smart and digital technology, continued globalization of reporting/disclosure standards, and new forms of regulation major challenges for the profession [4]. Association of Chartered Certified Accountants (ACCA) research has explored these important changes, expected to be encountered by the year 2025.

First, accountants will use increasingly sophisticated and smart technologies to enhance their traditional ways of working, and these technologies might even replace the traditional approach. Smart software systems (including cloud computing) will support the trend toward outsourcing services (including more overseas outsourcing), and greater use of social media via smart technology will improve collaboration, disclosure, engagement with stakeholders and broader communities. Social media (including Facebook, Twitter, and Google search) will reveal more data any corporate assurance report and stakeholders will use tools to interpret “big data” [5].

Second, continued globalization will create more opportunities and challenges for members of the accounting profession. While globalization encourages the free flow of money from one capital market to another, enhanced overseas outsourcing activities and the transfer of technical and professional skills will simultaneously continue to pose threats to resolving local problems (with different cultural, financial, and tax systems). Accounting firms in the US, EU, and Australia are outsourcing services to India and China for the purpose of cost minimization, which will create a shift in employment within the accounting industry in the West. As globalization has already been negatively impacted by some events such as Brexit and presidential election in the US, accounting professionals are likely to see themselves having a role in this transformation.

Third, increased regulation, and the associated disclosure rules, will have the greatest impact on the profession for years to come. For example, increased regulation is imminent because of massive tax avoidance, transfer pricing, and money laundering as exposed via the panama papers. Many professional (tax) accountants will be affected by intergovernmental tax action to limit base erosion and profit-shifting.

Additionally, because of greater public pressures and stakeholder expectations, social and environmental considerations are getting importance alongside economic concerns in contemporary organizations. We see a range of stakeholder groups including shareholders, workers, governments or regulators, non-governmental organizations, media, and the community have a growing interest in organizational social and environmental issues [6]. Because of the widespread stakeholder concern and associated regulations toward social and environmental considerations, contemporary organizations are facing challenges to find sustainable solutions to deal with the complexity of integrating financial, social, and environmental performance. Quite tied to this, new forms of regulation (such as integrated reporting IR, which is required for South African-listed companies, and supply chain transparency disclosures, which are required for many California-based companies) are emerging and members of accounting organizations are already engaged in this transformation [3],[5].

The regulatory concern for different social and environmental issues, along with the associated measurement and reporting complexities of these issues, has allowed accounting professionals to open their minds to the possibility that accounting has the capacity to change. The important implication is that all professional accountants will be expected to look beyond the

numbers, which will, in turn, enhance collaborations among members of multiple professions, including accountants, doctors, lawyers, environmental scientist, sociologists, and so on.

Future accountants will increasingly need education in digital technology (including cloud computing and use of big data), globalization (outsourcing of accounting services), and evolving regulations (tax regulation, new forms of corporate reporting, integrated reporting regulation, and so on). The ACCA report revealed that knowledge of digital technologies is the key competency area where professional accountants have skill gaps. At present, accountants lack knowledge in transformation of new disclosure regulations, new forms of disclosures, and awareness of the interconnectedness of financial and non-financial reporting. Professional accountants will need the skills to provide more all-inclusive corporate reporting, which tells less about the numbers and more about the narrative of the organization [4].

Unfortunately, at the moment, few universities have developed curriculums for accounting students in line with their future needs. Universities will need to develop or incorporate new units, such as cloud computing, big data, digital technology, integrated reporting, carbon emission accounting, and so on for accounting students. Professional accounting organizations should consult with universities to collate experts/lecturers in the new areas and run new courses. At the same time, universities should either invest in existing faculty members for training and learning or recruit experts to coordinate and lecture new units.

Big accounting firms are conducting surveys on cloud computing, big data, technological change, new forms of fraud and corruption, and corporate sustainability in order to address the ongoing and future opportunities and challenges facing the profession. KPMG, for example, has produced survey reports on cloud computing, fraud/corruption/bribery, corporate sustainability, and IR.

A growing number of accounting academics are investigating more narrative corporate reporting. A growing number of accounting academics and their PhD students are looking at social and environmental sustainability issues and the associated global frameworks, such as Global Reporting Initiative Standards, IR, the UN Global Compact, Social Accountability, and so on. Accounting researchers are organizing some national and international conferences, such as CSEAR and APIRA, to disseminate their findings to the wider community. Professional accounting organizations, including Chartered Accountants Australia and New Zealand, CPA Australia, and the ACCA (UK) are providing seed funding to academic researchers to investigate issues in line with future economic, technological, social, and environmental changes.

Despite ongoing efforts by professional accounting organizations and academic researchers, there is a surprising gap in research that deals with the changes that will impact accountants and professional accounting organizations. Future research should drive industry collaborations and collaborations between inter-disciplinary academic researchers in order to reveal strategic responses to and pro-active strategies on changes in digital technology, the continued globalization of standards, and new forms of regulation and associated stakeholder expectations.

In recent years, more and more people quote a research paper published by a couple of computer scientists – Frey and Osborne (2013) on how quickly various jobs are going to disappear because of automation and technology. According to these two authors, accounting is in grave danger. Despite the issue with this study and its conclusion, no one will object the statement that technology is going to change accounting profession. The more important questions are how will technology change accounting and accounting profession, and what should accounting firms and educators do in response? With the improvement in technology and computer power both corporations and accounting firms start to embrace technology and take advantage of the improvement. Take a large multinational corporation as an example. In the past, it has to send a group of accountants to each of its subsidiaries to ensure that the data is collected, processed, and communicated with the headquarters. Nowadays, large corporations generally have a large and comprehensive accounting information system that automatically collects and processes data [8]. Data are more abundant than ever. In this process of the transformation, the accountants who just do the routine job and collecting data will likely lose their jobs. At the same time, more accountants are



needed to process the data and generate useful information for top managers to facilitate their decisions.

Take auditing as an example. In the past (and now still), staff members in accounting firms need to do sampling and collect data from their clients to ensure that they process the transactions and prepare the financial statements correctly. Now and in the future, auditors do not need to do sampling and they can have access to all the data their clients have. Thus, the staff members who used to look through the piles of papers and collect samples of documents will soon be obsolete. Yet, more people will be needed to process the vast volume of data and identify red flags that might indicate inappropriate accounting treatments. Some accounting firms have started to develop such programs and change their audit teams accordingly.

In short, mundane, tedious, and low level work will be automated. However, accounting professionals will play a more important role in processing and generating information that are important for corporate decisions and financial reporting. Such changes suggest that future accounting professionals need to better develop skills that are required in the future – critical thinking skills, the ability to make professional judgement, and communication skills, among other things. Memorizing accounting standards and being able to record journal entries for transactions will not be sufficient.

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