

Digitalization of accounting according to the new rules of 2022

Renáta Stanley¹

¹ University of Economics in Bratislava
Faculty of Economic Informatics, Department of Accountancy and Auditing,
Dolnozemska cesta 1, 852 35 Bratislava 5, Slovak Republic
E-mail: renata.stanley@euba.sk

Abstract: *The growing trend of digitization in the business environment has not escaped accounting either. The state responded to the growing share of electronic accounting records with an amendment to the Accounting Act effective from 1 January 2022. Thanks to this amendment, the door to digital accounting was opened. The definition of an electronic accounting record was clarified, the method of processing and storing electronic accounting records was supplemented. The aim of this article is to clarify a new rules for accounting entities related to the digital accounting and highlight the benefits it offers.*

Keywords: *digital accounting, electronic accounting record, transformation of accounting record, demonstrability*

JEL codes: M410, M480

1 Introduction

Given the technological advances that have taken place over the last few decades, the search for reliable and timely information by companies, customers, users of information from financial statements as well as control authorities has increased. (Santos, IMD - Paes, AP - Lima, THC, 2022). Hence, in the face of Industry 4.0, financial and accounting services face new threats, challenges, and opportunities. (Gonçalves, et al., 2022)

The government therefore reacted in the area of digitalization of accounting with amendment no. 456/2021 Coll. from November 2, 2021, Act No. 431/2002 Coll. on accounting, as amended (hereinafter referred to as the "Accounting Act"), which clarifies and supplements the provisions regarding electronic accounting records, their processing, keeping and archiving of accounting electronically. (Pavlovič, V. et al., 2015) In Slovak legislation, the term electronic accounting is used for digital accounting, in this article these terms will be considered equivalent.

More and more authors (Fisher, I.E., et al., 2010), (Troshani, I., et al., 2019) are dealing with the topic of digital accounting in research as well. A total of 43 papers were published on the topic of digital accounting in Scopus during the period 2001-2021, and 34 papers were published in the Web of Science database during the same period, with an increasing trend. (Kubaščíková, Z., 2021)

The increasing importance of digital accounting is indisputable. The aim of this article is to provide an overview of the new rules related to digital accounting, to indicate how accounting entities should proceed in its management and archiving and, last but not least, to highlight the advantages that digital accounting brings to the business sector.

2 Methodology and Data

The object of research are the new rules introduced by the amendment to the Act on Accounting in the field of digital accounting effective from 1.1.2022, which bring about the efficiency of bookkeeping and bring new trends in relation to the business environment by introducing the possibility to use digital accounting.

I obtained the resources for the purposes of this article from articles devoted to the topic of digitization of accounting and new trends in accounting. (Blahušiaková, M., 2017), Parajka, B. (2016). The biggest source of information for this article was amendment no. 465/2021 Coll. of the Act on Accounting, which supplemented and specified the provisions in connection with digital accounting.

When writing this article, I used the selection method to select concrete provisions related to digital accounting and the comparison method to compare the previous wording of the provisions of the law with the current wording to better highlight differences and significant changes.

3 Results and Discussion

3.1 Form of accounting record

The accounting documentation of the accounting entity consists of a summary of all accounting records. The Accounting Act recognizes two options for keeping accounting records, paper form or electronic form.

A **paper accounting record** is considered to be an accounting record made on paper or a printed accounting record made using software, which is sent and received as a document (by mail), or made for the internal purposes of the accounting entity as a documentary document.

An **electronic accounting record** means an accounting record:

1. which is prepared, received or made available in electronic format, whereby the electronic format is determined by the preparer of the accounting record himself or determined on the basis of an agreement with the recipient of the accounting record,
2. in the form of a scanned document, while it may form an attachment to an electronic mail,
3. prepared in electronic format for the internal purposes of the accounting unit (for example, internal accounting documents).

Sending or making available an electronic accounting record to another person (e.g. sending an electronic invoice to a customer by e-mail) must be agreed in advance, either on the basis of a written agreement between both parties, or by confirmed consent of the recipient, which can also be considered payment of the invoice.

3.2 Accounting record transformation

The amendment to the Accounting Act also brought changes in the area of changing the form of an accounting record from a paper form to an electronic one, or vice versa from an electronic form to a paper form, this is the so-called **transformation of an accounting record**. With this change in the form of the accounting record, it is important that the content of the accounting record is preserved intact and that the accounting record is provable.

According to § 33 par. 2 of the Act on Accounting, the following applies: "In accordance with the chosen method of keeping accounting records, the accounting unit can perform the transformation of an accounting record that has not yet been the subject of transformation, while it is obliged to keep the accounting record in the form that is the result of the transformation of the accounting record." It follows from the above that the accounting record can be transformed only once, either from electronic form to paper form (e.g. by printing) or from paper form to electronic form (e.g. by scanning). This means that the transformation of an accounting record that has already been the subject of transformation is not possible (for example, in connection with the storage of accounting documentation, an accounting entity cannot change the electronic form to a paper form of such an accounting record for which it has already performed the transformation by scanning and the accounting record in the original paper form is no longer available).

An exception is if the transformed accounting record does not meet the readability condition (e.g. due to incorrect settings of the scanner) and thus the basic requirement of the accounting record, which is its demonstrability, is not met. An unsuccessful transformation of an accounting record can be performed repeatedly. A transformation in the form of manual overwriting of data from a documentary document to a text file is not considered a legal way.

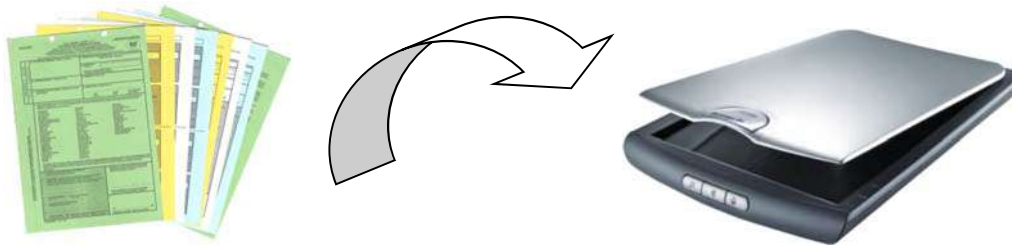
There are two ways to transform an accounting record:

1. from paper form to electronic or
2. from electronic form to paper form.

1. An accounting entity can transform an accounting record from a paper form to an electronic one by guaranteed conversion or scanning into a file format of a graphic form (the formats used are, for example, .pdf, .png, .jpg, .tiff). In compliance with the required criteria for scanning, where the output is a scan (image), such an electronic accounting record will be considered provable and the submission of the accounting record in the original paper form will not be required.

To ensure the legibility requirement, the scanner resolution should be set to at least 200 dpi (number of dots per inch). The transformed record must not be overlaid, all necessary details of the record page should be scanned, including the header and footer. If the paper form of the record has several pages, the transformed electronic record should also have the same number of pages. In general, it is necessary to maintain visual consistency with the original form of the accounting record.

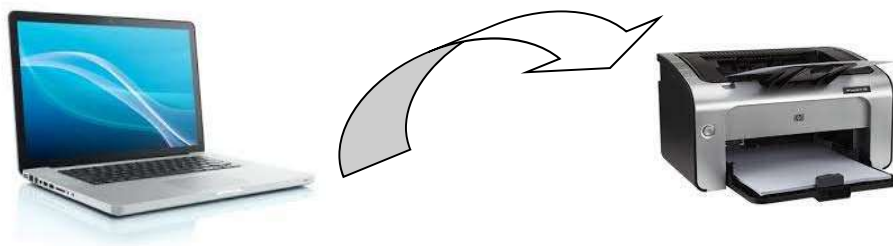
Picture 1 Transformation of accounting records from paper form to electronic form



Source: own processing

2. The accounting entity may transform electronic accounting records into paper form by guaranteed conversion or, if the electronic accounting record does not contain a qualified electronic signature or a qualified electronic seal, the accounting entity may print it on paper while maintaining the integrity and legibility of the content and may store and present them in this form in case of inspection.

Picture 2 Transformation of accounting records from electronic to paper form



Source: own processing

3.3 Demonstrability of the accounting record

Demonstrability is one of the basic requirements for accounting records. Pursuant to Section 32(1) of the amended Accounting Act, 'only an accounting record, the content of which is directly evidenced by the fact or the content of which proves the fact indirectly by the content of other demonstrable accounting records, is considered to be a demonstrable accounting record'. At the same time, an entity is obliged to comply with the specified requirements when recording the preparation and processing of the fact from the moment of receipt of the accounting record or from the moment the accounting record is received or made available until the end of the period of archiving of the accounting documentation. These are the following requirements (Section 31 of the Accounting Act):

1. the **credibility** of the origin of the accounting record is ensured if the entity, which is:
 - a) the contractor is able to demonstrate that the accounting record has actually been drawn up;
 - b) the beneficiary is able to demonstrate that the accounting record received is from the contractor.
2. the **integrity** of the content is ensured if the sending or making available of the accounting record to another person or by transforming the accounting record in the entity has not changed the content of the facts that are recorded by the accounting records.
3. the **legibility** of the accounting record is ensured if the content of the accounting record is readable by the human eye. In practice, this means that it can be an accounting record on the device screen or on paper.

The accounting entity ensures the credibility of the origin and the integrity of the content:

1. **the signature record of the responsible person** - a handwritten signature, a qualified electronic signature, or a similar verifiable signature record replacing a handwritten signature in electronic form, while clear, demonstrable identification of the person who made this signature record is important. A similar provable signature record is also considered a signature record, which can be, for example, personal access code to the software (name, password, encryption key). The system should be set up so that signature records cannot be misused, computer accesses, or software should not be shared between several people, computers should be locked, etc.;
2. **electronic data interchange** (EDI - Electronic Data Interchange) - which means the exchange of data, documents, accounting records between computers inside the accounting unit or with the external environment. The goal of EDI is to achieve the highest possible degree of process automation instead of manual data entry. The exchange of data goes through the process of verification, coordination, approval without the possibility to change the content of the accounting record;
3. **internal control system** - is the determination of the responsibility of specific persons for the control and processing of accounting records so that the facts are sufficiently verified. The method of control should be defined by the accounting unit in the accounting regulations for accounting and processing of accounting records.

3.4 Storage and protection of accounting records

An entity is required to ensure that the accounting documentation is protected against loss, theft, destruction or damage. The entity is also obliged to ensure the protection of the used technical means, information carriers and software against their misuse, damage, destruction, unauthorized interference with them, unauthorized access to them, loss or theft (Section 35 of the Accounting Act).

Due to the addition of provisions related to electronic accounting records, the amendment to the Act on Accounting supplemented information for the storage and protection of accounting records in order to ensure more consistently the accounting records during their storage. A provision on the storage of electronic accounting records has been added, according to which electronic storage of accounting documents means the storage of accounting documents **on a data medium**. An entity may decide what form of data carrier it chooses. Commonly used forms are, for example, optical drive, USB stick, memory card, hard drives, but also cloud storage, etc. However, it is the responsibility of the entity to ensure, in the case of a check, that the accounting records can be made available from the electronic data medium in a form that is readable by the human eye.

Accounting records that hold information relating to the accounting method, as well as the accounting records determining the accounting retention system, shall be kept by the entities for **10 years**. It is the responsibility of entities to follow a specified method of keeping accounting documentation that they can choose for themselves, for example in an internal regulation. Each entity may individually decide which method of storing accounting documentation it prefers, and it can also process and store documents in a combined form

and electronic form. For a better overview and orientation in accounting as a whole, it is more practical to unify the form of keeping accounting records.

Conclusions

The state responded to the growing digitization of accounting records by amending the Accounting Act effective from 1 January 2022. Thanks to this amendment, the door to electronic accounting was opened. The definition of an electronic accounting record, the method of processing and storing electronic accounting records has been clarified. The aim of this article was to present the new requirements for digital accounting as well as highlight its advantages. Although the introduction of electronic accounting is an option and not an obligation, thanks to this amendment accounting units no longer have to keep physical documents, they no longer have to worry about them not being destroyed, lost, faded or damaged. Digitization of accounting enables faster search of documents by supplier, amount, date of issue or other selection attributes. The advantage of digital accounting is also the effective control of duplicates, thanks to which it cannot happen that the accounting unit pays an invoice, etc. All the aforementioned advantages of digital accounting help to make accounting processes more efficient, save money, and at the same time advance in a competitive environment while meeting legal requirements.

Acknowledgments

This article is an output of the project of the Scientific Grant Agency of the Ministry of Culture of the Slovak Republic and Slovak Academy of Sciences (VEGA) no. 1/0517/20 (2020-2022) "Virtual Cryptochains as a Relevant Tool to Eliminate Economic Crime."

References

- Act no. 431/2002 Coll. on accounting as amended. NR SR, 2022.*
- Blahušíková, M. (2017) New trends in evaluation of accounting entity's financial performance based on the financial statements. In Strategic management and decision support systems in strategic management, pp. 539-544.*
- Fisher, I.E., Garnsey, M.R., Goel, S., Tam, K. (2010) The role of text analytics and information retrieval in the accounting domain. Journal of Emerging Technologies in Accounting, vol. 7(1), pp. 1-24.*
- Gonçalves, M.J.A.; da Silva, A.C.F.; Ferreira, C.G. (2022) The Future of Accounting: How Will Digital Transformation Impact the Sector? Informatics 2022, 9*
- Kubaščíková, Z. (2021) Digitálne účtovníctvo vo vedeckom výskume. In Účtovníctvo - audítorstvo - daňovníctvo : v teórii a praxi. - Bratislava : Slovenská komora certifikovaných účtovníkov, 2021. ISSN 1335-2024, 2021, roč. 29, č. Osobitné číslo, s. 21-27 online. VEGA 1/0517/20.*
- Lovciová, K. - Pakšiová, R. (2017) Historical development of European and Slovak legislation on annual reports as a support system in strategic management. In Strategic management and decision support systems in strategic management, pp. 654-661.*
- Pavlovič, V. - Knežević, G. - Surový, V. (2015) The Accounting regulation: comparative analysis of some aspects of Serbian, Slovakian and Czech accounting regime. In Zbornik radova. International scientific conference. pp. 267-275.*
- Parajka, B. (2016) Affect of legislative changes in accruals and deferrals on financial accounting and reporting of micro accounting entity. In Účetnictví a auditing v procesu světové harmonizace. p. 161-165.*
- Santos, IMD - Paes, AP - Lima, THC (2022). Adoption and use of digital accounting: A perception of accounting organizations. Revista contabilidade e controladoria-rc c 14(1), pp.133-151*
- Troshani, I., Locke, J., Rowbottom, N. (2019) Transformation of accounting through digital standardisation: Tracing the construction of the IFRS Taxonomy. Accounting, Auditing and Accountability Journal, vol. 32(1), pp. 133-162.*