

Conclusion

Ainsi, le taux de minéralisation de la matière organique du sol peut varier en fonction de la taille des agrégats du sol, ainsi que du type d'utilisation du sol, qui à son tour affecte également la structure du sol et influence la fertilité du sol.

Références

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TRENDS ACCOMPANYING THE INTRODUCTION OF DIGITAL TECHNOLOGIES BY AGRICULTURAL PRODUCERS

Anufriev Timofey Fedorovich, PhD student, Department of Economic Security and Law, Russian State Agrarian University – Moscow Timiryazev Agricultural Academy, work12v@yandex.ru

Academic advisor - Fomina Tatiana Nikolaevna, senior lecturer, Department of Foreign and Russian Languages, Russian State Agrarian University – Moscow Timiryazev Agricultural Academy, t.fomina@rgau-msha.ru

Abstract: *The article examines the impact of digital technologies on the economic activity of agricultural producers and identifies the current trends in ensuring economic security in the digital economy.*

Keywords: *agriculture, digitalisation, trends, economic security, digital technologies.*

Economic entities, including those in the agricultural industry, are always striving to use advanced achievements of science and technology to improve

efficiency and achieve higher performance results. That is why the use of computer and digital technologies is becoming more and more extensive among agricultural producers every year.

The integration of emerging digital technologies in agriculture such as the Internet of Things, artificial intelligence, cloud computing, Big Data and analytics and others will change the current face of the industry and enable the transition to Agriculture 4.0, known as smart agriculture as well [4]. The introduction of digital technologies is sure to allow collection and analyses of a huge amount of data, so the use of such technologies can serve as a basis for faster and more informed decision-making [3]. Statistical research shows an increase in the number of Russian entities applying digital technologies, for example, the use of artificial intelligence in agricultural companies has increased from 2.2% in 2020 to 4.7% in 2022 [1].

Digital technologies have a significant impact on the pace of development of entities, enable continuous improvement of certain business processes and their activities as a whole, and contribute to the emergence of new products and services. They have significantly increased the level of interaction between, firstly, employees within an entity, and secondly, between entities themselves, including by reducing various transaction costs. In order to improve their competitiveness and create conditions for further sustainable development, digitalisation of operations has become a major challenge for many companies. Over the past few decades, the economy has changed significantly under the influence of digital technologies, which is why this economy has come to be called the digital economy.

The development of information technologies in recent decades has led to significant changes in all sectors of economy. The unprecedented growth in demand for digital technologies, shortening of the life cycle of technologies, increasing technological and social risks have been noted as distinctive features of the digital economy at the present stage, which indicates a new round of technological development [2].

The digital economy under construction and the accompanying processes of digitalisation of society have both positive and negative sides. On the one hand, due to digital transformation business entities can increase the efficiency of their activities, but, on the other hand, they may face new threats such as a problem of ensuring economic security for agricultural producers. For example, digital technologies greatly simplify the processes of threat and risk identification and increase the efficiency of the mechanisms used, but they are also a source of new risks at the stages of their introduction and use.

In the process of digitalisation, agricultural producers may be challenged various problems that can have a significant negative impact at the level of economic security:

- 1) high cost of carrying out digitalisation activities and lack of financial resources for companies to carry out them;
- 2) employee resistance to digitalisation processes due to fear of redundancies;
- 3) insufficient level of digital competence of employees and company managers;

4) a significant increase in the probability of confidential information leaks and a growing number of cybersecurity threats.

In this regard, new tasks of ensuring economic security have been formed:

1) suitability of the use of certain solutions in the entity, taking into account cybersecurity risks and other possible risks;

2) feasibility of introducing certain digital technologies, assessment of future economic returns from their introduction;

3) assessing the risk of expenses on training employees to use new technologies or the risk of the need to hire new employees with the relevant competences;

4) controlling the costs of introducing new technologies.

The analysis of the positive and negative aspects of digitalisation together allows us to identify current trends in economic security in the digital economy. The general trend is the improvement of economic security processes due to the widespread and active introduction of digital technologies. This is primarily manifested in:

1) expansion and automation of the economic security toolkit due to the application of various digital technologies;

2) improvement of information support through the introduction of electronic document management, use of information systems for record keeping in companies, development of the Internet and, accordingly, the possibility of collecting information about the external environment;

3) increasing the speed of obtaining information about all kinds of events of interest to the entity enabling faster and more informed decision-making;

4) paying special attention to information and cyber security of the company;

5) increasing the degree of control over employees to ensure that the interests of the entity are protected;

6) exercising clear control over production processes thanks to the Internet of Things technologies, improving product quality thanks to numerical control equipment, simplifying product development processes, and taking logistics to a new level.

As a result, it can be stated that digital technologies have enabled the digital transformation of business entities, thus changing the approach to the implementation of financial and economic activities, significantly simplifying, and in some cases completely replacing the work of a human employee of the entity. The processes of digitalisation have led to serious changes in all spheres of life, and the concept of digital economy has been formed.

The performance of all sorts of tasks has become faster and at the same time more qualitative, as a result increasing the efficiency of the entity's activities. However, digitalisation carries a number of serious risks, such as lack of financial resources, qualified specialists and others. In this regard, the importance of ensuring the economic security of an economic entity is more important than ever. The analysis of the advantages and risks acquired by an entity due to digitalisation

allowed us to identify current trends in ensuring economic security in the digital economy.

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DIAGNOSIS OF HARMFUL VIRUSES OF STONE FRUIT CROPS BY ELISA AND PCR METHODS

Akhba Ekaterina Denisovna, Junior Researcher, laboratory of Molecular-genetic and virological research, Federal State Budgetary Scientific Organization «Federal Horticultural Center for Breeding, Agrotechnology and Nursery» e-mail: katya0565@yandex.ru

Scientific Advisor - I.A. Kapitova, Candidate of Sciences in Chemistry, Senior Researcher, Federal State Budgetary Scientific Organization «Federal Horticultural Center for Breeding, Agrotechnology and Nursery», Moscow, Russia, e-mail: kiastandart@gmail.com

Foreign Language Advisor - Galina V. Porchesku, Candidate of Philology, Associate Professor, Department of Russian and Foreign Languages, Russian State Agrarian University–Moscow Timiryazev Agricultural Academy, gporchesku@rgau-msha.ru

Abstract: *The presence of phytopathogenic viruses is an important factor in cultivation of fruit and berry crops, affecting the yield and development of plants. Infected plantations are more susceptible to fungal and bacterial diseases and in combination cause significant economic damage to farms. Production of virus-free planting material is a priority for plant seedling producers and requires improvement and establishment of norms for diagnostics of phytopathogenic viruses.*