Abstract. The article considers the process of digital transformation in the sphere of social entrepreneurship, which solves socially significant problems of public life, simultaneously providing a positive economic, social and environmental impact thereon. The use of the Internet and digitalisation of the economy transforms radically the cooperation processes between all involved actors. Social entrepreneurship is no exception. In this context, this paper explores the role of digitalisation in the development of social entrepreneurship. In order to achieve the set goal and analyse the available data, the authors used such general scientific methods of knowledge as abstraction, deduction, deconstruction, synthesis, analogy and axiomatics. The use of this methodological apparatus made it possible to conclude that the process of digitalisation and introduction of information technologies in the sphere of social entrepreneurship provides new tools supporting the activities in this sphere as well as changing the very context of social entrepreneurs’ work. This made it possible to highlight the factors influencing the development of digitalisation in social entrepreneurship, as well as to identify new and promising areas of digital transformation in the sphere of social entrepreneurship. These primarily include the use of the blockchain and smart contracts which offer new opportunities for financing, storing data and achieving social entrepreneurship goals.

1 Introduction

The modern world is going through a period of tremendous upheaval and breath-taking technological innovations. The introduction and use of information technologies is driving the transformational change. The rapid development and implementation of digital technologies influences various economic, social, technical and managerial systems. The product- and production factor markets are changing; new original business models are being created and transformed; digital transformation is becoming a major trend in the modern society development and plays an important role in the development of economic activity, penetrating its various fields. Social entrepreneurship is no exception. The spread of Covid-19 and subsequent restrictive measures as well as the introduction of lockdown
accelerated the pace of implementation and use of modern information technologies. The virtual and distance-technology world became a key mode of interaction at that period of time. These trends particularly actualised this development vector for social entrepreneurship.

Digitalisation has been addressed quite extensively in a number of studies. Various directions of digitalisation are considered; the authors describe how digitalisation pushes organisations for revising their business models and business processes, their operation in digital economy [1-4]. Particular attention is paid to the realisation of innovations based on digital technologies that show the former’s efficiency in solving economic and social problems, which is also relevant for the sphere of social entrepreneurship [5-7]. The researchers also point to the importance of applying new technological and digital tools towards improving the efficiency of the social sphere and the development of public/private partnership [6].

Social entrepreneurship is covered by a great number of studies. Of special concern are such issues as conceptual features of social entrepreneurship, identifying its characteristics [8-10]. Some studies are aimed at identifying the incentives and sources of social enterprise development [11]. A number of issues related to moral and ethical characteristics of social entrepreneur’s personality are dwelled upon. One of the research topics is the relevance of “balance” between the social and economic goals of social entrepreneurship activities [8]. However, the problems connected with digital transformation in the sphere of social entrepreneurship remain poorly studied. In this regard, studying the issues exploring the impact of digitalisation on the development of social entrepreneurship represents a particular interest.

2 Materials and methods

The methodologic basis of the work is represented by historical-, dialectic- and hermeneutic methods of knowledge, which supposes scientific interpretation of economic phenomena from the perspective of dynamics of their permanent development and interrelation. This made it possible to identify the existing contradictions, correlate the essential characteristics and forms of manifestation of the explored phenomena, namely, digitalisation process in the social entrepreneurship sphere. The work is based on the application of methods of scientific abstraction, induction, deduction, analysis, synthesis as well as analytical and logical methods of studying socio-economic phenomena.

In order to realise the set goal, a number of scientific papers were studied, presented by both national and foreign scholars engaged in exploring digitalisation and economic transformation issues as well as development of entrepreneurship and the institute of social entrepreneurship.

The scholarly literature analysis was based on the articles published in major international scientific journals pertaining to the domain under study. The search strategy involved accessing several databases, e.g. EBSCO, E-library, Emerald Insight, Google Scholar, Science Direct, Scopus, Wiley.

As a result, using the diachronic and axiomatic methods of scientific source analysis, the authors of the present paper selected the works that seemed most relevant and significant in both methodological and practical aspects. The deconstruction method made it possible to select the most relevant and appropriate materials and their fragments for subsequent use in the present work, with full preservation of the primary source context and subsequent competent use towards achieving the goal of this research. In order to identify and analyse the digitalisation process, as introduced the activities of social enterprises, the authors used the data presented in online platforms through a number of created initiatives bringing social entrepreneurs together. This in turn made it possible to highlight the factors
influencing the development of digitalisation in the sphere of social entrepreneurship and to identify new promising directions. In addition, this enabled the authors to make a conclusion that the process of digitalisation, along with the introduction of information technologies in the sphere of social entrepreneurship, provides new tools towards supporting social enterprise activities and transforming the context of their work.

3 Results and discussion

Social entrepreneurship, as an activity aimed at solving and mitigating the social problems and eliminating the negative consequences and external effects arising in the functional process, is an integral element of socio-economic development and is of paramount importance for inclusive and sustainable development. It contributes to the achievement of social stability, compliance with environmental norms, proper economic growth owing to the development and use of innovative human capabilities, preservation and multiplication of spiritual and scientific potential of the society and smoothing out the negative effects of the “pure” market.

Social entrepreneurship is actively involved in job creation and provision of innovative services and products. For instance, according to the European Commission data, about 40 million people are employed in the sphere of social entrepreneurship [12]. Globally, over 200 million volunteers are involved in this sphere [12]. According to the report on social entrepreneurship in the United Kingdom, the contribution of such enterprises in the UK economy makes 3% of the GDP. In addition, social entrepreneurship accounts for 5% of all jobs [13]. According to the 2020 report “Two Decades of Impact: How Social Entrepreneurs Have Improved 622 Million Lives” presented by Schwab Foundation, social entrepreneurship engages more than 622 million people from 190 countries [14]. And its activity areas encompass education, public health, environmental protection and use of renewable energy sources, employment and adaptation of socially vulnerable categories of people.

In the conditions of COVID-19, social entrepreneurs have also shown their ability to meet complex challenges in providing relevant assistance in various aspects of social functioning [13]. The successful experience within this domain in coping with the consequences caused by COVID-19 demonstrates their ability to introduce new business models, new methods of work, to use social innovations and develop cooperation with business initiatives, public organisations and representatives of authorities. The entrepreneurs were able to adapt quite quickly to the new circumstances by changing a certain aspect of their business model and shifting to a new mode based on introduction and use of information technologies. For instance, social enterprises developed and launched an application aimed to help needy people staying at home within the framework of anti-COVID requirements to buy goods, and launched services to help lonely pensioners. Digital tools were actively used by social enterprises providing public health and education services, when they operated in the online format during the pandemic. Social entrepreneurs started to use digital communication tools increasingly in their work, as well as dashboards and electronic databases. Digital technologies have become a powerful instrument for expanding the potential of social entrepreneurship.

The digitalisation and introduction of information technologies enable social enterprises to use new solutions to resolve the existing social problems. One of the examples is the introduction of robotics and information sensors aimed to increase people’s independence and autonomy as well as the use of such tools in providing personalised care, with further use of the obtained data to improve due operations. For instance, social entrepreneurship practices use special algorithms to detect the signs of incipient poverty; they identify delays in payment of utility bills or interest money [15].
The introduction of information technologies will promote scaling up and expansion of social entrepreneurship [16]. For instance, this can include the development of mobile applications that analyse the data collected from clients’ mobile phones and provide them with an overview of their financial situation, enabling them to obtain microfinance, save and multiply their money; the use of drones for delivery of medications to remote areas.

The use of the blockchain system and smart contracts technology is another direction of digitalisation of social entrepreneurship. These technologies open up new possibilities for financing, data storage and goal attainment. The blockchain is a revolutionary tool for facilitating transactions, having a significant potential for use in relations between investors and social enterprises [17]. The blockchain is based on the system of verifiable trust; it eliminates the need for third parties. This can exclude any reliance on intermediaries and ensures rapid and effective transfer of goods and services in this context. As to the social entrepreneurship sphere, the blockchain can support transactions that are more resource-effective; it also secures the ongoing alignment of organisational goals and objectives, creating an additional dimension for social enterprises, opening up new areas of funding, while taking into account social and commercial aspects of their operation [17].

The development of smart contracts stored in the blockchain solves the problems involving technical transparency of this technology. Their use in the sphere of social entrepreneurship increases the trust of all participants and prevents potential digression from the social enterprise’s mission. For instance, if a social enterprise fails to meet its financial obligations according to some pre-agreed criteria the blockchain transparency notifies all participants about it through the smart contracts system; therefore, certain adjustments can be made to the company’s activities. The use of smart contracts can track and store the data relating to the goals and objectives of a social enterprise in a real-time mode. This makes it possible to take appropriate management decisions efficiently and in a timely manner.

However, a number of factors influence the process of digitalisation in the sphere of social entrepreneurship. They include the state of digital infrastructure development, data transfer speed and communication quality, the availability and penetration of the Internet across the country, the availability of necessary skills and competencies.

It should be noted that many people still lack due resources and skills required to access the Internet. In addition, the introduction of blockchain technologies and the use of smart contracts require specific competencies on the part of social entrepreneurs. In this regard, special attention should be paid to the issues of education and competence development of employees working in the sphere of social entrepreneurship – since the increasing number of skilled employees contributes to more efficient socially-oriented activities.

4 Conclusion

Digital transformation is a major trend in the development of modern society, playing an increasingly important role and penetrating various spheres of people's life. It is creating an environment that requires evolution, including the development of social entrepreneurship.

Digitalisation provides the social entrepreneurship sector with the tools that support its activities by changing the context in which social enterprises operate. As practice has shown, the spread of COVID-19 has accelerated the process of digital transformation of the society in general and of social entrepreneurship in particular. Information technologies that are in the service of social entrepreneurship open up a plenty of new opportunities that will contribute to its sustainability.

References
entrepreneurship sphere, the blockchain can support transactions that are more resource-effective; it also secures the ongoing alignment of organisational goals and funding, while taking into account social and commercial aspects, creating an additional dimension for social enterprises, opening up new areas of application. The development of smart contracts stored in the blockchain solves the problems of transparency and avoids the risks of fraud, as well as ensures rapid and effective transfer of goods and services in this context. As to the social enterprise's mission. For instance, if a social enterprise fails to meet its financial obligations according to some pre-agreed criteria the blockchain transparently and multiply their money; the use of drones for delivery of medications to remote areas. The introduction of information technologies will promote scaling up and expansion of social enterprises 

2. O. Gassmann, K. Frankenberger, M. Csik, The business model navigator: 55 models that will revolutionise your business (Pearson, Harlow, 2014)
3. G. Oswald, M. Kleinemeier, Shaping the digital enterprise (Springer, 2017)