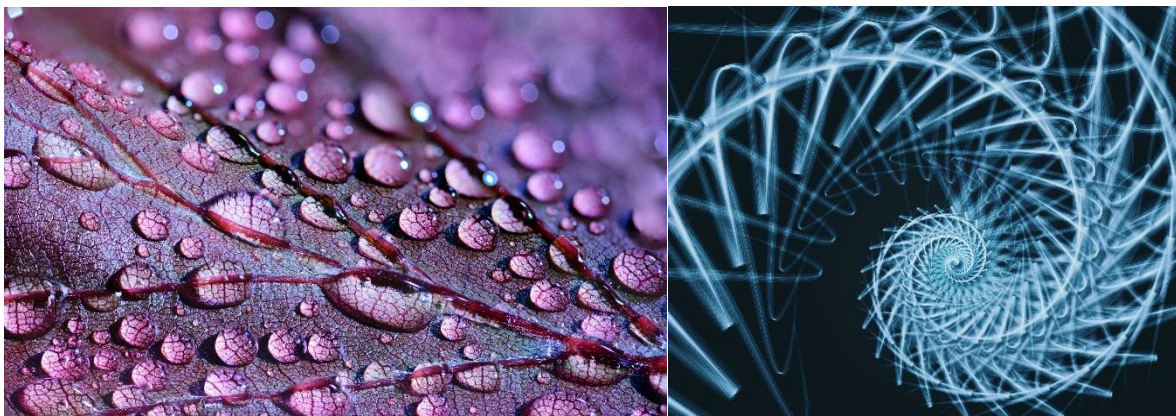


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Research and innovate

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TERRITORIAL DEVELOPMENT THROUGH THE PRISM OF INFORMATION TECHNOLOGY AND STRUCTURAL CHANGE OF CITIES

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Abstract

This presentation presents trends in the development of sustainable urbanism, in which innovations and technologies are brought to the fore. It is assumed that at this stage the necessary measures are being introduced to improve the efficiency of services and the use of resources in smaller machines (eg energy efficiency or efficiency in your enterprises) with information technology. This creates the conditions within the regional development offer to develop a concept of a smart city ("smart city"). In practice, the smart city is growing beyond this initial goal to one that applies to entire cities and urban blocks, not just the transport system or buildings, and covers a large area. This raises the need to study the development of settlements in order to better illustrate the processes of development of geo-spaces through the prism of the introduction of new communication technologies.

Key words: urbanization, area, space, information, technologies, development, environment and management.

Abstrakt

In diesem Vortrag werden Trends in der Entwicklung des nachhaltigen Städtebaus vorgestellt, wobei Innovationen und Technologien in den Vordergrund gerückt werden. Es wird davon ausgegangen, dass in dieser Phase die notwendigen Maßnahmen eingeführt werden, um die Effizienz von Dienstleistungen und die Nutzung von Ressourcen in kleineren Maschinen (z.B. Energieeffizienz oder Effizienz in Ihren Unternehmen) mit Informationstechnologie zu verbessern. Dies schafft die Voraussetzungen im Rahmen des regionalen Entwicklungsangebots für die Entwicklung eines Konzepts für eine intelligente Stadt ("Smart City"). In der Praxis entwickelt sich die intelligente Stadt über dieses ursprüngliche Ziel hinaus zu einer Stadt, die sich auf ganze Städte und Stadtteile bezieht, nicht nur auf das Verkehrssystem oder Gebäude, und die ein großes Gebiet umfasst. Daraus ergibt sich die Notwendigkeit, die Entwicklung von Siedlungen zu untersuchen, um die Entwicklungsprozesse von Geo-Räumen durch das Prisma der Einführung neuer Kommunikationstechnologien besser zu veranschaulichen.

Stichworte: Urbanisierung, Gebiet, Raum, Information, Technologien, Entwicklung, Umwelt und Management.

Résumé

Cette présentation présente les tendances du développement de l'urbanisme durable, dans lequel les innovations et les technologies sont mises en avant. On suppose qu'à ce stade, les mesures nécessaires sont introduites pour améliorer l'efficacité des services et l'utilisation des ressources dans les petites machines (par exemple l'efficacité énergétique ou l'efficacité dans vos entreprises) avec les technologies de l'information. Cela crée les conditions au sein de l'offre de développement régional pour développer un concept de ville intelligente ("smart city"). Dans la pratique, la ville intelligente dépasse cet objectif initial pour s'appliquer à des villes et à des blocs urbains entiers, et pas seulement au système de transport

ou aux bâtiments, et couvre une vaste zone. D'où la nécessité d'étudier le développement des agglomérations afin de mieux illustrer les processus de développement des géo-espaces à travers le prisme de l'introduction des nouvelles technologies de communication.

Mots clés: urbanisation, superficie, espace, information, technologies, développement, environnement et gestion.

Introduction

This research aims to focus on urban development and proposes that cities be seen as platforms for integrating policies aimed at achieving sustainability, both between different sectors and between different levels of cooperation, from local to international. Informed decision-making in crises such as the COVID-19 pandemic requires comprehensive, up-to-date, timely and easily accessible information, reliable data and indicators and their proper assessment. In order to solve this problem and ensure the timely adoption of the necessary measures to protect the most vulnerable groups, it is necessary to develop appropriate monitoring programs, information management systems and evaluation procedures and solutions. On the other hand, the introduction of new technologies creates confidence that the future development of large cities cannot be achieved without the introduction of working information technologies. The territorial component is important in the current development of cities. Due to the continuing territorial (geographical specificity) inequality, including a coordinated approach at many levels and stakeholders for sustainable urban development is needed. This new approach to the introduction of information and communication technologies increases the level of services provided and at the same time makes cities more comfortable to live. Thus, the well-being and prosperity of each city become increasingly dependent on technological innovations. In this regard, we can assume that no nation can claim sustainability if many of its cities are not at the required technological level and pace of development. For example, in the last year the introduction of 5G technologies has become especially relevant, which in practice means the fifth generation in mobile communications. Unlike its predecessors, however, in the new technology, the connections and data exchange between devices, antennas and servers are much closer and more comprehensive. In this way, it becomes possible to connect many more appliances, which will facilitate technologies related to urban management, their use in the household, autonomous driving, innovation in industrial production and the speed of the Internet. Response time to the transmission of information is important for everything that is done in real time - from online gaming through a mobile device, virtual reality-based services, to medicine and autonomous vehicle movement. The change will allow the imposition of a standard with negligible delay in any action requiring precision. The doctor will be able to remotely control a device that performs real-time diagnostics, or even perform surgery. An operator will be able to remotely control vehicles, measure the values of electronic water meters, as well as make deliveries to the respective homes. We can assume that digital technologies are increasingly integrated into urban design and management. Implementing them, urban governance, infrastructure and finding smart solutions to support the integration and coordination of urban conditions will promote the possibility of providing citizen-oriented services. Although these technologies are not a panacea and need to be adapted to the real needs of cities, they are able to provide efficiency gains and rationalization. Urban operating systems implemented together with digital twins are called to create

comprehensive and optimized ways of managing municipal services and transport infrastructure. Cities are experimenting with robotics and autonomous systems (e.g. connected self-driving cars, health robotics, building automation for energy efficiency). This means that if we want to have a modern regional development, we must look for solutions at the regional level and with the introduction of new technologies in urban management and local business development. New internet sharing platforms also open up opportunities that were previously underused and creating new markets (e.g. sharing cars, bikes, houses). Cities are increasingly aware of the ethical and social challenges that have arisen in the process of transition to digital technologies. Socially smart cities strive to be digitally inclusive, empowering and providing value and benefit to all citizens. Another important issue for the development of urban spaces is their mapping (Bulkeley, 2016). Mapping is an important element of broadband planning and provides a basis for EU evaluation for all its members. Broadband mapping helps to target funding more efficiently and facilitates planning. On the other hand, unsatisfactory mapping can lead to insufficient financial viability of both public and private investments. Broadband mapping is the collection and presentation of data related to broadband deployment. This mapping is not just about geo-reference visualization; it covers the whole process of data collection. This can be data on the deployment of the broadband infrastructure itself, i.e. copper or optical cables, and may be connected to infrastructure such as ducts and pipes. In addition, the mapping of broadband must take into account the real supply and demand for broadband services, as well as existing and planned investments in broadband infrastructure.

Results

Innovative development and functioning of urban systems. Urbanization is defined as a new central force in the overall development of civilization in the new urban program adopted by Habitat III in 2016. It is a landmark document that sets a global vision for urban development over the next two decades. In developing a New Urban Development Agenda for a number of important directions, including through the main recommendations for sustainable housing and urban development (Habitat, 2016). At the heart of cities' enormous potential for sustainable development are people as communities and as individuals living today and those who will live tomorrow. Society is certainly responsible for many of the problems facing our planet. However, the innovation and transformation potential of cities should not be taken for granted. This function of cities needs to be clearly recognized and promoted at all levels of government and that the necessary powers are given at these different levels. The creation of favorable conditions for innovation is associated with a number of factors, all of which must be present in order to create a living ecosystem and a reliable information environment. Cities that strive to create a better and more sustainable environment provide an integrated combination of housing, urban and social infrastructure. These sectors are part of the functioning of the 'urban economy', which is becoming an increasingly distinct advantage in urban life, which is crucial for the creation of a new urban consumer culture and business in cities. This aspect of the development of urban systems in the XXI century sets a new fragmentation of the models of regional development. The prism of innovation is increasingly intertwined with spatial development, but on the other hand, these processes also have their workload and oversaturation. This defines innovation as an introduction to the use of any new or significantly improved product (product or service) or process, a new marketing method or a new organizational method in business practice, the organization of workers places or external relations (Bulkeley, 2016). Innovation encompasses the creation and application of new knowledge that redefines the path to a more

sustainable future. In addition to new technologies or new products, innovations may include new management methods and organizational methods, new ways of structuring partnership relationships, or new ways of managing social relationships. In other words, the concept of innovation goes far beyond research, high-tech start-ups and even business-oriented to profit from private sector activities. It's about trying and defining better ways to improve communication and well-being. This process is part of creating a more attractive urban environment for all social groups and ages. For example, in the context of aging, cities support the environment for a healthy lifestyle and well-being and create the conditions for older people to "grow old on the spot" in a pleasant environment. In such cities housing, social transport infrastructure meets the needs of the elderly and people with disabilities. Another important issue is energy efficiency, which can also find better management through information technology. Almost everywhere there is a tendency to tighten energy efficiency standards for new buildings and residential buildings and to ensure energy recovery in existing buildings, as well as the exchange of experience between cities. Cities are shifting energy supplies to cleaner energy sources and modernizing energy infrastructure. It is very possible to achieve by focusing on transport, which is still used mainly by fossil fuels. It is very possible for the local economy and public administration to focus municipal procurement on clean energy and green technologies for public services. Such an important priority is to reduce pollution from transport, which is an effective lever for a green transition along with urban planning and to stimulate the transition from mobility to greener regimes. In order to find new and innovative solutions, experimentation and the search for new things are important. Smart policy measures are an ongoing search process, not a prescribed set of strategies with expected results (Rutherford and Coutard, 2014). To make full use of their innovation potential, cities are developing an open culture of flexible governance that promotes reflective learning, adaptation, creativity, innovation, co-creation and the maintenance of innovative business models (Carbon Neutral Cities Alliance, 2019). This includes experimental multi-level governance mechanisms to facilitate collaboration between different sectors to gain experience and knowledge of what works, gain confidence and develop, test, adjust and scale ideas.

Innovation is the key to sustainable urban transformation. Cities bring together industries, entrepreneurs, research and educational institutions, people capital, efficient infrastructure, a wide variety of consumer demand and preferences, Investors responsible and responsive to the needs of citizens Politicians and officials person, culture and, importantly, different types of talent. Leading cities have a critical appraisal system that allows you to define the main problems or what works and what doesn't! This creates an environment that provides opportunities for change and, above all, to eliminate what does not work, avoiding maintaining the "status quo" and situations in which the choice of one option complicates the choice of a more successful option in the future (Golubchikov and O'Sullivan, 2020). A principled approach to the development of sustainable practices must be based on real results and awareness, allows understanding and evaluation of decisions in practice. In order to take the innovative approach as a leader, it should be borne in mind that the concentration of all elements in one location serves as a fertile ground for innovative ideas to create opportunities and ultimately to address the challenges of sustainable development that currently face the world, including congestion, energy and resource depletion, environmental pollution, public health, waste management and housing affordability. In order to take the innovative approach as a leader, it should be borne in mind that the concentration of all elements in one location serves as a fertile ground for innovative ideas to create opportunities and

ultimately to address the challenges of sustainable development that currently face the world, including congestion, energy and resource depletion, environmental pollution, public health, waste management and housing affordability. These include in themselves the application of approaches developed under other conditions. It is important to note that innovation in this context includes not only technologies but also mechanisms for applying knowledge, ideas, practices and new and better ways to address today's dilemmas and challenges (Easme and DG Grow, 2019a); (Petrov and Borisov, 2021). This is in line with the established model of building "sustainable cities" as one of the main directions of urban development since the early 90's of the twentieth century for sustainable development, which has become a social paradigm. The development of urban systems is often defined as a political commitment. The concept of a sustainable city is imposed, which is considered a city that finds a balance between social, economic and environmental problems and processes in the spatial aspect. Sustainable cities are often associated with a number of relevant regulatory visions for urban development. For example, cities must be economically rich at the same time (productive cities, competitive cities, creative cities), socially responsible (open cities, comfortable cities to live in, fair cities, comfortable for the elderly) and ecologically literate (resource-saving cities, green eco-cities, sustainable cities). Rapid trends of urbanization are transformed into a growing and urgent demand for new or improved infrastructure, services and institutions capable of solving the triune task: 1) ensuring access of the growing urban population to basic services and vital resources; 2) maintaining continuous economic growth and 3) managing resources within the limitations of our planet in solving the problems of adaptation to climate change and mitigating its consequences. Cities are already major socio-economic assets and are a driving force for development in all countries (including those where the population still lives mainly outside the cities). This is largely due to economic and cultural globalization. Driving factors of globalization are advances in telecommunications, digital technologies, transport systems and trade liberalization (Easme and DG Grow, 2019b). At the same time, globalization requires an increase in the pace of socio-economic development interactions, forcing people to move to cities, especially large cities, with their advantages proximity, accessibility and exceptional productivity. It determines the productivity of cities agglomeration effect, economies of scale, knowledge sharing, business interaction, access to jobs, finance, entertainment, media, art and other services. Competitive and attractive cities stimulate job growth, income growth and labor productivity, even if there are huge differences between cities and regions in terms of performance. In this way, geo-urbanization restructures geography both globally and locally, strengthening the urban hierarchy, with large metropolitan areas enjoying a special privilege as centers of globalization, although all cities in the structure of the urban hierarchy play their role within the architecture of the new economic geography. The role of cities in promoting social development must be seen in the context of the wider trends and challenges of social development to which all cities must adapt in one way or another.

These trends and challenges also open new opportunities, lead to the formation of new functions of cities in society. Relative economic performance, employment opportunities and wages are some of the indicators that often show differences between cities (Friedman, Conteh and Philips, 2019). These differences often cause a chain reaction. For example, a steady decline in the city's economic performance and lack of economic opportunities lead to a brain drain, loss of skilled staff and relocation of jobs to other more prosperous communities. This reduces the ability of the public and private sector to ensure the sustainability of the budget of such a settlement, as well as the provision of services and maintenance of

infrastructure. As a result, the level of business development decreases and innovation. Over time, qualitative and quantitative differentiation between settlements is only intensified, which leads to uneven quality of life. As central places systematically gain advantages (economic, cultural and / or political) over peripheral areas, this can be seen as a spatial or territorial injustice, contrary to the idea of sustainability. Related to this is the phenomenon of urban shrinkage. These are the cities that are experiencing a decline in population (Yenneti, Day and Golubchikov, 2016). This process is relative, the decrease is of different intensity in different cities and runs in parallel with the growth in other cities, which attract population. At the same time, these processes after 2019 were placed on a new plane. The rapid growth of the use of digital technologies, including digital communications and infrastructure and other advanced technologies, has changed many areas of public life, including production and consumption, how people interact with each other and how people work and behave. Isolation measures in response to the COVID-19 pandemic and the temporary shift to teleworking also demonstrate the prevalence of digital transformation in society. This change has led to the elimination of the link between the workplace and the place of residence has suddenly become the norm for many more people, even those who do not normally do work away from the traditional workplace. This showed that the world is moving towards a new technological change.

Development of the city's economy through information technologies and networks. Cities contain colossal resources, human talents, creativity and serve as centers for sharing knowledge, experimentation and innovation, generating new ideas and implementing these solutions at the local level, the most successful of which is scaled up in a wider application. However, cities are not abstract machines for sustainable development; real people live, work, study and realize themselves in cities. Cities consist of people built by people and existing for people. Therefore, sustainable development measures must make sense above all for the city dwellers themselves, making their lives more comfortable. Moreover, people are the driving force behind sustainability, its source and beneficiary. This vision is at the heart of the concept of "people-smart sustainable cities". By promoting sustainability in all its environmental, economic, social and cultural dimensions, such cities create the conditions and infrastructure to empower their citizens to contribute to and benefit from a better, more sustainable and sustainable development city (Klinenberg, 2018). Such cities form an environment for the full participation of citizens in the exercise of their rights. to the town. The focus is on making cities more prosperous, fair, comfortable and innovative, meeting social needs and ensuring high quality and affordability of housing and urban services. These cities meet the needs of vulnerable groups and people with disabilities, gender and age, recognizing the needs of residents are different and change at different stages of life. This approach is comprehensive and equitable, directly and clearly linking sustainable development to human capital development, and also reaffirming the urgent need to expand life opportunities and improve the quality of life for all.

Citizens are seen as a source and as beneficiaries of sustainable development. These ideas are based on the concepts of "sustainable cities" and "smart cities" (Latham and Layton, 2019). Stakeholders to participate in joint, inclusive and at the same time pragmatic policies for sustainable development. The continuing digitalization and the development of intelligent technologies have influenced the conceptualization of sustainable cities, the introduction of the intelligent dimension as a new normative requirement for a technological society. But the concept of "smart city" has changed over time: there is a

change from the concept that some are now called "Smart City 1.0" (which features a top-down system, with a focus on ICT infrastructure and the implementation of solutions driven by technology companies), to the concept of "Smart City 2.0" (a system that is focused on people and user-friendly) and even Smart City 3.0 (inclusive governance and participatory urban management). In terms of technology, instead of blindly copying and applying what other cities do, there is a search for "really smart" solutions for cities that are tailored to the needs of specific cities and their inhabitants, taking into account their characteristics, aspirations and challenges. (Nesti, 2019). This approach is more in line with the concept of adaptive control. Intelligence is certainly one of the conditions for more sustainable development, but at the core of this concepts must be people, citizens, communities. In this publication, the concept of "socially smart sustainable cities" refers to an extremely "humanistic" vision of a "smart" city, which includes, but is not limited to, ICT or technology, but extends far beyond them. for a socially intelligent sustainable city promotes a broader understanding of intelligence in urban development - as a set of conditions aimed at strengthening human capital, while ensuring sustainability and creating a harmonious society and improving the quality of life. This means meeting social needs and creating more favorable conditions in cities for innovation, which will make cities more attractive to people and businesses (Valkov, 2020). This approach sets the new trend, which focuses on creating an enabling environment that makes cities socially smart and opens the door to a more sustainable and comfortable future. It also demonstrates that cities are key forces for introducing and implementing innovation for a sustainable future. In practice, this environment cannot go through the implementation of new communication technologies such as 5G. In addition to the basic terminology and important trends, at the level of cities and in particular in Bulgaria as municipalities, efforts will have to be made for the introduction of 5G technology. There are already working 5G networks in Bulgaria, although in test mode. The reason this is not really felt is that these are working networks, but with many reservations: limited coverage, limited speed and most of all a limited number of devices that can be included in it. In addition, even if the construction of a 5G network can be completed in the next few years, it will be unusable - there will not be enough mobile devices adapted to work with it. The successful and timely introduction of 5G networks will require a significant change in infrastructure investments, which will require significant coordination and development of regulatory frameworks. 5G mobile networks will be vital to sustaining the growing demand for mobile video. Increased data transfer capacity, speed and low latency will allow ordinary users to have fun through so-called virtual reality (VR) and alternate reality (AR). These technologies are already helping to enhance the experience in sports and other live events with innovations such as AR games and interactive gaming programs, while VR is helping to recreate a live experience for those at home and on mobile devices. Currently, virtual reality bandwidth is almost 100 times higher than playing high-definition video. 5G will allow for more innovation in this area. Given the complexity of future 5G systems, it is not yet clear how and where 5G networks will be located. It is possible that their development will be part of a much broader wireless ecosystem, based on investment in 4G networks and the improvements needed to provide different uses in different areas. Connecting hotspots is likely to provide additional capacity for hundreds of thousands of small short-range and high-speed cellular radios that support the existing network. Thus, 5G will require a gradual change in investment in digital communications infrastructure, as well as the necessary skills to provide its capabilities. Applications transform the user experience with urban spaces and services, including how people receive information, communicate, interact with each

other, move, access places and participate in public and political life. Many other features for urban living applications include the following in themselves:

Urban mobility. Smartphone applications use a built-in navigation feature to adapt to different modes of transport. Many public transport services provide real-time traffic schedules, traffic information, the ability to purchase tickets online and track access to bus or train stops from geolocation.

Car sharing. These applications offer access to car sharing services, allowing the user to find free cars and rent them on an hourly basis or to access the car sharing services of several colleagues on joint trips. Taxi calling services make it easy to order a taxi, search for it in real time and pay for the trip online through the app. This is exactly what 15toGO does - it connects people with common interests and desires to visit a certain destination. When users use the Travel with Me button, they offer a "travel friendship" using the term travelship in the platform. The more people accept the invitations, the greater the network of travelers created by the respective user.

Shopping and delivery. Retail and supermarket chains provide applications that provide access to their products, allow you to place a purchase order, and help you find nearby stores. You can also order food and its delivery by accessing the menu of restaurants and independent delivery services.

Financial services. This group includes applications for daily use of mobile devices bank and online payment by phone in stores or when receiving services, which replaces a credit or debit card. Such applications also allow those who do not have a card payment machine to make small personal money transfers (Rutherford and Coutard, 2014).

Short-term rent. Find hotel rooms, compare prices, book a room and manage the reservation can be made both from a smartphone and a desktop computer. With the growth of the sharing economy. These possibilities are not limited to hotel rooms, but also cover services for sharing (short-term rent) of residential premises.

E-government or e-government. Receiving government services directly through smartphones is becoming commonplace. Many local authorities provide applications to make it easier for citizens to inform the authorities and participate in the decision-making process. These include reported infrastructure gaps using geographically indicated images and brief descriptions that are sent to the relevant services.

Medical care. The applications also change the way we approach healthcare, some of the applications proved useful during the COVID-19 epidemic.

The digital revolution provides cities and citizens with new tools to find opportunities, solve problems and create pathways to a more sustainable and comfortable future for all. This is particularly true of the fourth industrial revolution (Industry 4.0), automation and robotics, which can change the way businesses work, the organization of social life and its impact on labor markets (Yenneti, Day and Golubchikov, 2016); (Friedman, Conteh and Philips, 2019).

Finally, we cannot ignore the fact that the information society is a stage of the development of civilization, let's assume that the new technologies lead to a qualitatively new structure, organization of public relations based on global access and use of information, communication networks and services. Through information technology it is possible to overcome national, geographical or other restrictions on the exchange of information on scientific, spiritual, cultural and other achievements.

Conclusion

It is a determining factor in public life as a whole scientific knowledge. It displaces labor (manual and mechanized) as a factor in the value of goods and services. The economic and social functions of capital pass to information. Thus, the urbanism of the platform and smart cities are some of the trends in the commitment of cities in the digital transition. They recognize cities as suitable metropolitan areas for the introduction of "smart" technologies, including in an experimental, "test" mode. Various "Platforms" introduce new services and markets in urban life, enabling more efficient and cost-effective, opening up new opportunities for service providers and offering more convenient and cost-effective services. The sharing economy involves activities based on user-user interaction, which allows transactions between buyers and sellers, usually supported by Internet platforms. The model allows the creation of new markets in which consumers can profit from underused or unused assets, such as cars or real estate. Airbnb, Uber and their regional alternatives such as Yandex.Taxi and other Yandex services and other similar platforms quickly became part of everyday life. Car-sharing services by several other passengers, such as Oszkár in Central Europe, car-sharing and bicycle-sharing platforms are widespread (Carbon Neutral Cities Alliance, 2019). Similarly, collaboration platforms and freelance practice help to better balance supply and demand in a more flexible labor market. The platforms are evolving due to network effects and economies of scale. This predetermines the entry of 5G technologies within the Bulgarian national space. The infrastructure of the information society is the new intelligent, not the mechanical technology. The social organization and information technologies form a kind of symbiosis. Society enters a technotronic era when social processes become programmable. There is a lot of information in modern society as well plays a colossal role. To understand the essence of the information and why it plays such an important role in the modern age is needed clearly distinguish message (or message), interpretation perception) and communication. Modernization goes through the introduction of new technologies and their management in order to create a new labor market that brings to the fore new professions and winds of the economy of the XXI century.

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OPPORTUNITIES FOR IMPLEMENTATION OF INTELLIGENT SYSTEMS IN TERRITORIAL DEVELOPMENT

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Abstract

This report is dedicated to intelligent territorial management systems, which are increasingly used in urban governance with the introduction of the term "smart city". In this presentation, we present a new approach to implementing smart governance systems in the form of a smart region. The exhibition examines the possibilities for applying smart approaches to the development of the territory and improving the spatial development of the administrative-territorial units in Bulgaria. An attempt has been made to analyze and compare smart policies in the European area and their implementation in our country. The main trends and opportunities for smart management of the regions in Bulgaria are outlined.

Key words: smart region, regional development, governance, territory, system, smart city, space

Abstrakt

Dieser Bericht ist intelligenten territorialen Verwaltungssystemen gewidmet, die mit der Einführung des Begriffs "Smart City" zunehmend in der städtischen Verwaltung eingesetzt werden. In dieser Präsentation stellen wir einen neuen Ansatz zur Umsetzung intelligenter Verwaltungssysteme in Form einer intelligenten Region vor. In der Ausstellung werden die Möglichkeiten für die Anwendung intelligenter Ansätze zur Entwicklung des Territoriums und zur Verbesserung der räumlichen Entwicklung der administrativ-territorialen Einheiten in Bulgarien untersucht. Es wurde versucht, intelligente Politiken im europäischen Raum und ihre Umsetzung in unserem Land zu analysieren und zu vergleichen. Die wichtigsten Trends und Möglichkeiten für ein intelligentes Management der Regionen in Bulgarien werden skizziert.

Stichworte: intelligente Region, regionale Entwicklung, Governance, Gebiet, System, intelligente Stadt, Raum

Résumé

Ce rapport est consacré aux systèmes de gestion territoriale intelligente, qui sont de plus en plus utilisés dans la gouvernance urbaine avec l'introduction du terme "ville intelligente". Dans cette présentation, nous présentons une nouvelle approche de la mise en œuvre des systèmes de gouvernance intelligente sous la forme d'une région intelligente. L'exposition examine les possibilités d'appliquer des approches intelligentes au développement du territoire et d'améliorer le développement spatial des unités administratives-territoriales en Bulgarie. Une tentative a été faite pour analyser et comparer les politiques intelligentes dans l'espace européen et leur mise en œuvre dans notre pays. Les principales tendances et opportunités de la gestion intelligente des régions en Bulgarie sont soulignées.

Mots clés: région intelligente, développement régional, gouvernance, territoire, système, ville intelligente, espace.

Introduction

Modern technology is rapidly changing our lives. With the help of a computer you can literally do everything: work, buy goods and services, communicate, have fun. We can say that a new way of life is being formed today. In the modern world, intelligent management systems focus on urban planning concept for the integration of many information for urban infrastructure management: transport, education, healthcare, housing and communal services, security and more. The aim is to create conditions for the creation of a "smart city" and then a smart region, which will provide a better quality of life for residents in different areas. The definition of a smart city is interpreted ambiguously by experts. However, their wording converges in one thing: the smart city is driven by data, and data management allows municipal services to improve the quality of life of the population. The data cover such areas of citizens' lives as safety, transport, medical services, utilities, beautification, etc. . Data sources are video cameras, various sensors, sensors and information systems. This model of change in humanity is related to the spatial development of our national territory and the need to introduce the concept of "smart region". In practice, the smart region model goes beyond the innovative development of cities by adding the opportunity for innovative development of rural areas, post-urban spaces, suburban areas, holiday villages, resorts and villages in the Republic of Bulgaria (Marinov, 2009). Thus, the intelligent system at the regional level is based on the introduction of information and communication technologies in various spheres of life, which can accelerate the economic development of the territories and improve the quality of life of citizens. In practice, the smart region is primarily a platform that applies the basic principle of smart development of the individual territory and especially the reuse of data and infrastructure. For example, thanks to an integrated system, the same surveillance camera can be used by different services and departments for their purposes such as traffic monitoring, public safety, quality control of street cleaning, etc. n. On the other hand, the global trends for the implementation of intelligent territorial management systems are one of the challenges that can create conditions for overcoming certain deficits in the regional development of our national territory (Nikolova, 2017). Thus, through the smart region model, the concept of scaling the technical solutions, management methods and social practices of a smart city for all municipalities in Bulgaria can be achieved. This is a concept for the development of the digital economy, the production and use of innovations within the regional specialization, which includes the creation of the necessary infrastructure for this and the cultivation of competencies required in the information society among residents of municipalities and settlements.

Results

European experience and the development of intelligent systems in individual regions. After 2015, the countries of the European Union are moving from a strategy for smart cities to a strategy for smart regions, which covers not only the municipal but also the regional and inter-municipal level of planning and policy. Globally, national and municipal strategies for the development of smart cities have been developed and are operational.

These are programs and initiatives for smart cities in the European Union and the United States. At the same time, a number of departmental and interdepartmental initiatives standardizing the development of smart cities in the People's Republic of China have been implemented in recent years. Also, nearly 100 smart city programs are being implemented in India. As of 2020, there are several hundred smart cities around the world (Nikolova and Klisurova, 2015).

It must be understood that the smart region is such a thing that, firstly, you cannot implement it "from above" and, secondly, you cannot implement it "in one". Without the participation of business and the population in the project, as well as without the cooperation of a large number of very different specialists, the project for a smart region will be doomed to failure. It should also be borne in mind that rapid urbanization places an excessive burden on services such as transport communications, emergency rescue and municipal services of cities and, above all, the area of gravity of urban systems (Nikolov and Botseva, 2018). To tackle these problems, the concept of a "smart region" is becoming more widespread around the world. Its main goal is to increase the efficiency of all services through the use of information and communication technologies. It should be emphasized that all Smart Region projects include video surveillance, public services, intelligent transport system and others should not be isolated. In intelligent systems, we must have interconnectedness within a single concept for the region. The main subsystems include the Intelligent Transport System (ITS), the Geographic Information System (GIS), the security system, e-education and e-health. Each project, as a rule, is a deeply integrated system consisting of many subsystems, which include different functional components, each of which can be used simultaneously in many subsystems. Smart regions scale the practices of smart cities and determine their smart economic specialization (Shishmanova, 2015). The main concept for the regional development of the Bulgarian regions should be the development of elements of e-government and the introduction of digital government mechanisms that use big data to make management decisions in the system of state and municipal administration. In the field of regional economy achieving digitalization of sectors and clusters of the economy, as well as various spheres of public life at the level of district, region, municipality and settlement, the use of big data as a factor for economic development, social sphere, state and municipal management.

In the field of regional economy achieving digitalization of sectors and clusters of the economy, as well as various spheres of public life at the level of district, region, municipality and settlement, the use of big data as a factor for economic development, social sphere, state and municipal management. In the last few years in Bulgaria in the field of regional development began to implement partial projects to create a smart regional specialization. This is measured in the adoption of strategies for the development of the regional economy, based on the identification and selection of a limited number of priority areas for investment in research and innovation, which are the strengths and comparative advantages of the region (Petrov, 2015). The first focus of this type of strategy rests on defining an urban environment to build a smart city. It is believed that this should be a city that implements a number of technical solutions and organizational measures aimed at achieving the highest possible quality of management of urban resources and infrastructure and the provision of services in order to create sustainable living conditions, residence and business activity in the city. But the city itself needs to have its own zone of gravity, which brings to the fore the need to develop the concept of a smart region. This concept should be based on the creation of a regional practice, which consists in scaling up smart urban technologies for urban

agglomerations and areas with a low share of urban population, as well as for the formation of smart specialization of the region. This process is related to the need to achieve a high level of digitalization of the economy (Santova, 2019). As the regional economy should be a key factor in production are digital data, processing large volumes and the use of analytical results, which compared to traditional forms of management can significantly increase the efficiency of various types of production, technology, equipment, storage, sales, delivery of goods and services.

The needs of regional development to create an intelligent environment. In the intelligent management of regional development, it is necessary to use new terminology, which will fill with content the spatial development of the processes of innovative development of the separate territorial communities (Petrov and Borisov, 2021). In the first place is the concept of "big data", which characterizes digital data sets, large size, the rate of increase or complexity of which requires significant computing power for processing and special software tools for analysis and presentation in the form of human-perceived results (Batty, 2012). Another concept related to the development of regional technologies is the Internet of Things (IoT). It is a computer network that connects physical objects equipped with built-in information technology to interact with each other or with the external environment without human intervention. Another variety is cyber physical systems (CPS), which are intelligent network systems with built-in sensors, processors and devices that are designed to interact with the physical environment and support the operation of computer information systems in real time. Cloud computing, which is a model of information technology to provide ubiquitous and convenient access via the Internet information and telecommunications network to a common set of configurable computing resources ("cloud"), storage devices, can also be important to support regional development. data, applications and services that can be immediately provided and released from the load with minimal operating costs or almost without the involvement of the supplier. Thus, in regional development, there is a need to create a network of open data. It creates conditions for the use of information created by state bodies, their territorial bodies, local self-government bodies or organizations subordinate to state bodies, local self-government bodies, or obtained from these bodies and organizations, which must be published in Internet in format, providing its automatic processing for re-use without prior change by a person (machine-readable format) and can be freely used by any person for any purpose in accordance with the law. In this way, conditions are created for the promotion of e-government at the regional level (Correia, 2011). The next step at the local level is to move to building an industrial Internet, (IIoT). This means building an information and communication infrastructure based on Internet connection of industrial devices, equipment, sensors, sensors, process management systems, as well as the integration of data from hardware and software with each other without human intervention. In recent years, the European Union has been implementing a "Strategy for Research and Innovation for Smart Specialization" (RIS3). Regional and national smart specialization strategies are supported through participation in the Smart Specialization Platform (S3). A similar example is the introduction of an electronic document management system that brings together regional authorities, district administrations and other institutions. In recent years, the European Union has been implementing a "Strategy for Research and Innovation for Smart Specialization" (RIS3). Regional and national smart specialization strategies are supported through participation in the Smart Specialization Platform (S3). A similar example is the introduction of an electronic document management system that brings together regional authorities, district administrations and other institutions. In recent

years, the European Union has been implementing a "Strategy for Research and Innovation for Smart Specialization" (RIS3). Regional and national smart specialization strategies are supported through participation in the Smart Specialization Platform (S3). A similar example is the introduction of an electronic document management system that brings together regional authorities, district administrations and other institutions. Based on the accumulated experience, three types and three ways of developing smart regions based on agglomeration areas can be identified. In the first place, such as the introduction of intelligent systems in the infrastructure of existing cities, the creation of intelligent infrastructure for large-scale events, as well as the construction of new high-tech areas or residential cities ("green field" projects). In practice, individual regions can have opportunities in this direction by encouraging the development of small and medium-sized enterprises that are actively involved in the development of "smart cities" (EU, Cities of tomorrow. Challenges, visions, ways forward. European Commission, Directorate General for Regional Policy, 2011). This process can be encouraged by the state through the implementation of programs, implementation of ideas and solutions, as well as the provision of grant schemes for the preparation and implementation of a national strategy for smart cities. Another solution is the implementation of corporate projects to provide free support for small and medium enterprises, building business incubators, open innovation centers and parks and identify "champions" working in the segment of smart city development. It is important to note that integrated solutions are often needed in regional development. This involves solving several problems simultaneously or providing services throughout the life cycle of the city's construction, including infrastructure, industrial and partial solutions. Moreover, partial solutions are technological solutions within any narrow specialization (telecommunications, energy, security, automation and building management systems, etc.). In this regard, at the regional level it is necessary to increase the role of public, expert and research organizations, as well as companies, is to create various ratings and partnerships for the development of smart cities and regions (Townsend, 2013). An effective mechanism for open innovation is "living laboratories" ("living laboratories"), which allow companies, start-ups and proactive citizens to test different solutions for smart cities in practice in a real urban environment. Crowdsourcing and hackathon projects are used to attract a wide range of citizens. In countries like Bulgaria, the problems of regional development are integral and so far many policies and projects related to targeted impact have been implemented, but high-tech projects with the implementation of intelligent management systems are not perceived as a possible factor in promoting regional development.

Policies for development of information infrastructure in the regions. The construction of intelligent management systems undoubtedly goes through the development of the information infrastructure in the regions of Bulgaria. These include the development of new model communication networks, data centers, the introduction of digital data platforms to meet data collection and transmission needs and the provision of data storage and processing services. Policies for the development of information infrastructure in the regions. The construction of intelligent management systems undoubtedly goes through the development of the information infrastructure in the regions of Bulgaria (Stoychev, 2012). These include the development of new model communication networks, data centers, the introduction of digital data platforms to meet data collection and transmission needs and the provision of data storage and processing services. This can be done by creating a single situational center at the level of settlements by integrating a large number of information systems based on a single

information platform for the situational center (usually in a settlement of 5 to 10 thousand people). Also the development of an information panel (board) at the municipal level on the Internet, which shows real-time information about the situation in the municipality and the settlements in it. Another possibility is the introduction of an electronic card of a citizen at the level of municipalities and settlements in them with the possibility of personal identification with it, access to services to premises, loyalty programs, payment for travel on public transport and others. Another novelty is the use of citizens' smartphones as devices on the Internet of things for collecting information in a unified regional geographic information system and subsequent analysis of the obtained big data. This should go hand in hand with increasing the amount of open state and municipal data available to the public, companies and stakeholders. Another important part is the creation at the municipal level of a narrowband network using LPWAN technology for the collection and processing of telematics information. All this should encourage the process of attracting investors to less developed areas and creating conditions for the development of industries specializing in cyberphysical systems, supporting pilot projects for investors to test solutions for urban areas in rural areas of Bulgaria. .

Also creating a connection between all schools in each municipality to the unified information system in the field of education "Network City". By introducing an electronic system for admission to educational organizations and services to inform parents about their children who are in class, which will lead to the development of the infrastructure of further education by creating new platforms for self-realization of representatives of educational and research organizations (children's technology parks, centers for youth innovation, coworking, incubators) (Stoychev, 2012). The key to improving the competitiveness and increasing the share of the digital economy, as well as training qualified staff for it. The main goals of this area: improving the education system, which should provide the digital economy with competent staff, developing a system of career guidance, additional education for children and youth and identifying talents in the field of information technology. The main objectives of the training within the implementation of the concept of "smart region" are the introduction of a system of competencies that reflects the digital reality of the activities of citizens, including the competencies of teachers. Creating opportunities to ensure an increase in the number of graduates of schools and organizations of secondary vocational education who have passed the exam in computer science. The purpose of this direction is to achieve a state of security of the individual, society and the state from internal and external information threats by ensuring the unity, stability and security of information and telecommunications infrastructure (Tsonkov, 2021). The main tasks for ensuring information security within the implementation of the concept of a smart region are raising awareness and literacy of the population and organizations on information security issues as part of open programs to inform citizens about the risks of information security. The main goal of the introduction of digital intelligent technologies in the field of construction and housing and communal services is to increase the efficiency of design, construction and operation of real estate, to ensure high quality planning of settlements, housing and services provided in the housing and communal services sector. This will increase the transparency of the housing and communal services market for end-users of services. The tasks for the introduction of digital intelligent technologies in the field of construction and housing and communal services within the concept of "Smart Region" are to create conditions for the transition of the regional construction complex to the technology for information modeling of buildings and structures technologies). The transition to the mandatory use of information

modeling technology in the construction of buildings and structures commissioned by government agencies and organizations, as well as companies with state participation. creating conditions for equipping systems for monitoring, analysis and forecasting of damages in the infrastructure of the house (elevators, pipelines, etc.) of housing projects under construction with the help of information modeling technology (Nikolov and Botseva, 2018). Also installation of devices for remote measurement of heat, energy and water resources consumption during the construction of new buildings and structures. Including the replacement of old measuring devices. ensuring the integration of capital construction projects by entrepreneurs with the existing regional and / or municipal solutions of System-112 and the Integrated Emergency Warning System for the population for the threat of emergencies or emergencies (KSEON). Also expanding the opportunities for citizens and organizations for remote and electronic documents related to the construction, operation, rental and cool sale of real estate. The main objectives in this area are to improve the quality of state and municipal services, the efficiency of the performance of state functions, including control and supervision, as well as to ensure the effective functioning of state bodies and local self-government (EU, Cities of tomorrow. Challenges, visions, ways forward. European Commission, Directorate General for Regional Policy, 2011). The tasks for the introduction of intelligent digital technologies in the field of state and municipal government are to increase the share of residents receiving state and municipal services in electronic form to over 70%, increase the number of regional and municipal services and provided in electronic form. Introduction of a public-private partnership mechanism in the development of digital governance, in particular in the field of the functioning of state information systems. The main goals in this area are to improve the quality of information of citizens and their participation in management processes at the municipal level. The tasks for the introduction of smart digital technologies in the field of interaction between the authorities and the citizens are to create a special regional portal and a pilot city portal for discussing proposals and voting on the most important issues in the region, including the possibility to make proposals to the strategy. for the development of the region and the municipalities (Tsonkov, 2021). Regular monitoring of the satisfaction of the inhabitants of the municipalities with the quality of life, taking into account the use of digital channels for interaction with the citizens and the use of digital services for monitoring the public opinion.

Conclusion

In the modern regional development there is an increasing need for the implementation of innovations. In this direction, the search for solutions to promote regional development with the implementation of the concept of "Smart Region" will create spatial conditions in the entire national territory of Bulgaria to develop the digital economy. Of course, the introduction of smart systems as a factor in promoting regional development needs to be conceptualized and developed by developing a three-year plan for the implementation of the concept and roadmaps in certain areas, projects and areas to be included as various government agencies and local self-government, and business and citizens. The interaction between the authorities and local self-government, as well as the institutions for the development of the region will play an important role in the realization of the concept of "smart region". Of course, the introduction of smart systems as a factor in promoting regional development needs to be conceptualized and developed by developing a three-year plan for the implementation of the concept and roadmaps in certain areas, projects and areas to be included as various government agencies and local self-government, and business and citizens. The interaction between the authorities and local

self-government, as well as the institutions for the development of the region will play an important role in the realization of the concept of "smart region". It is necessary to implement the concept of "smart region", which should be developed in accordance with municipal plans and strategies for regional development. Roadmaps will be developed in some municipalities and districts for the implementation of the concept. As part of the concept, both existing and new priority projects of regional development will be implemented. It is necessary to implement the concept of "smart region", which should be developed in accordance with municipal plans and strategies for regional development. Roadmaps will be developed in some municipalities and districts for the implementation of the concept. As part of the concept, both existing and new priority projects of regional development will be implemented.

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METHODOLOGICAL FRAMEWORK AND ACTIVITIES FOR THE CREATION OF THE ELECTRONIC JOURNAL
MANAGEMENT SCIENCE AND APPLICATIONS AT THE UNIVERSITY OF NATIONAL AND WORLD ECONOMY

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Abstract

This presentation presents the accumulated methodological experience of the research team in the implementation of the research project for the creation of a scientific journal in the field of professional field "Administration and Management". The presented report is dedicated to the need for scientific research in the country to be presented through journals on the Internet. In this direction is an advanced institutional analysis of the functioning of electronic journals, which show the different ways of functioning. The technology of submitting and processing the articles before their publication is shown. As a result, the creation of an electronic journal at the University of National and World Economy was brought out. The tendencies and the possibilities for presenting the scientific achievements of the teachers working mainly in the professional field "Administration and Management" to the world are outlined.

Key words: electronic environment, management, publications, articles, model, research, writing

Abstrakt

In dieser Präsentation werden die gesammelten methodischen Erfahrungen des Forschungsteams bei der Durchführung des Forschungsprojekts zur Gründung einer wissenschaftlichen Zeitschrift im Bereich des Berufsfelds "Verwaltung und Management" vorgestellt. Der vorliegende Bericht ist der Notwendigkeit gewidmet, die wissenschaftliche Forschung im Land durch Zeitschriften im Internet zu präsentieren. In diese Richtung geht auch eine fortgeschrittene institutionelle Analyse der Funktionsweise elektronischer Zeitschriften, die die verschiedenen Funktionsweisen aufzeigt. Es wird die Technik der Einreichung und Bearbeitung der Artikel vor ihrer Veröffentlichung aufgezeigt. Als Ergebnis wurde die Schaffung einer elektronischen Zeitschrift an der Universität für Nationale und Weltwirtschaft herausgestellt. Es werden die Tendenzen und Möglichkeiten aufgezeigt, wie die wissenschaftlichen Leistungen der Lehrkräfte, die hauptsächlich im Berufsfeld "Verwaltung und Management" arbeiten, der Welt präsentiert werden können.

Stichworte: elektronische Umgebung, Management, Veröffentlichungen, Artikel, Modell, Forschung, Schreiben

Résumé

Cette présentation expose l'expérience méthodologique accumulée par l'équipe de recherche dans la mise en œuvre du projet de recherche pour la création d'une revue scientifique dans le domaine du champ professionnel "Administration et gestion". Le rapport présenté est consacré à la nécessité pour la recherche scientifique dans le pays d'être présentée par des revues sur Internet. Dans cette direction est une analyse institutionnelle avancée du fonctionnement des revues électroniques, qui montrent les différents modes de fonctionnement. La technologie de soumission et de traitement des articles avant leur publication est montrée. Ainsi, la création d'un journal électronique à l'Université d'économie

nationale et mondiale a été mise en évidence. Les tendances et les possibilités de présenter au monde les réalisations scientifiques des enseignants travaillant principalement dans le domaine professionnel "Administration et gestion" sont exposées.

Mots clés: environnement électronique, gestion, publications, articles, modèle, recherche, rédaction

This article is part of the research project NI-5/2021 Concept and publication of a scientific journal at the faculty "Management and administration" of UNWE.

Introduction

Electronic resources (e-resources) are becoming an increasingly important component of activities for the construction and development of research. In the modern world, science has its requirements and challenges. The creation of such a methodology for building and developing an electronic journal creates an opportunity for the application of a constant and coherent approach to staffing and ensures that the scientific results of teachers can receive the necessary publicity. In this direction, within the University of National and World Economy (UNWE) we created a research team that aimed to achieve a complete product related to the creation and development of the scientific journal. In this regard, we share that the philosophy of research and journals are a place for the realization of journals that present the achievements in the professional field, administration and management. This made it necessary to emphasize that the urge to share scientific achievements in research and teaching achievements is an important condition for academic development, and secondly, to do so through academic writing in academic journals. In Bulgarian science, an academic journal or scientific journal is considered to be a periodical in which materials related to a particular science and the achievements of researchers are published. Academic journals serve as permanent and transparent forums for presenting, reviewing and discussing research. They are usually peer-reviewed or peer-reviewed. It is important to note that their content is usually in the form of articles presenting original research, reviews or book reviews. The aim of the academic journal, according to Henry Oldenburg (first editor of the Philosophical Transactions of the Royal Society), is to give researchers a place to "pass on their knowledge to each other and contribute as much as they can to the Great Plan for Improving Natural Knowledge and Improving Natural Knowledge." all philosophical arts and sciences. " (The Royal Society: Royal Society journal archive made permanently free to access, 26 October 2011). Here is the place to frame that scientific journals and journals on the quantitative social sciences differ in form and function from the journals on the humanities and quality social sciences; their specific aspects are discussed separately. The world's first academic journal was the Journal des sçavans (January 1665), followed soon after by Philosophical Transactions of the Royal Society (March 1665) и Mémoires de l'Académie des Sciences (1666). The first fully peer-reviewed journal was Medical Essays and Observations (1733). By the end of the 18th century, nearly 500 such periodicals had been published (Mabe and Michael, 2003) with the vast majority coming from Germany (304 periodicals), France (53) and England (34). Other important events in the history of academic journals include the creation of Nature (1869) and Science (1880), the creation of Postmodern Culture in 1990 as the first online-only journal, the founding of arXiv in 1991 to distribute preprints for discussion. before their

publication in a journal and the creation of PLOS One in 2006 as the first mega journal (Mudrak, Ben 2018). Thus, scientific journals gradually accumulated their tradition and management capacity. Scientific journals are also developing in our country, which have their difficulties in publishing, but in general manage to establish themselves as sustainable scientific journals. In the years after 1990, the process of change a number of journals ceased to operate for various reasons, but the few remaining scientific journals gradually began to gain international prestige. After the introduction of electronic technologies, the preparation of electronic scientific publications is being worked on. These tendencies for presentation through electronic journals provoked our scientific research, as a result of which a scientific team was formed within the Faculty of Management and Administration, which made the relevant study of the available journals. The purpose of this study is to see the practical nature of scientific journals and their scope. Our efforts are to create an e-journal called Journal of Management Science & Applications. With this in mind, we present some points (Mabe, Michael, 2003).

Results

Journals, electronic databases and problems with indexing in them. The purpose of defining the framework of our academic journal of Management Science & Applications in electronic environment is to determine its policy and place of publication. There is no doubt that today's global technological rise of academia should not only not lag behind, but should be at the forefront of the electronic revolution, which gives us reason to present the challenges to the electronic journal. Electronic scientific journals are about to become the main way to exchange knowledge and skills. The understanding and the desire for change and modernization are obvious, and only a dose of practical know-how is needed to clarify how to deal with these means of science and information. E-zines are included in a number of academic databases that are available and recognized worldwide. This is the so-called Indexing of the journal itself. In this regard, the following academic databases can be highlighted, which are important for the framework of electronic journals, which are:

1. Journals that have subscription access, these are mainly - SCOPUS, Web Of Science, Academic Search, CiteFactor, CrossRef, Thomson Reuters, EBSCO Publishing, Index Copernicus, Indian Citation Index, Chinese Social Sciences Citation Index, Wiley and others. These are in fact the most authoritative indexed databases that are evaluated by scientific thought.

2. These are free access journals - ArXiv.org, Bielefeld Academic Search Engine (BASE), Open Access Journals Directory (DOAJ), ENDNOTE - Thomson Reuters, Frontiers, Google Scholar, Mendeley, RefDoc, ResearchGate, SCImago Journal & Country Rank (SJR), Springer, WorldCat and others. It is important to mention that some of them require different fees for processing materials. These journals usually seek to reach a very large market, such as the entire population of a country (Edmunds, Guskin, Rosensteil and Mitchell, 2012). In contrast, local media cover a much smaller population and area, focusing on regional news of interest, while special media is provided for certain demographic groups. Some local media outlets that cover state or provincial news may become known for their investigative journalism and the influence their regions have in national politics, while e-zines have access to society as a whole. In this regard, the question arises about the representativeness of electronic journals. In this direction it is considered prestige if a publication is in an authoritative database. The world's leading database with subscription access Scopus (SCOPUS). It is the largest bibliographic and scientometric database in the field of scientific, medical and technical literature. The database is an indispensable

assistant in the work process of scientists with intelligent tools for searching, tracking and analyzing scientific information. Journals, authors and institutions can be evaluated in SCOPUS. It indexes over 22,000 journals published by about 5,300 publishers around the world. By updating its information daily, SCOPUS offers access to reference lists and other metadata of a huge number of articles, but unlike the Web of Science, the ratio between social and natural science publications is 17% to 83%. Equally important is the Web of Science. It is one of the most authoritative databases on scientific citations. It is a multidisciplinary reference and bibliographic resource maintained by the US Institute of Scientific Information (ISI) and presented on the Thompson Reuters Web of Knowledge platform. The CiteFactor database, which offers indexing of major international journals and periodicals, also plays an important role. Authors can obtain information on the international impact factor of these publications and information on upcoming events. All links lead to publisher web pages that are integrated into CiteFactor resources. The aim is to increase the visibility and ease of use of open access academic journals. Wiley's Global Research database, which favors research and education by providing access to online tools, journals, books and databases, also has a good reputation. The Wiley Online Library database offers access to 4 million articles from 1,500 journals, 9,000 books, and a wealth of reference resources. Another database such as the Bielefeld Academic Search Engine (BASE) is one of Europe's most powerful open source web search engines. BASE provides access to 60 million documents from over 3,000 sources. 70% of all publications are available in full text. The same goes for the Directory of Open Access Journals (DOAJ), which is a multidisciplinary platform offering free access to 10,000 scientific and academic journals in full-text electronic format. It helps to increase the number of scientific journals available for free via the Internet, as well as to strengthen the international initiative "Open Access Journals". DOAJ increases the visibility and usability of peer-reviewed scientific journals and thus helps to increase their impact factor (Mikeska and Howell, 2020). The main convenience of this resource is the use of search filters: subject, article, journal, language, country, publisher, aggregator, license type, year of publication, etc. The directory was established by Lund University (Sweden). In our country, most scientists are subscribers to Google Scholar. This is a free web search engine that indexes metadata and the full text of scientific and academic publications of all formats and disciplines (articles, working papers, reports, preprints and post prints, dissertations, books, web pages, etc.). For example, Google Scholar allows you to search for digital or physical copies of publications online or in libraries, respectively. As a result of the search, hyperlinks are displayed to the publishers' commercial pages, which is why the user often gets access only to the annotations and may be asked to pay for the full text. Also important is the ResearchGate database, which is a site for scientific social contacts, something in between Facebook for researchers, Twitter and LinkedIn. It has the characteristics of social networks (user profiles, public and private messages, tools for finding users with similar interests), but differs in that it is designed for researchers and scientists. Research Gate is a German research network with more than 3 million users, i.e. 30% of all scientists in the world.

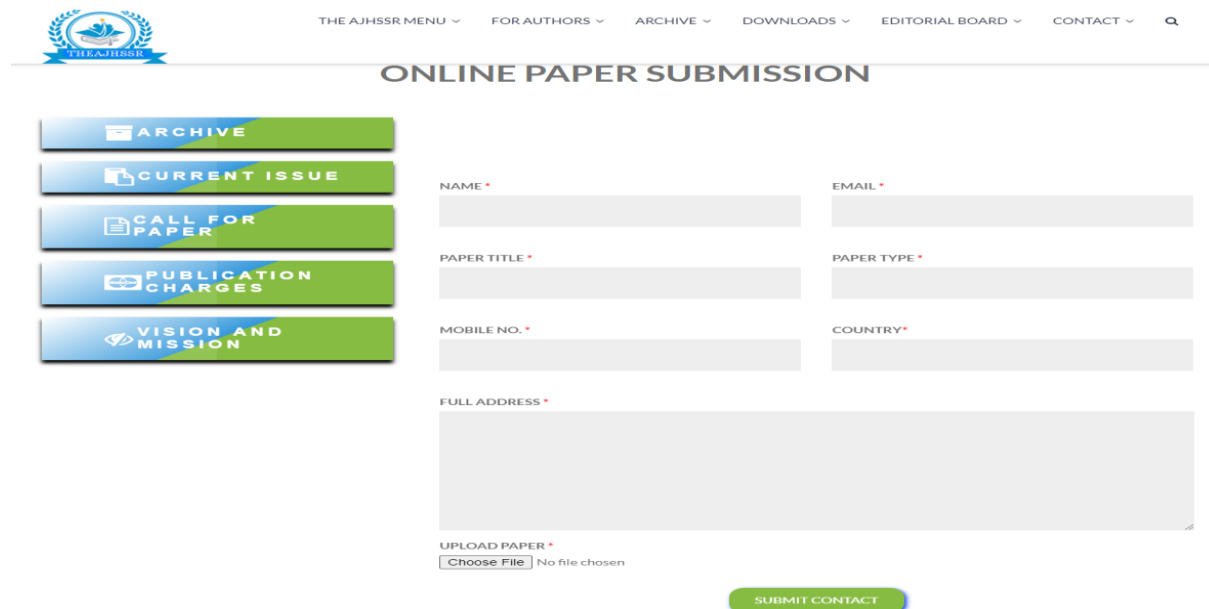
Distribution of types of electronic scientific journals and their location. Articles in scientific journals can be used in research and higher education (Behluli, Qerimi, Borisov and Hajdari, 2020) Scientific articles allow researchers to keep up with the development of their field and to lead their own research. An essential part of the scientific article is the citation of an earlier work. The impact of articles and journals is often assessed by counting citations (impact of citations). Some classes are partly devoted

to the explanation of classic articles, and the seminar activities may consist of a presentation by each student of a classic or current article. Textbooks and textbooks are usually written only on established topics, while the latest research and more obscure topics are only available through scientific articles. In a research group or academic department, it is common for the content of current scientific journals to be discussed in journal journals. Public funding bodies often require the results to be published in scientific journals. Academic qualifications for promotion to academic titles are largely determined by the number and impact of published scientific articles. Many doctoral programs allow a thesis through publication, where the candidate must publish a number of scientific articles (Tenner, 2009). This brings to the fore the distinction between different types of electronic scientific journals. They are according to the way of access by the readers of free access journals or paid access journals. According to the requirements of the author, regarding the payment or not of publication fees. Journals that require payment of publication fees or journals that do not require payment of publication fees.

In addition, according to the topic, the journals are divided into multidisciplinary, in the field of economics, education, geography, medicine, physics, chemistry and other scientific fields. Important is the geographical distribution, which according to location and subject matter, national electronic journals, European journals, Asian journals, American journals, international journals, etc. The phrase "electronic journal" is used to denote a broader category of electronic publications that may or may not have a printed analogue. At first glance, the concept of an e-journal seemed well defined, but there were a number of cases where this proved to be inadequate or vague. Several electronic publications provide alternative access to articles thereafter, such as annual or quarterly print volumes. In these cases, the distinguishing feature seems to be the lack of a simultaneously issued hard copy; hence the phrase "original publication in electronic format" in our criteria. For the purposes of this article, we have chosen to use an e-journal only for e-journals that were originally published only in electronic format, although in some cases the titles have an annual archived print version (Waight, 2012). It is important to note the way and the process of publishing an article in an e-zine. As already mentioned, scientific electronic journals, according to the requirements of the author, regarding the payment or not of publication fees, are divided into 2 types. Those that publish the materials after payment of certain editorial and publishing fees by the author to the journal itself and those that do not require payment of any fees. When payment is required, it is usually as easy as possible and the most common method of payment used is through PayPal. There are usually two ways to submit scientific articles (so-called Submit article) for review, editing and publication - through the journal's website or by e-mail. In some journals it is possible to provide both options for sending an article to the Editorial Board of the journal. The first thing the Editorial Boards of the journals do is to verify the authenticity of the text that has been sent for review and publication in their journal. For this purpose, they use specialized software that reports the percentage of plagiarism. The allowable plagiarism rate is usually 20%. The article goes for consideration after successfully passing this stage, otherwise it is disqualified at the very beginning and refused publication. Most journals use double-blind review, which means that both the reviewer and the author are hidden from reviewers and vice versa throughout the review process. To facilitate this, authors must ensure that their manuscripts are prepared in a way that does not reveal their identity. There are also journals that do not require the author to hide his identity, but the article is again impartially edited by the Editorial Board of the journal. The process of reviewing and publishing the article takes a different period of time, it depends on the

policies of the journal - it can be 1-5 days, 1-2 weeks, 2-4 weeks, 2-3 months and even more. In case the Editorial Teams have recommendations, remarks and additional requirements for corrections to the article, they return it to the author for editing. After the author has corrected it according to their requirements, he returns it to them ready for publication, together with a hand-signed copyright declaration [6]. Sometimes they require a cover letter to accompany the article and the declaration. In many cases, however, there is a possibility at the first examination of the article, it will be rejected and not proceed to the next stage of editing and correction. This is usually due to the following indicators: the topic does not correspond to the topics covered by the journal, incomplete and superficial information, insufficient in-depth review or study, lack of data, tables, graphs, maps and others. Finding a list of e-zines was not difficult; there are plenty of seemingly endless choices available through the library's many web pages. No list is limited to e-zines. The difficulty was sifting through the lists to find those journals that were only available in electronic format. Searching for the term "electronically only" in search engines and databases often leads to lists of fake hits for titles that offer only an electronic subscription. Most of them had a printed analogue with a separate subscription. Excerpts from journal web pages were available and validated to determine what criteria we would like to use to accept or reject a title for inclusion in this study (Tenner, 2009).

This journal offers to send the article for review directly through their website:



The screenshot shows the 'ONLINE PAPER SUBMISSION' page for The AJHSSR journal. At the top, there is a navigation menu with links: THE AJHSSR MENU, FOR AUTHORS, ARCHIVE, DOWNLOADS, EDITORIAL BOARD, and CONTACT. Below the navigation is a sidebar with five buttons: ARCHIVE, CURRENT ISSUE, CALL FOR PAPER, PUBLICATION CHARGES, and VISION AND MISSION. The main content area is a form with the following fields: NAME, EMAIL, PAPER TITLE, PAPER TYPE, MOBILE NO., and COUNTRY. Below these fields is a large text area for FULL ADDRESS. At the bottom of the form, there is an 'UPLOAD PAPER' section with a 'Choose File' button and the text 'No file chosen'. A 'SUBMIT CONTACT' button is located at the bottom right of the form.

Sources: On public materials from electronic journals

Some web pages contained little or no information about the sponsoring organization, how articles were selected for publication, or how often new material was added. Publication stability is a key criterion for many basic indexing services and therefore necessitated limiting the study to publications with a proven publication. When the study was first discussed, it was assumed that only free titles should be considered because there would be problems accessing subscription titles; however, most subscription titles make the information needed for their evaluation easily accessible (and restrict access to the full text). The criteria have been changed to include subscription titles where sufficient information has been

available. Evaluating articles as research-oriented requires that you can see enough information either in the "for" section, the content or the summary to form an opinion (Liu, Hmelo-Silver, 2009). Thus, given the opportunities for publishing, we present the different models of electronic journals. Illustrative examples of the different ways to submit a publication application in real electronic journals are as follows:

The American Journal of Humanities and Social Sciences Research - www.theajhssr.com.

Here it is important to mention that after entering the information it is good to check the other details of the electronic journal. Basically to find information about the policies for indexing the e-journal, the authors who are its editorial staff, the time of publication of the journal, how many issues are published over the years, etc. This is important so that we can have information about the index of the respective publication or in other sources where, for example, Ulrich's and OCLC WorldCat will be indexed.

The second way to publish is by sending a post via email. This example is illustrated in the Global Prosperity Journal - www.gprosperity.org. This journal actually offers to send the article for review by e-mail:

The screenshot shows the website for Global Prosperity Journal. At the top, there is a navigation menu with links for 'Global Prosperity', 'Current', 'Archives', 'Submission', 'About', 'Monographs and Conferences', and 'Contacts'. The main content area is titled 'Submission Procedure' and includes the following text: 'Please, follow the next procedure: Read the editorial policies carefully. Prepare the manuscript according to the author's guide. Send the manuscript to editor@gprosperity.org. Wait for confirmation of receipt of the manuscript (1-3 working days). If you receive technical comments from the editor or reviewer, correct them and resubmit the manuscript. Receive confirmation of publication and pay APC. Expect the publication of your article in the next issue. All articles will have a DOI number and an individual link. Authors will receive reference after final acceptance. Please note that the editorial process takes 2-4 weeks. You will get an answer as soon as possible.' To the right of the text, there are three flags (UK, Ukraine, and Russia) and a list of indexing services including ISSN 2787-9364, Crossref, Dimensions, Scilit, scite_, WorldCat, LOCKSS, Google Scholar, and ResearchGate.

Sources: On public materials from electronic journals

In this case, the proposed publication travels the appropriate path before it is published or rejected by the e-journal, and we are showing increasing acceptance of this format of publications. In this case, some aspects of intelligibility that e-journal editors need to address may not stand out. The publication should not be a static display of results and interpretations, but a distillation of the essence of the general scientific activity corresponding to the published unit. The advantage of radical transparency for scientists is that it increases trust in their work among colleagues. It's easier to convince when your audience sees you putting all your cards on the table. In computing areas, publishers can add value by offering resources for benchmarking tools and methods to test performance using standard datasets and indicators. Another option is to publish in a journal, which offers the opportunity to send an article, both online through the site and by e-mail:

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TOGETHER WE REACH THE GOAL

INTERNATIONAL
STANDARD
SERIALS
NUMBER
INDEX

NEWS & EVENTS

Online applications from highly
qualified professors/scientists with
satisfactory expertise in any research
area falling under the domain of
IJMRAP are invited for the editorial
board. The resume may be sent to
editor@ijmr.com

Sources: On public materials from electronic journals

In a sense, publishers will always be what they have always been: intermediaries between scientists who want to improve their field. The difference should be that publishers add value - modern value - instead of collecting rents by controlling historical heritage. Special volunteers or individual institutions could carry out all activities related to the creation of a publication that includes information technology [5]. However, these volunteers would be scientists who will have to devote time to their own core activities. Thus, within the University of National and World Economy in cooperation with other universities we created the electronic Journal of Management Science & Applications. The journal aims to present international and national and educational policies in the field of management and administration. The journal will publish scientific, popular science, review and information materials on administration, management and regional development. The journal promotes good national and international governance and geographical policies, as well as a forum for discussing regional and governance issues. The assigned DOI (digital identification code) makes each article "visible" to more than 6 million users of scientific literature worldwide and to more than 4,500 scientific publishers, databases and electronic libraries. The publication itself can now be cited in bibliographies only with its DOI. Is an electronic journal, will be published twice a year. The electronic journal has an editorial board, which includes Prof. Dr. Simeon Zhelev, Assoc. Prof. Dr. Kliment Naidenov, Assoc. Prof. Dr. Angel Marchev, Prof. M. Bogdanova, Assoc. Petar Borisov, Assoc. Prof. Dr. Al. Valkov, Assoc. Prof. Dr. Georgi Nikolov, Assoc. Prof. D. Gorchilova and others. The journal is a multidisciplinary scientific publication covering all aspects of governance, administration and regional development.

Conclusion

In order to transform scientific communication, as some anticipate or even have a measurable impact on it, e-zines must become an integral part of the scientific process. Authors should read and contribute to e-zines. They need to be influenced or affected by reported findings in order to build or modify their own research and research on the content of articles in electronic journals. the disciplines they serve. With the creation of the electronic Journal of Management Science & Applications, the research team strives to prepare the journal so that it meets the highly reputable indexes and research policy frameworks.

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DIMENSIONS OF THE NEW PUBLIC GOVERNANCE IN THE REGIONAL DEVELOPMENT AND THE PUBLIC SPHERE

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Abstract

This article is devoted to the development of the public sector and the new spatial dimension related to regional development. The exhibition begins with the functions of the state in modern conditions of change. It goes through the consideration of the individual strategies for the development of the reform and directions for the modernization of the state administration. The focus is on the new public management and Public Entrepreneurship. The discussed issues are related to the focus on regional development and the public sphere. Generalizations and conclusions have been made related to the researched issues and the outlining of the features of the public management and its influence on the regional development.

Key words: public sector, development, management, models, sphere, administration, reform, situation, analysis

Abstrakt

Dieser Artikel ist der Entwicklung des öffentlichen Sektors und der neuen räumlichen Dimension im Zusammenhang mit der regionalen Entwicklung gewidmet. Die Ausstellung beginnt mit den Funktionen des Staates unter den modernen Bedingungen des Wandels. Sie geht über in die Betrachtung der einzelnen Strategien zur Entwicklung der Reform und Richtungen für die Modernisierung der staatlichen Verwaltung. Der Schwerpunkt liegt dabei auf dem New Public Management und Public Entrepreneurship. Die erörterten Themen stehen im Zusammenhang mit dem Schwerpunkt Regionalentwicklung und öffentlicher Raum. Es wurden Verallgemeinerungen und Schlussfolgerungen in Bezug auf die untersuchten Themen und die Merkmale des öffentlichen Managements und dessen Einfluss auf die regionale Entwicklung gezogen.

Stichworte: öffentlicher Sektor, Entwicklung, Management, Modelle, Bereich, Verwaltung, Reform, Situation, Analyse

Résumé

Cet article est consacré à l'évolution du secteur public et à la nouvelle dimension spatiale liée au développement régional. L'exposition commence par les fonctions de l'État dans les conditions modernes de changement. Elle passe par l'examen des stratégies individuelles pour le développement de la réforme et des orientations pour la modernisation de l'administration de l'État. L'accent est mis sur la nouvelle gestion publique et l'entrepreneuriat public. Les questions discutées sont liées à l'accent mis sur le développement régional et la sphère publique. Des généralisations et des conclusions ont été faites

concernant les questions étudiées et la mise en évidence des caractéristiques de la gestion publique et de son influence sur le développement régional.

Mots clés: secteur public, développement, gestion, modèles, sphère, administration, réforme, situation, analyse

Introduction

In the first half of the 21st century, good governance is vital for an adequate response to today's challenges. On the one hand, the modern state faces serious problems related to the increasing and increasing complexity, dynamics and interconnectedness of global economic, political and social processes, on the other hand, compared to the middle of the twentieth century, the requirements for public administration are significantly higher. larger and more complex. In this different context, under these radically changed conditions, reforms to modernize public administration have been launched in Western Europe and the United States. It is obvious that due to the variety of strategies, approaches and methods for implementing reforms, it is not realistic to offer a universal model for successful reforms, just as it is not possible to give a single model, single paradigm or ready-made recipe for solving modern problems in the state. management. Each individual country strives to solve them according to its coefficient of state power, the type of its state structure, its level of development, its administrative potential, the availability of material and information resources and the nature of the relations it maintains with other countries. Moreover, in the modern world all processes have their locally measured level and they characterize the conditions and comfort of life of the population adjacent to the territory. In this regard, we must make it clear that this process is natural and may have the necessary evaluation framework. It develops in the respective stages of the assimilation of space by man and his active activity. This change is reflected in the regional development of the territory, as well as in the functional change it undergoes. This requires from a scientific point of view to look for a specific cognitive approach that includes a combination of spatial systematization and the imposed model of socio-economic management for the rational development of the individual territorial community.

Results

Functions of the state in modern conditions of change. In the modern confrontational responsibilities of the state are increasing, which determines the need for a new philosophy for sustainable government. At the national level, the state assumes responsibility for the performance of a large number of functions that cannot be performed by anyone else, but at the same time the state will increasingly have to be able to perform its functions at both supranational and subnational levels to ensure peace and security within and outside their national borders. To ensure respect for minority rights and the principles of legality and justice, to formulate public policies and provide public goods, and to ensure social justice and prosperity. As a consequence, there is a need for the state to create specific bodies and administrative structures with the necessary skills for multi-layered management, to which to entrust the provision of an effective network between these levels. One of the most popular classifications of the functions of the modern state is the one presented in the World Bank report "The State in a Changing World" (1997). The document predicts that on the threshold of the third millennium before the changing state, five groups of basic functions emerge:

1. Establishing a legal basis for the functioning of the market economy, accompanied by respect for human rights. In this case, a necessary condition for public trust in public institutions and the administration is the observance of the law in their actions.

2. Maintaining a sustainable environment for conducting a state policy of stability and economic growth with a fair distribution of public goods, social protection of the poor and unemployed.

3. Concentration of public investments mainly in the field of education, healthcare, fight against poverty and improvement of infrastructure.

4. Implementation of combined regulation of industrial policy and social policy in order to assist citizens against the risks of development through modern pension and health insurance, providing information about the labor market and others.

5. Protecting the environment to provide conditions for healthy living for future generations and improving its quality.

Outlined in the prognostic aspect, the functions of the state in the changing party are clearly oriented towards the citizens and not towards those in power. This fundamental reorientation of the functions of government also requires a significant reorientation of the functions of the public administration, as the administration in sustainable democracies is at the service of civil society. In this situation, it is obvious that finding the right path for the successful implementation of these functions goes through public administration reforms. On the other hand, the new functions of the state require the strengthening of its capabilities in order to successfully achieve its public goals, to increase transparency in its actions and to limit the opportunities for administrative arbitrariness at all levels of government. One of the main priorities of the reforms for both the countries of Western Europe and the countries of Central and Eastern Europe is the state to improve its capacity and its fundamental role within the national and international level. At the same time, the new philosophy of public administration is increasingly based on the understanding of the gradual creation of qualitatively new systems of public administration with a global scope - the creation of a global intergovernmental association type "network" in which existing national entities acquire the qualities of more or less few separate structural units (of the "network-state" type) in the global whole" (Pavlov, 2002). The threads of this "mega-state network" (which is constantly moving and constantly changing its configuration) are the new computer and information technologies, knowledge and intelligence as a strategic resource of the changing world. This still hypothetical "mega-state network" would be difficult to destroy existing nation-states, as it is more likely to gradually integrate them, transforming them in line with the new logic of globalization. As a consequence, other complex problems of statehood will arise, caused by the existing "paradigmatic insufficiency" of the role and place of the state in the changing world. In turn, this will raise the question of the new role and place of the public administration, which faces the task of being "a good servant of two masters" - not only to serve the government well on a daily basis, but also the citizen - taxpayer. and a customer of public services. In practice, this means that under the influence of changes in the paradigm of the "network state", the public administration suffers from a paradigm inadequacy, which necessitates its transformation.

Strategies for development of the reform and directions for modernization of the state administration at regional level. Administrative reform can take various forms, which are most often applied cumulatively, such as regulatory reform or structural reform. Regulatory reform (reform of

regulatory techniques) includes improvements in legislation and other regulatory mechanisms related to public administration. It covers both the simplification of regulatory forms and procedures and the reduction of the strictly regulatory function of the state and its replacement, where possible, through the mechanisms of the market economy. Structural reform is taking place not only in the economy but also in the administration. In the administration, the structural reform is carried out when, for reasons of adequacy and efficiency, changes are made in the functional and organizational structure of the state administration. This does not mean, however, that when new functions of the state arise, new state institutions and new administrative units must be created, while the existing institutions continue to function.

From what has been said so far, we can accept, albeit with many clarifications, that regional development is a process of permanent social change, contributing to the sustainable and sustainable development of the community in a particular region. It presupposes a very sectoral and complex process related to certain goals: economic growth, sustainable development, social integration, meeting basic needs, quality of life, regional autonomy and environmental protection (Petrov, 2020). Finding the optimal reform strategy is a difficult task. This requires the selection of a number of significant changes that are limited enough to be possible, but at the same time radical enough to be significant for changing behavior in the most important parts of government. According to D. Coomes and T. Verhayen. There are three main strategic alternatives for reform:

1. A selective strategy, which is characterized by the development of the reform only in separate spheres of activity at separate levels and for selected directions of the reform. This strategy allows adapting the reform to the most urgent changes and in accordance with the development of the country with time-based resources needed for the reform. The disadvantage is the duration of the reform organized in this way and the disruption of the synchrony between the individual elements of the system.

2. The strategy of total change is a strategy for starting and implementing the reform simultaneously and in parallel in all units and levels of the administrative system. This strategy gives the fastest and most lasting results, and can rely on the greatest overall effect. The disadvantage is the need for large costs - financial, human, organizational and others, regardless of the state of the economy, while requiring the concentration of large resources.

3. Combined strategy is a type of strategy aimed at gradual and gradual (step by step) development of changes with comprehensive coverage of the system and achieving results (search for breakthroughs) in the most important elements of the reform. This alternative can eliminate the shortcomings of the previous ones and adapt the reform to the real possibilities of the country, without losing the pace of change. The scope, depth and pace of the reforms are determined by the choice of strategy, but the individual countries differ primarily in the emphasis and selection of the individual components of the reform. Countries differ in the level of individual reforms, as they place different emphasis on different aspects and implement reforms at different speeds. The main and unifying direction of the reforms in the developed countries are the fundamental changes from a centralized, hierarchical, subordinated to the rules administration to one, which is characterized by delegation of management and market orientation. Therefore, the evaluation of the results is based on the three key aspects of the reform:

- Decentralization of power and providing flexibility;

- Ensuring responsiveness in the provision of services, improving their quality and use of information technology;

- Improving the administrative capacity and improving the management of human resources.

Viewed as a project to modernize governance, reforms in developed countries combined represent a paradigm shift. European countries and the United States are responding differently to the new challenges by building their own models for public sector governance. Today's challenges do not affect all countries in the same way. In addition, some countries have less opportunity to bear the cost of adjusting to dynamic processes (Vulkov, 2012). But the general trends in these models stem from their main goal - to achieve change that transforms behavior and attitudes. Due to differences in local conditions and national characteristics, the best model of reform could not be recommended, but a common problem for all countries in developing strategies is how to ensure the necessary potential of the organizations implementing the reforms. The assessments in the report "Public Administration in Transition" of the Special Committee on Public Management at the Organization for Economic Cooperation and Development are the basis for a balanced view of the trends in public administration reforms in developed countries. hypertrophied, highly industrialized, sparsely industrialized, highly urbanized, areas with dominant small settlements and dispersed localization of the population, transport areas, areas with peripheral economy, specific functional areas (agricultural, industrial, tourist, mountain), etc. and to be carried out the relevant regional policy. This leads to another need that for the assessment of spatial development the indicators should be brought to at least two groups. So let's assume that there are basic and complementary indicators in regional development. Such a division can be made depending on the purposes of the categorization or due to their specific features to distinguish the sites (municipalities and settlements) (Marinov, 2012). The main conclusion is that the main goal of modern reforms is lasting change, transforming behavior and values. According to experts, the main directions of modernization of public administration in developed countries relate to (The reforms in the public management of the OECD countries, VFU "Ch. Hrabar", 2000):

- Improving rule-making and the decision-making process in state structures, and especially the introduction of modern methods for evaluation and selection of policies and strategies;
- Creation of mechanisms for timely reaction of the public sector to the changes in the environment;
- Implementation not of independent departmental policies and strategies, but of harmonized state policy in all spheres;
- Deconcentration and decentralization of power and ensuring flexibility in public administration, including adequate financial provision of deconcentrated and decentralized structures;
- Replacement of detailed centralized control with a more global one, but supported by the system of incentives for good and efficient work.

It is obvious that the modernization of public administration can take place only after successful reforms. But for developed countries, public sector reform is a dynamic process, not an end point. Through reforms, these countries seek to create the capacity to respond automatically to change, flexibly and at the lowest cost. This largely allows us to assume that the regional system is a combination of objects with consistent interconnections, which gives new qualities: integrity, autonomy, sustainability and most of all

functional. Objects or a set of objects that perform a function in the system are defined as elements of the system (Petrov, 2021).

New public management. Public entrepreneurship. Under modern conditions, the main challenge to public administration is institutional renewal. As a consequence, reform programs are moving in the direction of making governments at all levels more efficient and effective, the quality of public services higher, and the public sector more flexible in its response and response. -strategically oriented in terms of external changes, and the development of the national economy to be maintained and accelerated (Institutional Requirements and Problem Solving in the Public Administrations of the Enlarged European Union and its Neighbours, ed. Jenei, G., Barabashev, A., Berg, F., NISPAcee, 2005). This fundamental change has led to the emergence of a new paradigm for public management, focused and results-oriented in the less centralized public sector. In English-speaking countries, the strategy of radical reform, based mainly on the theory of new public management (NPM), has proved to be an effective tool for improving public sector productivity and reducing costs. The new model has drawn these countries into a difficult process of changing culture and views on governance and has outlined a paradigm shift in the role of the state and the unloading of its functions. The main features of this fundamental change in the reorganization of the state are systematized by the OECD Committee on Public Management in the following more important areas (The Reforms in the Public Management of the OECD Countries, VFU, 2000, p. 8):

- Focus on results, in terms of efficiency, effectiveness and quality of services;
- Replacement of highly centralized, hierarchical, organizational structures with decentralized management, where decisions on distribution, resources and service delivery are close to the place of delivery and which provides feedback from customers and other stakeholders;
- Directing public resources where better results with fewer resources can be obtained;
- Greater emphasis on services provided directly by the public sector and creating competition within and between public sector organizations;
- Strengthening the strategic potential at the center to guide the evolution of the state and to allow reaction to external changes and different interests, automatically, flexibly and at a lower cost.

The quintessence of this model, which in practice relies on such approaches as radical change, flexible organizations and focusing on citizens' preferences, could be deduced from the directions of change outlined in this way. The influence of the concept of new public management is still strong today, although the results of its application in different countries vary. Therefore, over the last decade, the theory and practice of the concept of the new public management has prevailed in the programs for the administrative reform of European countries. Due to its wealth of ideas, this modern concept of strategic management of the reform allows in the course of administrative reform to adapt and apply the most appropriate management tools and to form a new management style in public administration. As it is known, the concept is based on the understanding that the management in the private sector instrumentally surpasses the management in the public sector, which creates the need for creative transfer of management approaches, methods and means from the business management in the public management. The new public management emerges in response to the inadequacies of the traditional bureaucratic model of administrative practice and in response to the need to improve the capacity of state bodies and administration to work in the new conditions, while narrowing the opportunities for

administrative arbitrariness and bureaucratic whims of all levels of government. It is obvious that the main characteristics of traditional bureaucratic public management show the inability of bureaucratic management to meet the new challenges in the age of global competition, fast communications, scientifically managed economy and specialized markets. The idea of this modern concept is to create competition and market discipline in the activities of public organizations, which will stimulate more efficient use of public resources and will bring more benefits to society. The new public management requires a complete change, both in the organization of public institutions and in the established model of their bureaucratic management. The necessary changes in the approaches, methods and actions in the management of public organizations are summarized by D. Farnham and S. Horton as follows:

1. Use of techniques of strategic management for formulation of public goals, strategies and policies for their achievement.

2. Change in the management structure of budgetary institutions, aimed at separating economic activity from administration. This is achieved through the creation of administrative units - agencies to the relevant collective or individual state body with delegated powers to provide public services.

3. Reducing the hierarchical levels in the administrative structures and strengthening the official responsibility, achieving the set tasks by forming separate units with clearly defined tasks, granting rights to the managers for their management, seeking individual responsibility for achieving the assigned tasks.

4. Introduction of a system of indicators for evaluation of the implementation of the management functions by a given administrative structure according to the criteria for economy, efficiency and effectiveness.

5. Change in the administrative culture of the employees in the state administration in the direction of the values imposed by the modern management - rationality, perfect attitude towards the citizen client, high standard of the offered public services. This requires that public institutions be relatively independent and managed by professional managers.

6. Using the approaches of human capital management to abandon the collective irresponsibility in the behavior of civil servants by individualizing the tasks and determining incentives and sanctions that increase their responsibility is motivation. This would also facilitate the selection for the professional and administrative growth of the employees in the given public organization.

7. Establishment of flexible, adaptive and only trainee public institutions, which changes the emphasis in providing public services from the supply, according to the capabilities and interest of the administration to the demand for public services, according to the interests and needs of customers, citizens and legal entities.

8. Improving the traditional budgetary relations in the public sector by introducing the contractual system "buyer-seller" in terms of prices, quality requirements, term and volume of public services, as well as the responsibilities of both parties to implement the contract.

At the heart of the proposed changes is the combination of elements from the theory of Public Choice and the theory of Neo-Taylorism (Coomes, 1997). The theory of public choice rejects the classical model of representative democracy and opposes the monopoly of bureaucracy. The authors of the theory focus on improving the interaction between bureaucracy and society through more competition, more "privatization", more information and more control over bureaucrats. According to A. Downs and W. Niskanen, authors of the theory, bureaucrats should not be allowed to maintain a monopoly on

information and on the results of public resource management. Public resources must be open to competition, with bureaucrats expanding the practice of awarding public services on a contractual basis in order to reduce state budget waste. The executive and the legislature, as well as civil society structures, need to exercise more control over bureaucrats, as well as keep the public informed of the work, decisions and actions of their authorities and administration. In essence, neo-Taylorism is a revival of the theory of scientific governance formulated by Frederick Taylor. Neoteilism does not deal with the analysis of the political system in its various dimensions, but focuses only on the internal and external organization of the bureaucracy and on its rationalization.

The theses defended by the supporters of this theory are aimed at exercising better control over the bureaucracy in public organizations, and it is recommended to increase the information control over the production costs and to introduce new organizational rules. Neoteilism proposes that the real achievements of the public administration be measured in relation to the pre-set public goals, and at any time, each unit and employee in the administration bears direct responsibility for the achieved result. According to this theory, the remuneration of bureaucrats must be tied to real achievements, while at the same time providing for sanctions for bad work. In a synthesized form, the theory recommends the use of methods and techniques of management that have proven their effectiveness in controlling bureaucracy in private companies and organizations. The American version of the concept of new public management is known in the scientific literature as public entrepreneurship. The concept of entrepreneurial management gained widespread popularity after 1992, when D. Osborne and T. Goebler published "Rediscovering Management" (Osborne, 1992). The concept was developed as a means of overcoming the problems of bureaucratic management for the conditions of American management. To describe the new model of governance in the United States, Osborne and Goebblers use the term "entrepreneurial governance" and propose an approach in which "the entrepreneurial spirit transforms the public sector." The authors derive a set of fundamental principles for the new form of government, which public managers must adhere to. They are formulated on the basis of the concept of "steer the boat, not rowing" and are in complete contradiction with Weber's principles of bureaucratic organization. Unlike Weber's bureaucratic model, based on the idea of efficiency in the Prussian army, Osborne and Goebbler were motivated by the free spirit of the American business world. Although these principles can hardly solve all the problems of public administration, as the researchers themselves assume, the main problems of bureaucratic management can be overcome if the experience of the organizations that have adopted them is used as a "roadmap or guide".

Conclusion

The modern state faces serious problems related to the increasing and increasing complexity, dynamics and interconnectedness of global economic, political and social processes. Moreover, compared to the middle of the twentieth century, the requirements for public administration are significantly higher and more complex. In this different context, under these radically changed conditions, reforms to modernize public administration have been launched in Western Europe and the United States. The functions of the modern state can be summarized in five main groups. Outlined in the prognostic aspect, the functions of the state in the changing world are clearly oriented towards the citizens and not towards those in power. This fundamental reorientation of the functions of government also requires a significant reorientation of the functions of the public administration, as the administration in sustainable

democracies is at the service of civil society. Viewed as a project to modernize governance, reforms in developed countries combined represent a paradigm shift. Finding the optimal reform strategy is a difficult task. In general, three main strategic alternatives for reform development can be distinguished: selective strategy, strategy of total change and combined strategy. The three key aspects of the reform concern the decentralization of power and the provision of flexibility; ensuring responsiveness in the provision of services, improving their quality and use of information technology; and improving administrative capacity and improving human resource management. In English-speaking countries, the strategy of radical reform, based mainly on the theory of new public management (NPM), has proved to be an effective tool for improving public sector productivity and reducing costs. The concept is based on the understanding that private sector management is instrumentally superior to public sector management, which raises the need for creative transfer of management approaches, methods and tools from business management to public management. The new public management emerges in response to the inadequacies of the traditional bureaucratic model of administrative practice and in response to the need to improve the capacity of state bodies and administration to work in the new conditions, while narrowing the opportunities for administrative arbitrariness and bureaucratic whims of all levels of government. This presupposes a significant level of decentralization and effective management of regional development in order to be able to define - for each territorial community - the appropriate autonomous space for realizing the potential and comparative advantages for better participation in national and international markets in the global framework. national development strategy. The combination of the vertical and horizontal hierarchy of the territorial systems studied by the regional development enables it to participate creatively in the management and planning of different levels and territorial configurations. This suggests that regional development can be perceived as a system in which there are strong sectoral links that create a condition for its functionality.

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OPPORTUNITIES FOR THE REGIONAL DEVELOPMENT OF MUNICIPALITIES OF THE DANUBE REGION

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Abstract

The Danube region as a border region is strongly affected by the changes in the socio-political plan and administrative structure in Bulgaria. As a result of the reforms, most of the municipalities on the Danube are lagging behind economically and becoming depopulated. Therefore, it is important to analyze the state of the region, indicating the possibilities for its resuscitation. The main goal of the author is to offer ways and opportunities for its recovery by analyzing key indicators. The report uses methods such as inductive, deductive and analytical methods. The author sets himself the task of defining the spheres for economic development of the municipalities in the Danube region.

Key words: Danube region, cross - border cooperation, territorial differences, security, economic development, infrastructure, municipalities

Abstrakt

Der Donaauraum als Grenzregion ist stark von den Veränderungen in der sozialpolitischen Planung und der Verwaltungsstruktur in Bulgarien betroffen. Als Folge der Reformen sind die meisten Gemeinden an der Donau wirtschaftlich ins Hintertreffen geraten und entvölkern sich. Daher ist es wichtig, den Zustand der Region zu analysieren und die Möglichkeiten für ihre Wiederbelebung aufzuzeigen. Das Hauptziel des Autors ist es, durch die Analyse von Schlüsselindikatoren Wege und Möglichkeiten für die Erholung der Region aufzuzeigen. Der Bericht verwendet Methoden wie induktive, deduktive und analytische Methoden. Der Autor stellt sich die Aufgabe, die Bereiche für die wirtschaftliche Entwicklung der Gemeinden im Donaauraum zu definieren.

Stichworte: Donaauraum, grenzüberschreitende Zusammenarbeit, territoriale Unterschiede, Sicherheit, wirtschaftliche Entwicklung, Infrastruktur, Gemeinden

Résumé

La région du Danube, en tant que région frontalière, est fortement affectée par les changements du plan socio-politique et de la structure administrative en Bulgarie. À la suite des réformes, la plupart des municipalités du Danube sont à la traîne sur le plan économique et se dépeuplent. Il est donc important d'analyser l'état de la région, en indiquant les possibilités de sa réanimation. L'objectif principal de l'auteur est de proposer des moyens et des opportunités pour son rétablissement en analysant les indicateurs clés. Le rapport utilise des méthodes telles que les méthodes inductives, déductives et analytiques. L'auteur se donne pour tâche de définir les sphères de développement économique des municipalités de la région du Danube.

Mots clés: Région du Danube, coopération transfrontalière, différences territoriales, sécurité, développement économique, infrastructures, municipalités.

Introduction

In recent years, the territorial disproportion in the Bulgarian state has become more and more pronounced. There are a number of reasons for this, but most of them are related to the lack of targeted impact in certain areas of the country, despite the existence of a Regional Development Management System. The economy of almost all of Bulgaria is in decline, and this is most strongly and sensitively felt in the border areas of the country. Undoubtedly, the territories around the Danube River are among them. We are witnessing a paradoxical situation in which the Danube region, which we will see, has significant potential due to its natural location and resources, continues with its negative development. The region is characterized by very high unemployment and low business competitiveness in the Danube municipalities. These territories fall into the group of so-called risk areas where additional impact and incentives are needed.

Purpose and methodological approach. In this report, the author sets himself the main goal of analyzing the state of the Danube region, proposing, based on the possibilities, solutions for the development of the municipalities falling within the territories around the Danube River.

The author's goal will be achieved using a variety of methodological tools, including geographical and regional approach. Inductive, deductive, analytical and other methods are used within these approaches.

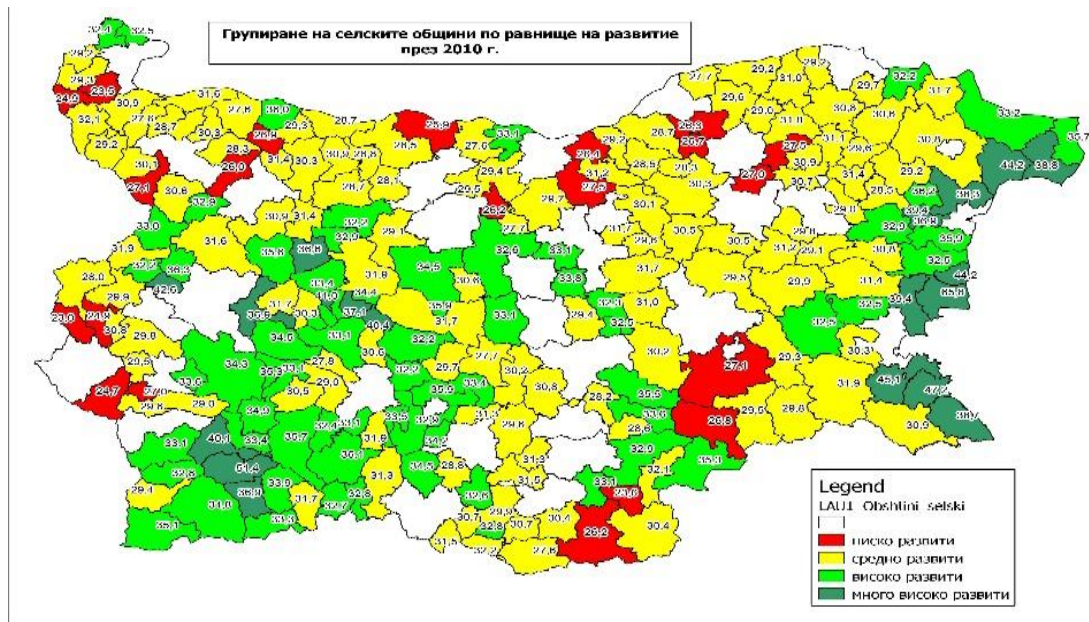
Results

The main goal set in the European concept of spatial development is: "sustainable and balanced development of the territory (space) of the European Union (EU)". The goal of balanced development is the aim to build a balanced spatial system, to reduce regional disparities in the national spatial systems of the EU. In this regard, the space of Bulgaria could be divided into three types of territories (Dokova, Petrov and Tsonkov, 2013). The first group of territories are natural, which are characterized by the lack of settlements in them. They are the smallest and mainly cover the mountain massifs in the country. The second group includes peripheral areas with small towns and villages. This group is the most extensive, including almost the entire Danube region, with the exception of Ruse, Kozloduy, Oryahovo, Lom, Belene, Silistra and Svishtov. The third group covers the central territories with large and medium-sized cities. This group also includes the above-mentioned cities with adjacent territory. For the past six years since the implementation of the The EU Strategy for the River Region Danube (EUSDR), the strategy has shown results. Thanks to the strategy, several new ones were launched or further developed important macro-regional projects (eg in the field of shipping and climate change). By bringing together different stakeholders at different levels EUSDR has contributed to a better culture of cooperation and helped to develop a multicultural dialogue. She helped also to increase coordination and develop synergies between policies and institutions at national level level, and support enhanced thematic cooperation with non-EU countries, as well as between existing international organizations in the region (Dokova, Petrov, Tsonkov, 2016). The Danube region and the Danube River, which includes these municipalities, is an important factor in the development of the country in cultural, historical, economic and urban terms. The territory

of Bulgaria around the Danube is 470 km long and borders Romania on the other bank. The region covers 8 districts and 75 municipalities bordering the Danube: Vidin (including 11 municipalities), Montana (11 municipalities), Vratsa (10 municipalities), Pleven (11 municipalities), Veliko Tarnovo (10 municipalities), Ruse (8 municipalities), Silistra (7 municipalities), Razgrad (7 municipalities). The total area of the territory is - 27 892.5 km², 25.1% of the national territory. 21 municipalities with a total area of 7,994.6 km² have direct access to the Danube. The number of settlements is 1158, which is inhabited by 1554.9 thousand, which is 20.4% of that of the country (2018), and it decreased even more even before the 2021 census (Dimitrov and Stoyanova, 2016). The Danube region is characterized by favorable conditions for economic development. In particular, the region is suitable for business and development, due to the fact that security is at a high level and is guaranteed by the Kozloduy NPP located in it. Moreover, the region is bordered and as such the European Union stimulates neighborly relations and cross-border cooperation, which creates additional security for investors in it. The future socio-economic development of the country is related to the main ones urban centers and their fields of socio-economic influence, which require a rethinking of the administrative-territorial structure of country, based on new realities. The defining role of the cities - centers for the socio-economic is preserved development of a region, based on the suburbanized territory created by them, i.e. subordinated to the economic influence of the city-center. It is of particular importance for solving the Center-Periphery problem compliance with both the new socio-economic and geopolitical realities, and with the real socio-economic condition of the administrative-territorial communities in the country (European Union Strategy for The Danube Region, European Commission, 2010). The direct link between a region's security and its economic prosperity has long been established. In addition to the guaranteed security, we could add the project for a new nuclear power plant in Belene. We must not forget about the strategic project, which can provide a new alternative for Bulgaria. In the worst case, the creation of a gas plant to help the country improve its energy balance. This project is important for the country from the point of view of the security of the region, as well as in economic terms. Analyzes show that the Danube region is characterized by good urban development and an even location of small towns and villages. At the same time, this part of the country includes both central and peripheral territories. The central territories include the area around the municipalities - Nikopol, Belene, Svishtov, Ruse, and the peripheral municipalities - Silistra, Tutrakan, Vidin, Belogradchik, Bregovo, Kozloduy, Oryahovo and Lom. The technical and engineering infrastructure is in relatively poor condition. The road network in the region is well developed, with second-class roads predominating. Four first-class roads have been built: Vidin - Botevgrad; Ruse - Veliko Tarnovo; Ruse - Botevgrad; Ruse - Varna. Rail transport is relatively well represented in the region. There are railway connections that connect Vidin with Mezdra, Ruse with Gorna Oryahovitsa, and from there with Mezdra, as well as a connection between Ruse and Varna. There are two bridges on the Danube, which is an important prerequisite for stimulating economic ties between Bulgaria and Romania. We could definitely say that more bridges on the river are needed. We could definitely say that more bridges on the river are needed (ESDP, European Commission, 2010). For example, near Ruse and Silistra, measures can be taken to build new bridges over the Danube. The digital telecommunications network has covered the Danube region, creating conditions for the integration of the region into the global network. This condition is important given the attraction of new investors in the area. The electricity system also ensures the development of the region, although the power lines are located in the interior of the country, because it

is a matter of national security. The port infrastructure is of particular importance for this region because it guarantees good connections with neighboring and more distant countries, located on the Danube River (National concept for Spatial Development for the period 2013-2015). Unfortunately, we must bear in mind that they are currently in poor condition. Their problems are related to several aspects. First of all, their workload and employment have greatly decreased in recent years due to the fact that they are directly related to the economic development of the region and the companies it serves.

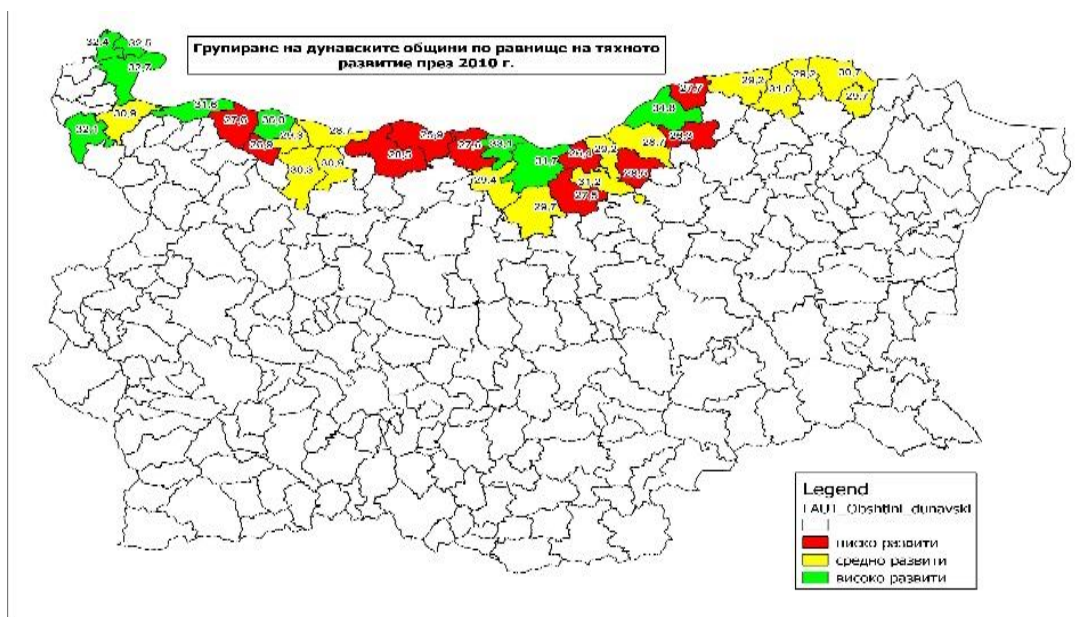
Scheme 1. Grouping of rural municipalities according to the summary assessments for their socio-economic development



Source: NSI, I.P.P.I. and the author's observations.

Secondly, this creates constraints on improving and investing in them. Thirdly, the state does not do what is necessary to grant them a concession, which would create conditions for investment in them. And fourth, they are not busy enough in terms of tourism. The economic indicators of the municipalities in the Danube region are negative and are constantly deteriorating. Figure 1 shows that most of the municipalities in the region are in poor economic condition.

Scheme 2. Grouping of the Danube municipalities according to the summarizing assessments for their socio-economic development.



Source: NSI, I.P.P.I. and the author's observations.

Figure 2 shows that 10 municipalities in the region are underdeveloped; 15 are moderately developed and 9 are highly developed. At the same time, Table 1 shows very clearly the socio-economic situation of the Danube municipalities, which have very low indicators. This is a logical consequence of the composition of this specific territory, which includes 34 municipalities, among which there are a number of small, rural, isolated, depopulated, poor, backward and / or with declining territorial units. On this basis, the author of the study believes that in parallel with the conduct of territorial reform in the country it is necessary to develop and implement a National Urban Strategy, which determines mainly the investment attractiveness on the territory of the administrative-territorial units and this of the big cities (Project "Development of socio-economic analysis for the needs of the Operational Program" Regional Development "for the period 2014-2020", Association for Regional Analysis 2014+, Sofia, 2012). With the development and the implementation of such a strategy will determine highly developed economically centers that will be economic catalyst to increase GDP in a given planning area.

Table 1. Estimates of the socio-economic condition of the Danube municipalities.

Source: European Union Strategy for the Danube Region, European Commission, 2019

	Summarized evaluation	Demographic assessment	Estimate of changes in population	Assessment of economic	Assessment of wealth and	Assessment of the condition of	Assessment of the state of public services
1. Republic of Bulgaria - average	36,4	69,5	54,8	26,5	24,0	15,0	28,5
2. Danube municipalities	31,3	64,4	41,4	26,2	16,2	11,0	28,6
Difference (1-2)	5,1	5,2	13,4	0,3	7,7	4,1	-0,2
% of the average for the Republic of Bulgaria (2/1 * 100)	86%	93%	76%	99%	68%	73%	101%

The municipal development plans of the Danube municipalities are aimed at solving several main problems such as demographic, economic and infrastructural. Almost all of them rely on stimulating small and medium-sized enterprises and the tourism industry, which is basic for this region. It must, of course, be linked to training in vocational schools and colleges. Of course, another major sector in the region is energy, which is a structural determinant of economic development. This industry will create employment for the population there, as well as for existing and new companies. The plans provide guidelines for the development of the region and its recovery (Petrov, 2021). There are generally two directions for revitalizing the Danube region. The first concerns the European Union and its targeted impact. To this end, the Danube Strategy has been developed, which focuses on stimulating tourism and economic ties between Danube municipalities along the river. The created one must be fully used in this direction. Association of Danube Municipalities, which could stimulate connections between cities and their economic revitalization and recovery. There is one objective obstacle, which is the lack of tools to implement the Danube Strategy (European Union Strategy for the Danube Region, European Commission, 2010). It is therefore necessary to initiate and decide on the establishment of a financial scheme or initiative to ensure the implementation of the strategy paper. The analysis of the territorial strategy for tourism says that there are conditions for the development of different types of tourism. It states that: "In the southern mountainous parts of the Danube coast in the period after 1995 about 20 eco-trails were built (European Union Strategy for the Danube Region, European Commission, 2010). Two ski slopes have been built: in the area of Kom peak (Berkovitsa municipality) and Parshevitsa (Vratsa municipality). They have a small capacity and are of regional importance, away from the established tourist destinations of winter (ski) tourism in the country (Dimitrov and Stoyanova, 2016).

For the purposes of hunting and hobby tourism there are 28 places for hunting, in which there are hunting lodges, observation towers and more. facilities related to hunting tourism.

The equestrian bases for the purposes of equestrian tourism are 22. "(Dimitrov and Stoyanova, 2016). This analysis shows that the Danube region is characterized by the necessary tourist resources, infrastructure and geographical and anthropogenic resources. The only thing that is necessary is related to the targeted impact and development of the tourism industry in the region. The development of the Danube coast in the North Central region is significant important for the implementation of our national priorities and programs related to the regional development, tourism and preservation of cultural and historical heritage (Yankov, 2020). In practice the approach requires large-scale investments and the formation of Svishtov, Ruse, Tutrakan and Silistra as key ports and urban centers to generate growth, develop cross-border cooperation, implement sustainable tourism policies and have pulling significance for other settlements.

Conclusion

The Danube region is in poor socio-economic condition, due to a number of factors. As a result, the Danube municipalities are depopulated and economically backward, as evidenced by the indicators of the national economy. At the same time, all the necessary conditions are in place to stimulate economic development and reconstruction of the region [9]. Measures to revive municipal economies are related to the European Union and its policies, as well as to the national policy for this region. In recent years, the Bulgarian state has constantly relinquished its responsibilities related to the development of the Danube

coast. There are favorable opportunities for development of passenger river transport on the Danube between Bulgaria, Romania and the countries of Western Europe, but there are almost no initiatives on the Bulgarian side. The directions for development are mainly in three directions - development of small and medium business, reconstruction of port and other infrastructure and stimulation and rise of the tourism industry, in connection with the EU Danube Strategy.

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CONDITIONS FOR APPLYING A MARKETING APPROACH BY BULGARIAN VEGETABLE PRODUCERS

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Abstract

The purpose of the article is to outline the prerequisites for the implementation of marketing activities by Bulgarian vegetable producers. Improving the effectiveness of marketing activities can be achieved only if the necessary prerequisites for this are created (Borisov, Radev and Nikolov, 2019). The proper implementation of these activities requires individual vegetable producers to take action in the following areas: first, the adoption of marketing philosophy as a concept for managing the production and trade of wine, both at the managerial level and by each of its employees; second, building the appropriate structures to implement the marketing concept through planning, implementation and control of marketing activities.

Key words: management, market, marketing activities, training, marketing unit

Abstakt

Ziel des Artikels ist es, die Voraussetzungen für die Durchführung von Marketingaktivitäten durch bulgarische Gemüseproduzenten zu skizzieren. Eine Verbesserung der Wirksamkeit von Marketingaktivitäten kann nur erreicht werden, wenn die notwendigen Voraussetzungen dafür geschaffen werden (Borisov, Radev und Nikolov, 2019). Die ordnungsgemäße Umsetzung dieser Aktivitäten erfordert von den einzelnen Gemüseerzeugern Maßnahmen in den folgenden Bereichen: erstens die Übernahme der Marketingphilosophie als Konzept für die Verwaltung der Produktion und des Handels, sowohl auf der Führungsebene als auch durch jeden einzelnen Mitarbeiter; zweitens die Schaffung geeigneter Strukturen zur Umsetzung des Marketingkonzepts durch Planung, Durchführung und Kontrolle der Marketingaktivitäten.

Stichworte: Management, Markt, Marketingaktivitäten, Ausbildung, Marketingabteilung

Résumé

L'objectif de l'article est de présenter les conditions préalables à la mise en œuvre d'activités de marketing par les producteurs de légumes bulgares. L'amélioration de l'efficacité des activités de marketing ne peut être réalisée que si les conditions préalables nécessaires à cet effet sont créées (Borisov, Radev et Nikolov, 2019). La bonne mise en œuvre de ces activités exige que les producteurs de légumes individuels prennent des mesures dans les domaines suivants : premièrement, l'adoption de la philosophie du marketing en tant que concept de gestion de la production et du commerce du vin, à la fois au niveau de la direction et par chacun de ses employés ; deuxièmement, la construction des structures appropriées pour mettre en œuvre le concept de marketing par la planification, la mise en œuvre et le contrôle des activités de marketing.

Mots clés: gestion, marché, activités de marketing, formation, unité de marketing

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Intorudction

One of the most important industries that have determined the appearance of Bulgarian agriculture is vegetable production. The current state of Bulgarian vegetable production is unfavorable. Production areas are declining, and the production can not meet the consumption of vegetables in our country (Nikolov, Borisov and Radev, 2014). The supply of Bulgarian vegetables faces many market challenges, which requires vegetable producers to seek a marketing approach to improving the market image of their products.

The purpose of the article is to outline the prerequisites for the implementation of marketing activities by Bulgarian vegetable producers. Improving the effectiveness of marketing activities can be achieved only if the necessary prerequisites for this are created (Borisov, Radev and Nikolov, 2019). The proper implementation of these activities requires individual vegetable producers to take action in the following areas: first, the adoption of marketing philosophy as a concept for managing the production and trade of wine, both at the managerial level and by each of its employees; second, building the appropriate structures to implement the marketing concept through planning, implementation and control of marketing activities.

Results

Improving the effectiveness of marketing activities can be achieved only if the necessary prerequisites for this are created (Borisov, and Behluli, 2020). The proper implementation of these activities requires individual vegetable producers to take action in the following areas: first, the adoption of marketing philosophy as a concept for managing its production and trade in wine, both at the managerial level and by each of its employees; second, building the appropriate structures to implement the marketing concept through planning, implementation and control of marketing activities.

With regard to the first direction (to adopt the marketing concept) there are problems with understanding its essence, which creates difficulties in its implementation in practice. Although marketing, as a concept, has long been in the vocabulary of Bulgarian business, it is still considered very limited, without using its comprehensiveness in relation to the processes taking place in the business environment. Most often, marketing is identified with the advertising and distribution of the company, which are a small part of its elements and their independent implementation would be difficult to compensate for non-performance of activities under other instruments to influence the market. As elements of marketing are considered - product, price, promotion and distribution (marketing mix), as well as market and internal company information without which adequate decisions about the marketing mix cannot be made. In fact, the marketing process begins with the information flows that need to be managed so as to provide the information the business needs. Market information is the basis for making any management decision, which is why it is necessary to purposefully search, collect, process and store for the needs of marketing management. Managers must appreciate not only the importance of information, but also the fact that it must be targeted, collected through appropriate methods, processed for further use and stored for future periods. so as to provide the necessary information for the business.

Market information is the basis for making any management decision, which is why it is necessary to purposefully search, collect, process and store for the needs of marketing management. Managers must appreciate not only the importance of information, but also the fact that it must be targeted, collected through appropriate methods, processed for further use and stored for future periods. so as to provide the necessary information for the business. Market information is the basis for making any management decision, which is why it is necessary to purposefully search, collect, process and store for the needs of marketing management. Managers must appreciate not only the importance of information, but also the fact that it must be targeted, collected through appropriate methods, processed for further use and stored for future periods.

Purposeful means to collect information on all elements of the external business environment (consumers; competitors; intermediaries; suppliers; economic environment; legal environment, etc.), as well as on the state of the farm, according to the needs of management.

Understanding the processes and phenomena taking place in and around the farm requires searching for information about them, and for this purpose it is necessary to devote more time to these activities, and the collection of information should be a top priority in the work of marketers or structures created for coordination of marketing activities.

The choice of methods for gathering information is another important point. Here, in addition to the existing opportunities for the use of printed and electronic publications, vegetable growers can initiate activities such as conducting surveys and focus groups, building a target network, etc., and through them the information will arrive in a timely manner.

In order for the collected information to be used, it is necessary to process it according to the needs of the problem to be solved. It must be systematic and understandable for all vegetable growers who will use it in their work. In this process, it is appropriate to attract external consultants who, with their expert skills, can support vegetable growers in this uncharacteristic activity.

Information is also an expensive resource, which is why storing it is important when using it. In this way, businesses increase their database, on the basis of which management decisions are made, and also avoid shocks in staff turnover due to the fact that new employees often do not have the information they need. Therefore, every vegetable grower must have constant and unrestricted access to the information in order to be able to use it at the right time.

These activities are the basis of the application of the marketing concept. The marketing process begins with understanding the role of information and allocating the necessary resources to provide it.

Understanding the nature of marketing and the need to apply it in practice can be achieved through internal company training. It should be carried out with all members of the farm staff, no matter what they do and how they contribute to achieving the goals of the business. However, it is reasonable to differentiate this according to the degree of staff involvement in marketing activities. Based on this criterion, the staff of the agricultural holding is divided into two groups: directly engaged and indirectly engaged. The first group includes managers, marketers and salespeople who are directly responsible for the implementation of marketing activities. Their training focuses on the full implementation of these activities. Indirectly involved are this part of the staff, which through its actions influences the marketing strategy. This includes workers engaged in the production process and performing production activities. The production of the product itself, satisfying the consumer needs requires all staff to be familiar with

the wishes and requirements of consumers in order to be able to support the marketing strategy through their work by ensuring the production of such a product. Another important task when recruiting workers is to select those who have the necessary qualifications and skills in accordance with the needs of the marketing strategy. Working with financial institutions is an important part of the manager's work to ensure the necessary financial resources for the successful implementation of the chosen marketing strategy. Financial intermediaries need to be aware of the possibilities of agriculture and the direction of market development in order to support their realization. In general, in the financial field, the work of the manager is related to cost management, which will allow the formation of a competitive price of agricultural products.

The considered two characteristics give the focus groups to which the agricultural holding should conduct training (Fig. 1).

managerial powers	degree of commitment	
	directly involved	indirectly engaged
management staff	executive director marketing director	functional managers
not management staff	marketing specialists	everyone else

Figure 1. Differentiation of staff as an object of internal company training

In the individual structural units the training can also be differentiated by the participation of the staff in the organizational structure of management. Its classic division into: senior management staff, middle management staff, junior management staff and non-managerial staff is applicable in large agricultural holdings with a large number of staff. For all others, two groups are formed: staff with management functions and staff without management functions. Among them, the temporary staff occupies a particularly important place, whose actions can influence the implementation of the marketing strategy. This imposes their motivation in the direction of compliance with the quality standards necessary to ensure its implementation. In general, conducting internal company training of staff,

Internal company training aims to explain the nature and contribution of strategic marketing activities and marketing in general for the successful operation of the company and the place of each member of staff in ensuring the implementation of marketing strategy.

The training of the groups thus identified is a process containing certain actions (Fig. 2).

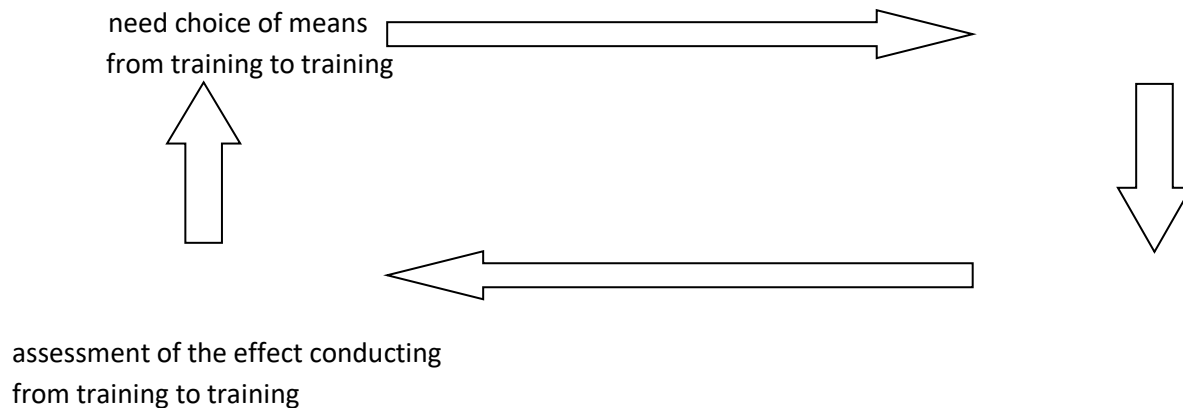


Figure 2. Internal company training process

First, determining the need for training. Based on the identified problem areas in the work of staff in terms of development, implementation and control of marketing strategy is determined and the required type of training.

Second, once the need for training has been identified, the appropriate training tool must be selected. Among the variety of forms of training (courses, lectures, seminars, conferences, etc.) is chosen the one that is expected to have the greatest contribution to solving the problem field.

Third, the conduct of the training itself is no less important, and for this purpose the necessary resources must be provided for the implementation of the established scope and direction of training.

Fourth, The assessment of the effect of the training is essentially the feedback, which provides information about the degree of solving the problem field as a result of training and is the basis for identifying a new one with which the process starts anew.

The next step in creating preconditions for the implementation of marketing activities by vegetable producers is to build the necessary structures. A survey (Radeva, 2021) among vegetable growers from the South Central region shows that they do not have a marketing specialist and rarely seek advice in this area. Conducting effective marketing activities requires the presence of competent specialists who are directly involved in business processes and are responsible for marketing. Of course, there is a difference between large and small farms. Small farms have a small staff, serve a specific market segment and offer small production volumes, therefore, it is appropriate for them to unite their efforts in the implementation of marketing activities by attracting one or two marketing specialists. While for the big ones it is expedient to build a unit, including more specialists, who will specialize in the implementation of separate marketing activities. As in both cases, it is not just about their existence as a structural unit, but about the functions they perform. It is a common phenomenon for such units to perform activities related only to the marketing and advertising of company products, without being assigned other functions. This is the place for farmers to assess the role of marketing as a management concept, by delegating rights and responsibilities to all elements of the marketing mix and gathering market information. The marketer must be involved in all stages from the creation to the sale of the product to

the end user, using his knowledge of market conditions. Only in this way the company would orient its production according to the needs of the market, which would turn it into a market-oriented entity. The effective implementation of marketing activities is associated with the construction of a marketing unit. This requires that the following sequence be followed (Fig. 3). The effective implementation of marketing activities is associated with the construction of a marketing unit. This requires that the following sequence be followed (Fig. 3). The effective implementation of marketing activities is associated with the construction of a marketing unit. This requires that the following sequence be followed (Fig. 3).

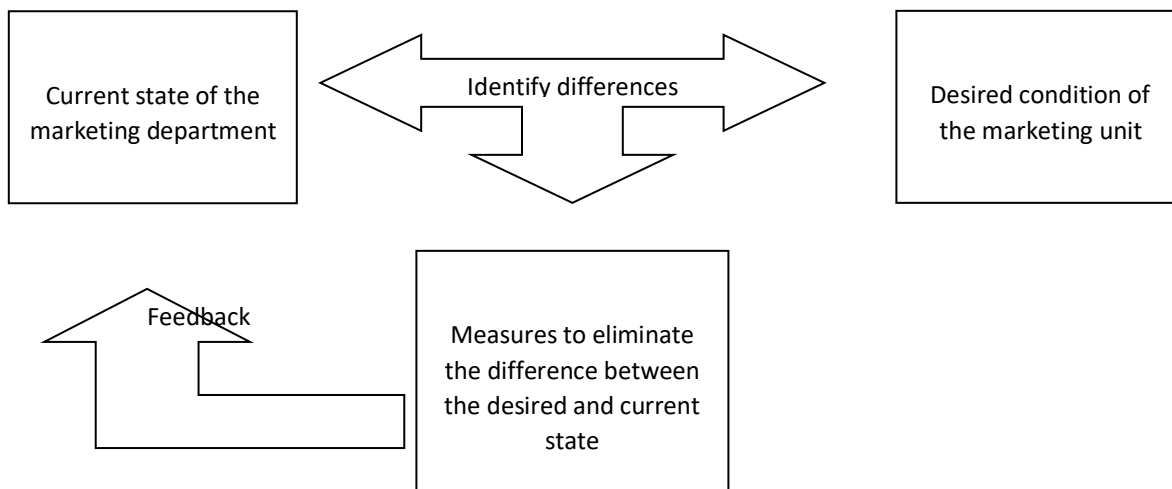


Figure. 3 Sequence of actions for building a marketing unit

First, establishing the current state of the marketing unit. It determines: first, the availability of such a unit in the structure of the business and second, what rights and responsibilities are delegated to its employees.

Second, determining the desired state of the marketing unit. It corresponds to the two directions from the previous stage. With regard to the first direction, the characteristics of the farm itself, which are the target markets, attitude to marketing as a management concept, diversification of activities are crucial. The following tasks are solved in the second direction:

1. defining the goals of the marketing unit based on the principles of marketing:
 - identification of the needs and requirements of existing and potential users;
 - to develop and offer products that meet the identified consumer needs;
 - increasing the efficiency of marketing activities.
2. defining the tasks performed by the staff of the marketing unit. Here it is possible to make the following differentiations:
 - analytical functions, including - determination of market factors; measuring market potential; short-term forecasting; long-term forecasting; consumer research; analysis of the internal capabilities of the company; analysis of price levels; analysis of the channels for realization; research of competitive products, etc.

- organizational functions, including - acquaintance of the other functional units with the results of the performed analyzes; coordinating actions with them regarding the application of marketing principles; organizing the implementation of strategic marketing activities; organization of the logistics system; organization of ancillary services; organization of the communication impact of the company; sales organization, etc.

3. distribution of marketing competencies among the employees of the Marketing unit. Here you can choose one of the various organizational structures that exist in business practice (the most common schemes of organization of the department are based on: functional orientation; product orientation; market orientation).

Third, based on the identified differences between the desired and the existing state of the marketing unit, measures for their elimination are envisaged. They can be building new structures in the marketing unit; improving the planning, organization, implementation and control of strategic marketing activities; improving the coordination of the unit with other functional units, etc. After the implementation of these measures, the marketing unit moves to a new current state, with which the process can start from scratch.

Once the marketing concept has been adopted and the structural unit has been provided with the necessary qualified specialists, which are prerequisites for increasing the effectiveness of the implementation of strategic marketing activities, their full implementation should be proceeded to and strict adherence to their consistency.

Conclusion

In conclusion, the following summaries can be made:

Understanding the essence of marketing through internal company training and building a fully functioning marketing unit are interrelated actions and are aimed at implementing marketing activities. Through their actions, the farmer ensures that they are maintained in a condition that allows effective implementation of marketing activities.

The need for these actions depends on the quality of the applied marketing strategy - the higher it is, the more concentrated will be their scope.

The proposals made must be adapted to the specificities of the farm and the markets it serves.

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ANALYSIS OF THE PROFITABILITY OF CROP FARMS UNDER THE CONDITIONS OF CAP IN BULGARIA

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Abstract

The purpose of this article is to analyze the profitability of crop holdings under the CAP.

When assessing the profitability of farms, the standard indicators are used - structure of production costs, amount and dynamics of sales revenue, amount of subsidies received, amount and dynamics of gross margin, net income and profitability of direct costs (Nikolov, Borisov and Radev , 2014). The use of these indicators uses a systematic approach, basic indicators characterizing the performance and ancillary indicators - generating information about the factors determining the results achieved by the farm (Borisov and Garabedian, 2020).

The Agricultural Accounting Information System (FADN) of the Republic of Bulgaria is used as a source for gathering the necessary information for the calculation of the indicated indicators. The main purpose of the agricultural accounting information system is to collect information needed to determine the income of agricultural holdings, as well as for business analysis of the sector. The survey covers agricultural holdings with an economic size of more than € 2,000 until the reporting year 2016, and more than € 4,000 from the reporting year 2017 onwards.

Key words: profitability, crop farms, CAP, subsidies

Abstrakt

Ziel dieses Artikels ist es, die Rentabilität von landwirtschaftlichen Betrieben im Rahmen der GAP zu analysieren. Bei der Bewertung der Rentabilität von landwirtschaftlichen Betrieben werden die Standardindikatoren verwendet - Struktur der Produktionskosten, Höhe und Dynamik der Verkaufserlöse, Höhe der erhaltenen Subventionen, Höhe und Dynamik der Bruttomarge, Nettoeinkommen und Rentabilität der direkten Kosten (Nikolov, Borisov und Radev , 2014). Bei der Verwendung dieser Indikatoren wird ein systematischer Ansatz verfolgt, wobei die Basisindikatoren die Leistung charakterisieren und die Hilfsindikatoren Informationen über die Faktoren liefern, die die vom Betrieb erzielten Ergebnisse bestimmen (Borisov und Garabedian, 2020).

Das Informationssystem für die landwirtschaftliche Buchführung (INLB) der Republik Bulgarien wird als Quelle für die Sammlung der notwendigen Informationen für die Berechnung der angegebenen Indikatoren verwendet. Hauptzweck des Informationssystems der landwirtschaftlichen Buchführung ist die Sammlung von Informationen, die für die Ermittlung des Einkommens der landwirtschaftlichen Betriebe sowie für die Unternehmensanalyse des Sektors erforderlich sind. Die Erhebung umfasst landwirtschaftliche Betriebe mit einer wirtschaftlichen Größe von mehr als 2.000 € bis zum Berichtsjahr 2016 und von mehr als 4.000 € ab dem Berichtsjahr 2017.

Stichworte: Rentabilität, landwirtschaftliche Betriebe, Subventionen

Résumé

L'objectif de cet article est d'analyser la rentabilité des exploitations agricoles dans le cadre de la PAC. Lors de l'évaluation de la rentabilité des exploitations agricoles, les indicateurs standards sont utilisés - structure des coûts de production, montant et dynamique des recettes de vente, montant des subventions reçues, montant et dynamique de la marge brute, revenu net et rentabilité des coûts directs (Nikolov, Borisov et Radev, 2014). L'utilisation de ces indicateurs utilise une approche systématique, les indicateurs de base caractérisant la performance et les indicateurs auxiliaires - générant des informations sur les facteurs déterminant les résultats obtenus par l'exploitation (Borisov et Garabedian, 2020). Le système d'information comptable agricole (RICA) de la République de Bulgarie est utilisé comme source pour rassembler les informations nécessaires au calcul des indicateurs indiqués. L'objectif principal du système d'information comptable agricole est de collecter les informations nécessaires à la détermination du revenu des exploitations agricoles, ainsi qu'à l'analyse commerciale du secteur. L'enquête porte sur les exploitations agricoles dont la dimension économique est supérieure à 2 000 € jusqu'à l'année de référence 2016, et supérieure à 4 000 € à partir de l'année de référence 2017.

Mots clés: rentabilité, exploitations agricoles, subventions

The results published in this article are funded by National Scientific Program – “Intelligent Plant-growing”, 2021-2024, Ministry of Education and Science – Bulgaria, Sofia.

Introduction

The profitability of crop farms has increased significantly in the last 10 years in crop farms (Borisov, Kolaj, Yancheva, and Yancheva, 2019). Factors that have mainly contributed to this increase in profitability are the rise in crop prices on both the domestic and foreign markets, the increase in aid from the Common Agricultural Policy, and the wider introduction of resource-saving technologies. All these factors are a prerequisite for increasing the profitability of the farm, undoubtedly the managerial skills of farmers are the main prerequisite for valuing these opportunities. Profitability in the crop sector is one of the factors to be taken into account in shaping the future Common Agricultural Policy,

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agricultural holdings with an economic size of more than € 2,000 until the reporting year 2016, and more than € 4,000 from the reporting year 2017 onwards.

Results

Crop production is a sector with specific requirements for technical and technological factors of production (Petrov and Borisov 2021). This also determines a larger share of direct costs in the amount of total production costs. Figure 1 shows the dynamics of direct costs over the last 10 years. The dynamics of the indicator shows that the specific costs in the sector vary significantly under the influence of the Common Agricultural Policy. In the period of validity of the CAP 2007-2013, the costs on average per farm vary from BGN 20,333 to BGN 20,241. Within the study period, 2 phases in the development of the dynamics of direct costs can be distinguished - (1) first phase within 2009 - 2012. direct costs began to decrease and in 2010 reached a little over BGN 12,000 and then their size begins to grow and reaches a level - BGN 20,241; (2) the second phase, covering the period from 2012 to 2015. In this period, costs vary widely. After 2012, they shrank dramatically and reached nearly BGN 10,000 per farm. From 2013 to 2015, the amount of direct costs began to increase rapidly and they reached their maximum of BGN 32,541. During this period, crop farms are developing in the conditions of the CAP 2014-2020. The sharp increase in direct costs is due to the motivation of farmers to follow good production practices, pursuing higher yields of crops. This increase in direct costs appears to be a side effect of higher levels of absorption of financial assistance under the 2014-2020 CAP. they shrink drastically and reach nearly BGN 10,000 on one farm. From 2013 to 2015, the amount of direct costs began to increase rapidly and they reached their maximum of BGN 32,541. During this period, crop farms are developing in the conditions of the CAP 2014-2020. The sharp increase in direct costs is due to the motivation of farmers to follow good production practices, pursuing higher yields of crops.

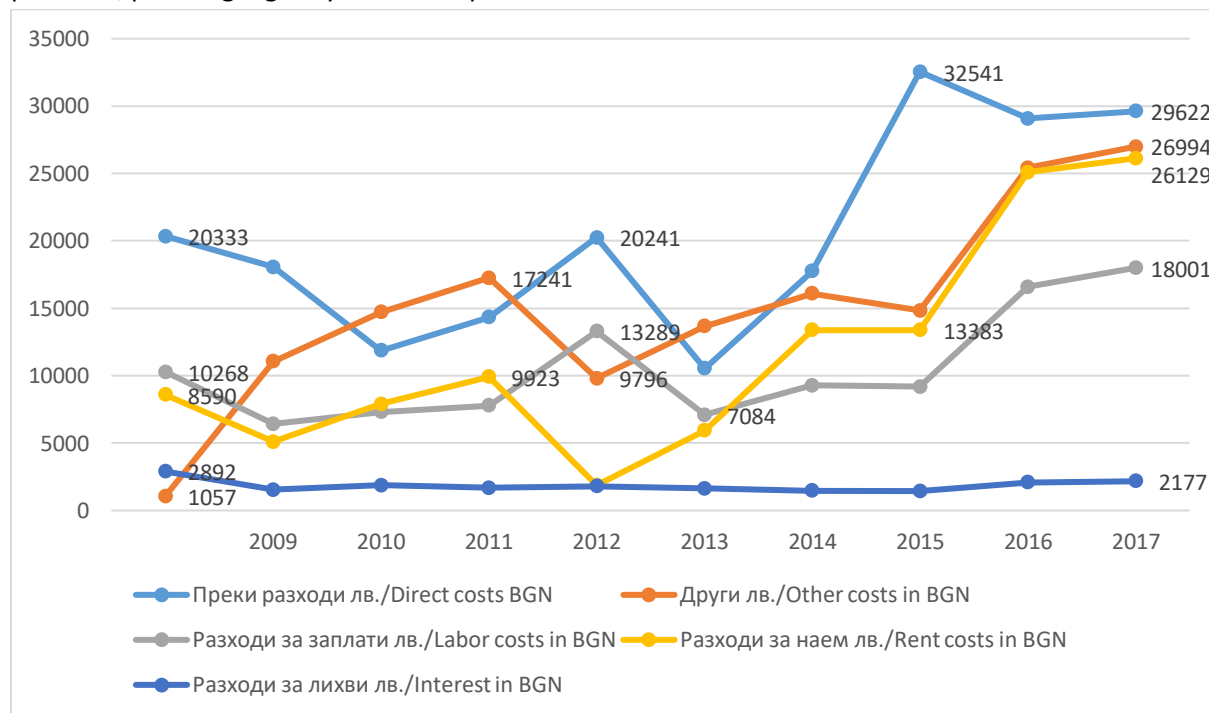


Figure 1. Dynamics of costs in crop farms for the period 2009 - 2017. Source: FADN - 2009-2018.

This increase in direct costs appears to be a side effect of higher levels of absorption of financial assistance under the 2014-2020 CAP. they shrink drastically and reach nearly BGN 10,000 on one farm. From 2013 to 2015, the amount of direct costs began to increase rapidly and they reached their maximum of BGN 32,541. During this period, crop farms are developing in the conditions of the CAP 2014-2020. The sharp increase in direct costs is due to the motivation of farmers to follow good production practices, pursuing higher yields of crops. This increase in direct costs appears to be a side effect of higher levels of absorption of financial assistance under the 2014-2020 CAP. The sharp increase in direct costs is due to the motivation of farmers to follow good production practices, pursuing higher yields of crops. This increase in direct costs appears to be a side effect of higher levels of absorption of financial assistance under the 2014-2020 CAP. The sharp increase in direct costs is due to the motivation of farmers to follow good production practices, pursuing higher yields of crops. This increase in direct costs appears to be a side effect of higher levels of absorption of financial assistance under the 2014-2020 CAP.

Relying on the subsidies received, farmers are starting to make higher direct costs by using more fertilizers and preparations to give them the technological opportunity to achieve higher productivity and productivity than the crops grown on the farm. Another extremely important element in the structure of production costs in crop farms are the costs of wages and social security. These costs reached their peak in 2012 - BGN 13,289 on average per farm. Factors that increase these costs are the increase in the minimum wage and the minimum insurance thresholds in agriculture. The fact that, thanks to CAP assistance, farmers are seeking to increase wages so as to keep good workers on their farms should not be underestimated. Crop production is an industry with less attractive working conditions, which is one of the main reasons for the loss of labor from the industry. That is why the farmers, encouraged by the received subsidies, strive to retain and motivate the staff on their farm. Over the last 10 years, wage costs have almost doubled, due to these factors. The next largest type of expenditure in crop farms is the cost of rent and annuity. These costs have tripled over the study period. The main reason for this is again the subsidies, which are given generously in the conditions of the CAP. These subsidies have a stimulating effect on buyers in the agricultural land market. This reflects on the price of agricultural land, which is rising sharply. This, in turn, has made investment in land resources significant over the last 10 years. Landowners seeking to make good returns raise rents under land contracts with farmers. Landowners are often becoming non-farmers, but see a good return on investment in agricultural land. Within the study period, the average cost of rent in a farm reached a peak value of BGN 26,129 (in 2018). The last most important item in the total costs of farmers is interest costs. The graph shows that the dynamics of these costs over the years has remained almost unchanged. Interest expenses range from BGN 2,892 to BGN 2,177. The analysis of the structure of production costs in crop farms shows that the financial assistance under both the CAP 2007-2013 and the CAP 2014-2020 is a list for launching all costs in the direction of their growth. It should be noted that the CAP supports not only the operational but also the investment costs of farmers.

In order to be able to assess the extent to which the costs that farmers make on their farms contribute to higher economic results, it is necessary to use the indicator of profitability of direct costs. This indicator assesses how effectively costs are managed in the crop industry. Figure 2 provides information on the dynamics of the profitability of direct costs over the last 10 years in the industry. In the period from 2009 to 2011 the profitability of direct costs increased from 0.64 points to 1.32 points.

The main reason for this is the decrease in the amount of direct costs incurred on the farm and the increase in productivity, and hence the revenue from sales on crop farms.

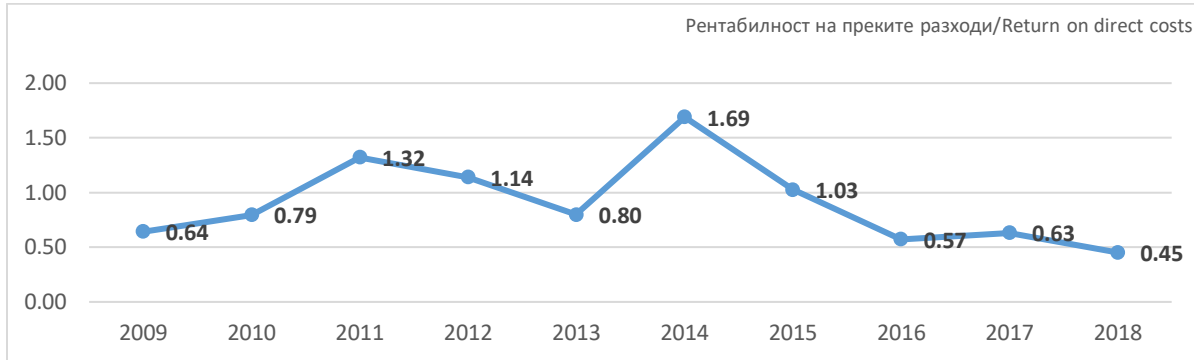


Figure 2. Profitability of direct costs. Source: own calculations based on FADN database - Bulgaria.

After 2011 the profitability of direct costs began to decline and they reached 0.80 points in 2013. This is because during this period, direct costs on farms start to increase significantly. After 2013, the profitability increased sharply and reached peak values in 2014 - 1.69 points. A period of reduction follows and in 2017 the profitability reached its absolute minimum of 0.57 points. Over the next three years, the profitability of direct costs continued to decline, reaching 0.45 percentage points. The main reason for the decline in profitability is the accelerated increase in all types of expenditures, as the growth rates of revenues and subsidies received on farms are beginning to lag behind. It can be summarized that despite the subsidization of the crop farm, their profitability measured on the basis of their direct costs remains volatile. This proves that subsidy is a double-edged sword. On the one hand, these subsidies provide security in the management of farms, but on the other hand, addiction to them leads to lower competitiveness on the part of farmers.

Figure 3 shows the dynamics of revenues from sales in crop production farms. Both expenditures and revenues show a negative downward trend within the 1-year study period. In 2009 the sales revenues amounted to BGN 57,209, and in 2018 they reached BGN 52,541. Despite the favorable prices on the market, Bulgarian farmers fail to manage their sales well, and hence their income.



Figure 3. Dynamics of sales revenues of crop farms (revenues in BGN average per farm). Source: own calculation on the basis of FADN - Bulgaria.

Despite the negative trend of shrinking sales revenues, farms managed to generate a steady rate of slight increase in their net income (see Figure 4). The main reason for this is that farms manage to diversify their sources of income and thus skillfully manage market risk.

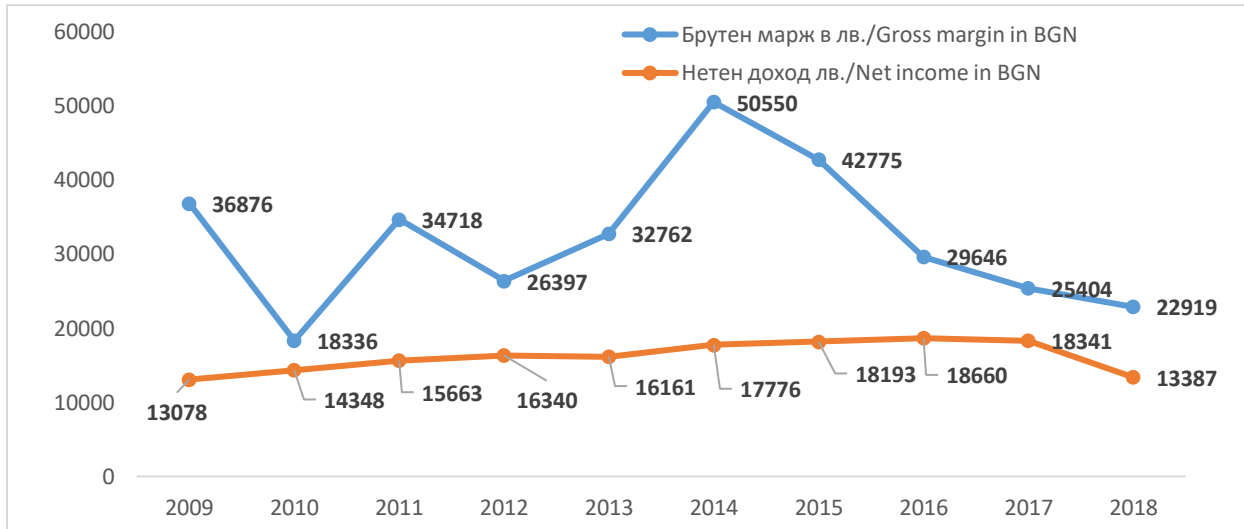


Figure 4. Dynamics of the Net income and the gross margin in the studied crop farms. (margin and income in BGN average on one farm). Source: own calculation on the basis of FADN - Bulgaria.

One of the most commonly used indicators for estimating the management of income and variable costs in the crop production is the gross margin. Through this indicator it is possible to assess how well the farmer manages his variable costs within the chosen production technology. Figure 4 shows the graph of the gross margin of the farms. In the period from 2009 to 2013, the gross margin on farms varies greatly from 36 876 BGN to 26 397 BGN. After this year, the gross margin increased sharply and reached a peak in 2014 - BGN 50,550. The main factor for this sharp increase in gross margin is the growing rate of subsidies received on crop farms (see Figure 5). After 2014, the gross margin began to decrease in value following the downward trend in subsidies received.

Figure 5 shows the dynamics of the types of subsidies received from crop farms. In the period from 2009 to 2013 the level of absorption of subsidies by farms statutes low - within 13 269 BGN. After 2013, the subsidies received as a total amount in the surveyed farms increased significantly and reached a peak value of BGN 22,692 (in 2014). This is due to the good coordination of the units of the National Agricultural Advisory Service, which advises farmers free of charge in developing and submitting documents for applying for financial assistance under the individual measures and schemes of the CAP.

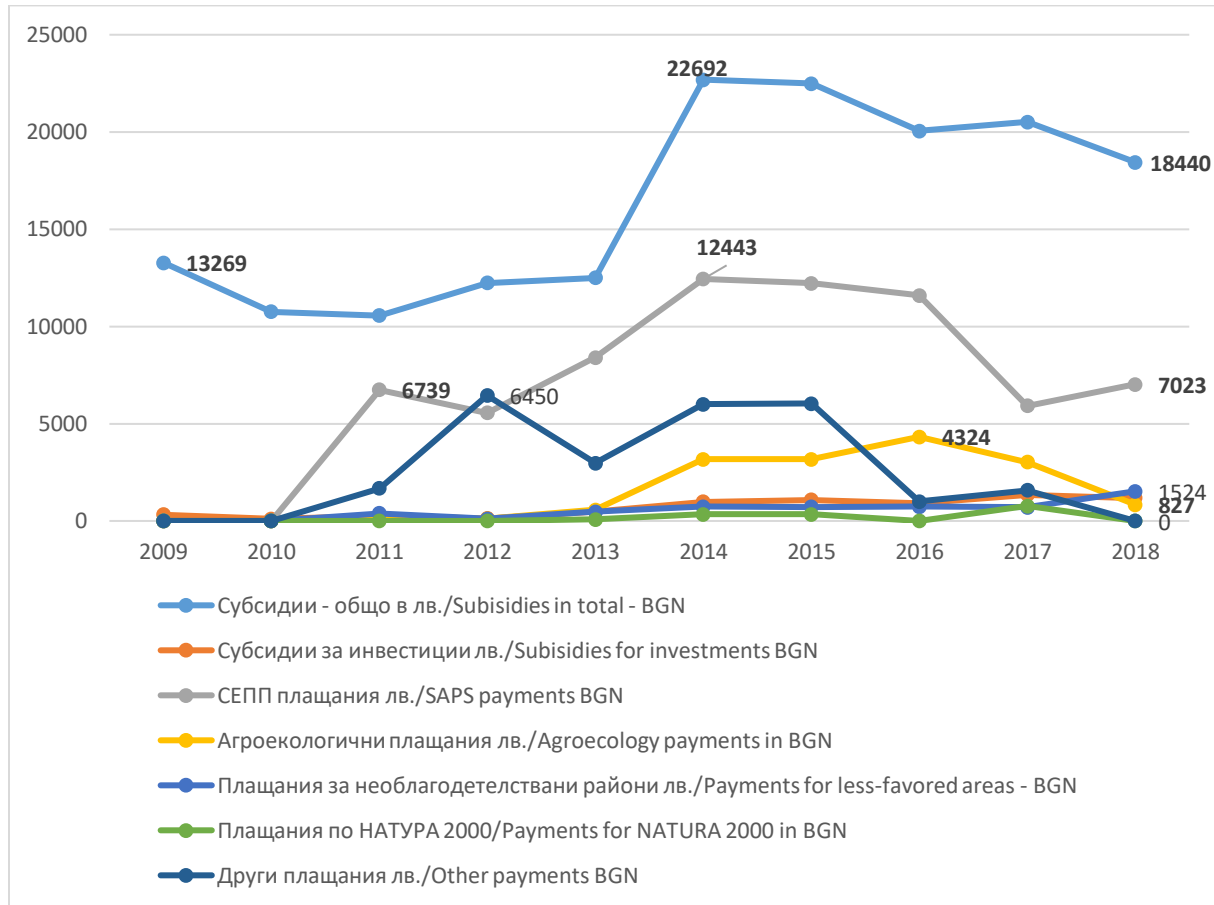


Figure 5. Dynamics of the received types of subsidies in the studied crop farms. (in BGN average on one holding). Source: own calculation on the basis of FADN - Bulgaria.

The largest contribution from subsidies is payments to farms in less-favored areas and SAPS payments. These two types of financial assistance form more than 50% of the subsidy received on the farms. Within the CAP phase 2014-2020, they also play an important role agri-environmental payments in the sector. The data in Chart 5 show that the boom in the absorption of subsidies is in the period from 2013 to 2018. In these years, farms are rapidly absorbing the financial assistance provided by the CAP. Payments within NATURA 2000 remain symbolic.

The received subsidies are reported in the income part of the crop farm. Over the years, farmers have become increasingly dependent on the level of subsidies under the CAP. Figure 6 shows that subsidies form from 62.3% to 76.8% of the total income from farm activities. The data show that the share of subsidies in total revenues remains significant over the years.

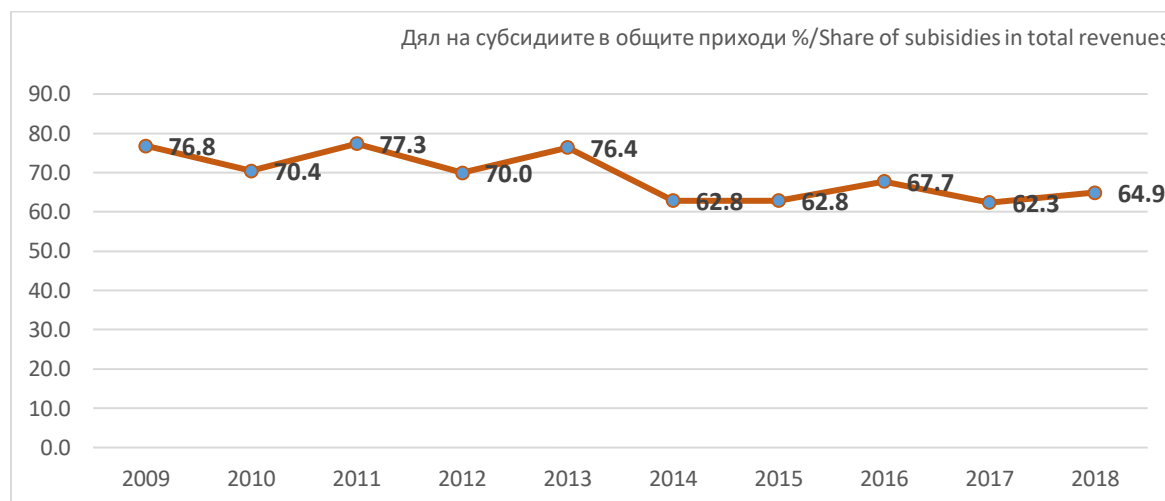


Figure 6. Dynamics of the share of subsidies in total revenues in crop farms. Source: own calculation on the basis of FADN - Bulgaria.

Conclusion

Crop farms have significantly improved their profitability over the last 10 years. The CAP and its application in the sector have played a key role in this. Yields have mainly increased due to the subsidies received in the period 2013-2018. The subsidies received have played a number of positive roles in terms of increasing revenues, incomes and investments in crop production. On the other hand, subsidies have negative consequences on the activity of farms, namely - they lead to addiction and occupy a significant share in the total income of farms; lead to lower competitiveness of the industry by encouraging those who are less responsive to market requirements supported by subsidies to remain on the market.

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