

THE IMPACT OF INTER-ORGANIZATIONAL COOPERATION ON THE DEVELOPMENT OF THE REGION BASED ON SELECTED INITIATIVES IN THE ŚWIĘTOKRZYSKIE PROVINCE

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Aim: The article aims to answer the following questions regarding the challenges of the modern world, support for inter-organizational relationships, and the use of initiatives in the field of science and business conducive to increasing competitiveness. It attempts to determine how to develop and manage contemporary initiatives regarding cooperation between the worlds of science, culture, art and business while maintaining the principles of ethics and culture, and how to help build support for business, science and culture. The aim of the article is also to demonstrate how the region's managers can prevent the escalation of war-related issues and what actions to take to prevent local societies from generating problems. Finally, the article tries to indicate how to build lasting inter-organizational relationships, how science, culture and art can contribute to solving local problems, and how informal clusters can support regional management through inter-organizational cooperation.

Design/methodology/approach: The article uses the methods of literature research and a case study in the Świętokrzyskie region.

Findings: The article presents an example of an inter-organizational cooperation initiative promoting the worlds of business, science, culture, art and local governments in the Świętokrzyskie region in the study of selected cases. The issue of building competitive advantages of the region through the development of inter-organizational relationships between the worlds of science, business, culture and art is also addressed.

Practical implications: Region managers can implement inter-organizational cooperation, which brings the most benefits, by including cooperation with scientific, cultural, art, sports and business institutions. The article characterizes initiatives of inter-organizational cooperation between business, science, culture and art. Inter-organizational cooperation initiatives can be used as sources of new competitive advantages for the region and building effective management strategies. Modern management of the region's competitiveness is the development of a mentality based on the principles of learning to use the regionally demonstrated freedom and ethics of business behaviour that implements inter-organizational cooperation, which is characterized in the case study. The inter-organizational cooperation initiatives analysed in this article in the Świętokrzyskie region have a synergistic effect and benefits in a number of other regions of Poland; therefore, they are an effective tool for managing the region in the aspect of building inter-organizational relationships.

Social implications: Effective management of the region involves creating a society that is willing to undertake conflict-free changes, implements innovations, is open to discussion and dialogue, and introduces conflict-free change implementation. Recent years have shown that

high intellectual capital and the implementation of new technologies and innovations can become a competitive advantage, provided that society is a conscious, sensitive and ethical recipient of the proposed competitive strategies of enterprises. The analysis of the problems of the war between Ukraine and Russia demonstrates that the managers of the region should make every effort in order to encourage the society to develop an attitude of sensitivity to harm, entrepreneurship based on the principles of ethical competition, the use of democratic freedom in a reasonable manner, as well as the use of property for purposes related to the development of emotional sensitivity to manifestations of intolerance and replacing conflicts with cooperation. In the long run, the effects of such management will benefit every participant of the market, because everyone is a resident of a region and has similar needs (security, development, improvement), and inter-organizational cooperation can achieve this through a region management strategy.

Originality/value: The article characterizes modern regional management, which, owing to inter-organizational cooperation between business, science, culture, art and local government, will support the peaceful resolution of regional problems and conflicts (war, famine, poverty) through the development of behaviour aimed at building inter-organizational relationships. Modern competition rules are intended to foster the creation of multi-level inter-organizational relationships, the benefits (synergistic effects) of which are described in the article on the basis of the analysis and evaluation of inter-organizational cooperation implemented in the Świętokrzyskie region.

Keywords: promotion of the region, inter-organizational cooperation, local initiatives, inter-organizational relations.

Category of the paper: Study, viewpoint.

1. Introduction

Modern organizations operate in a changeable and uncertain market economy environment, which forces the creation of competitive advantages. Strategies for building competitive advantages apply to all organizations, including regions. The competitiveness of regions is, by nature, understood differently than that of enterprises, which must generate profit through innovation, technology, process changes, and the fight to acquire sales markets, allies, and customers (Klamut, 2014). In managing the competitiveness of regions, one of the key aspects is meeting the needs of residents, which are most often included in strategic goals. Entrepreneurs are also residents of regions; therefore, their activities influence the perception of the region as competitive and a place of good life and business development. Hence, an important task is to create conditions in the region that will help shape open attitudes, facilitating the development of inter-organizational cooperation initiatives, as such initiatives, together with local leaders, have a decisive impact on the development and management of the region. Therefore, the region's managers should create conditions for the development of inter-organizational cooperation, because this translates into the region's competitiveness and the well-being of its residents.

2. 21st century challenges for management in the region

The article addresses the issue of building competitive advantages of the region through the development of inter-organizational relationships between the worlds of science, business, culture and art. In February 2021, the Russian–Ukrainian war proved that the modern world, despite advance technological development and modern forms of Internet communication, is not free from old fears and concerns such as war, poverty or famine. These problems, as well as the unhealthy ambitions of state leaders, may become the source of new global conflicts in the 21st century. The armed conflicts are of a developing nature: while the problem of the Russian–Ukrainian war has not yet been resolved, new problems have now emerged in the Middle East, where the long-drawn problem of the Israeli–Palestinian conflict continues and has recently taken the form of violent and armed solutions.

We are all obliged to look for solutions, and above all, scientists in various fields should seek to develop methods to solve problems and take preventive actions in order to resolve conflicts before they become war, poverty, famine or pandemic, as well as take precautions to possibly prevent such conflicts from occurring in the first place.

Nowadays, support for cooperation initiatives between business, science and culture may become a tool for building modern competitive advantages. The contemporary competitiveness of local entities may gain a new value in the ethical behaviour of entrepreneurs who will appreciate the value of works of science, culture and art. Hence, science and culture will acquire permanent recipients and participants in joint initiatives by promoting new values in a way that is accessible and interesting to regular residents of the region. Owing to the described initiative to promote science, culture and art of the region, entrepreneurs will be able to learn about new concepts, apply them and support the development of companies, conduct research, implement good practices and take advantage of cultural initiatives that promote the region. The market economy, competitive strategies and business activities will be able to gain a new face of more ethical and moral behaviour, altruistic attitudes, replacing conflicts with inter-organizational cooperation. Entrepreneurs – who are also recipients of science, culture and art (as they are also residents) – will gain the opportunity to participate in building competitive advantages of the region and its organizations in an atmosphere of cooperation, peace and tolerance, which will replace antagonistic attitudes, fights and brute force. The presented initiatives (Plawgo, 2007) of inter-organizational cooperation will affect the competitiveness of enterprises and the region implemented in the climate of a conflict-free development strategy. In such circumstances, the management of the region will be competitive because it will fulfil the basic needs of the inhabitants (security, peace), while moral and ethical behaviour – owing to the sublime tastes of entrepreneurs – will build a competitive advantage based on sound principles of ownership and the use of freedom of competition.

The transformation of the political and economic system that took place in Poland in the 1990s showed that SME sector companies had to overcome numerous problems, i.e. adaptation to market economies, finding a competitive strategy, applying methods and techniques to improve operations, transfer of knowledge, or development of management skills. Thirty years of functioning in a market economy gave scientists the opportunity to reach certain conclusions and a short experience for entrepreneurs. The analysis of enterprise management in Poland demonstrated that thirty years is too short a period to develop one's own methods and strategies of competitive activities (Danielak, Mierzwa, Bartczak, 2017; *Determinanty sukcesu...*, 2022). Polish entrepreneurs observe, learn and transfer methods, techniques and strategies from around the world into their business because we have not had time to develop our own. The modern world forces entrepreneurs and scientists to pursue continuous education, obtain information and data patterns, and perform continuous analyses and assessments in order to search for the best methods of work and development.

Contemporary management of sustainable development of regions in the aspect of inter-organizational cooperation development should be based on principles. Inter-organizational relationships also involve meeting the basic needs of residents, such as security, peace, tolerance, and prosperity. One of the ways to meet the needs of the region's inhabitants is to develop inter-organizational cooperation between business and science, culture and art, which constitute the basis of a new society in which aggression and the pursuit of solving problems by force will cease to be valid and will be replaced by seeking peaceful solutions for tolerance and harmony.

The key to effective and stable region management is to create a society that promotes conflict-free changes, implements innovative solutions, is open to discussion and dialogue, and implements changes without the use of force or violence.

It is about shaping the mentality of a society that will implement constructive solutions, non-violent and aimed at respecting social differences. Culture, art and science are the common ground that unites nations as they are outside the category of conflicts, they are an objective, transnational good connecting all people, beyond politics, economy or religion; therefore, they can be a key element of the new management of regional entrepreneurship.

This article presents one of such suggestions for solving the problems of the modern world by building management of the region's competitiveness through promoting initiatives of inter-organizational cooperation between business, science, culture and art. Managing an inter-organizational cooperation initiative favours building local and non-local environments based on the principles of promoting local achievements of culture, science, art and business. The acquired knowledge teaches us the ethics of behaviour in implementing entrepreneurial attitudes in the competitive freedom of a market economy and inter-organizational cooperation, which will eliminate conflicts and introduce tolerance through the formation of a society with refined tastes and moral behaviour. Recent years have shown that high intellectual capital and the implementation of new technologies and innovations can become a competitive advantage,

provided that society is a conscious, sensitive and ethical recipient of the proposed competitive strategies of enterprises. The analysis of the problems of the war between Ukraine and Russia demonstrates that the managers of the region should make every effort in order to encourage the society to develop an attitude of sensitivity to harm, entrepreneurship based on the principles of ethical competition, the use of democratic freedom in a reasonable manner, as well as the use of property for purposes related to the development of emotional sensitivity to manifestations of intolerance and replacing conflicts with cooperation. In the long run, the effects of such management will benefit every participant of the market, because everyone is a resident of a region and has similar needs (security, development, improvement), and inter-organizational cooperation can achieve this through a region management strategy.

The article characterizes local initiatives of inter-organizational cooperation of business, science, culture and art as part of the Kielce Science Festival, the Kielce Technology Park, the Świętokrzyskie Centre for Innovation and Technology Transfer, and the Collegium Medicum. Inter-organizational cooperation initiatives can be used as sources of new competitive advantages for the region and building effective management strategies. Modern management of the region's competitiveness is the development of a mentality based on the principles of learning, entrepreneurship development, promotion, the achievements of local society and the ethics of business behaviour that implements inter-organizational cooperation.

The topic of building competitive advantages of modern enterprises has been analysed by a number of foreign management authorities, as well as Polish authors, including: A. Noga (Noga, 2009), M. Romanowska (Romanowska, Wachowiak, 2006), E. Mączyńska (Mączyńska, 2019), W. Grudzewski (Grudzewski, 2003), J. Hejduk (Hejduk, Grudzewski, 2002), M.J. Stankiewicz (Stankiewicz, 2001), Z. Olesiński (Olesiński, 2005, Olesiński, 2010). The publications of these authors use foreign literature that sets the trends for the development of modern enterprises.

Modern organizations build competitive advantage strategies using Kevin Kelly's 10 principles (Kelly, 2001), which have dominated modern markets and renewed the laws of classical economics known from the books of macro- and microeconomics by D. Begg (Begg, 1999a; Begg, 1999b). The first principle involved a reversal of the traditional view of management. In the modern approach, it is proposed to decentralize management structures to make them smaller, more flexible, and adapted to changes in the environment. In classical economics, large heavy industry enterprises with complex technology parks were supported. Nowadays, it is the SME sector that supports the creation of GDP and the development of innovation; these enterprises adapt more easily to changes and depend only on the knowledge of the manager. The second principle of modern management is the use of the liquidity effect, i.e. managers should remember that innovations spread quickly and it is those who disseminate the inventions the fastest that benefit most from the market, not the inventors. Classical economics assumes that what is unavailable to the customer is the most expensive and constitutes the greatest value that needs to be protected from competition and is where the most

money is earned. However, this has changed; what can be disseminated gains higher utility and constitutes the greatest value (e.g. mobile phones or the Internet). Hence, companies such as Google, Microsoft and Apple are the most competitive because they popularize their inventions. In the past, the environment was relatively stable, but today, modern technologies (the Internet) have changed the world; thus, organizations creating competitive advantages must study these changes and adapt to them. Another principle is that space and its limitations no longer play an important role. In the past, cheap raw materials that could run out or cheap labour were a competitive advantage. At present, space no longer limits the activities of managers, because they do not create mines or steelworks, but have virtual organizations and can start operations anywhere – they are only limited in terms of knowledge, and this can be acquired, modernized and improved. The level of competitiveness of organizations is now determined by new technologies, innovations, know-how, high-tech, and the old competitive advantages (cheap raw materials and cheap labour) are becoming a thing of the past. Nowadays, competitive advantages depend on the level of openness, the number of network participants and the strength of network connections, and the competitiveness of organizations is created by multi-level inter-organizational relationships. Modern organizations build competitive advantages by seizing all opportunities. The ability to establish inter-organizational relationships and build inter-organizational cooperation may become the organization's most important competitive advantage. Developing inter-organizational relationships can provide various benefits, synergistic effects and management improvements, supporting the effective and efficient implementation of the region's strategic goals. Figure 1 describes the benefits of implementing inter-organizational cooperation in the region.

The basis for the presented model of inter-organizational cooperation in the region was reliable empirical research on micro-enterprises, local government units, and business development support organizations operating in the Świętokrzyskie Province (Olesiński, 2007).

The model indicates that the speed of creation, course and final result of the implementation of innovations depend on the quality of the elements of the resource potential of entities, the efficiency of discovering and meeting needs and the activity in creating cooperation between various organizations in the environment. Innovative activity is related to competitive skills, which may be manifested in communicating one's pro-innovation needs to various entities in the environment and the efficiency of these entities in providing enterprises with the necessary support that contributes to the satisfaction of these needs (Hoffer, 2004).

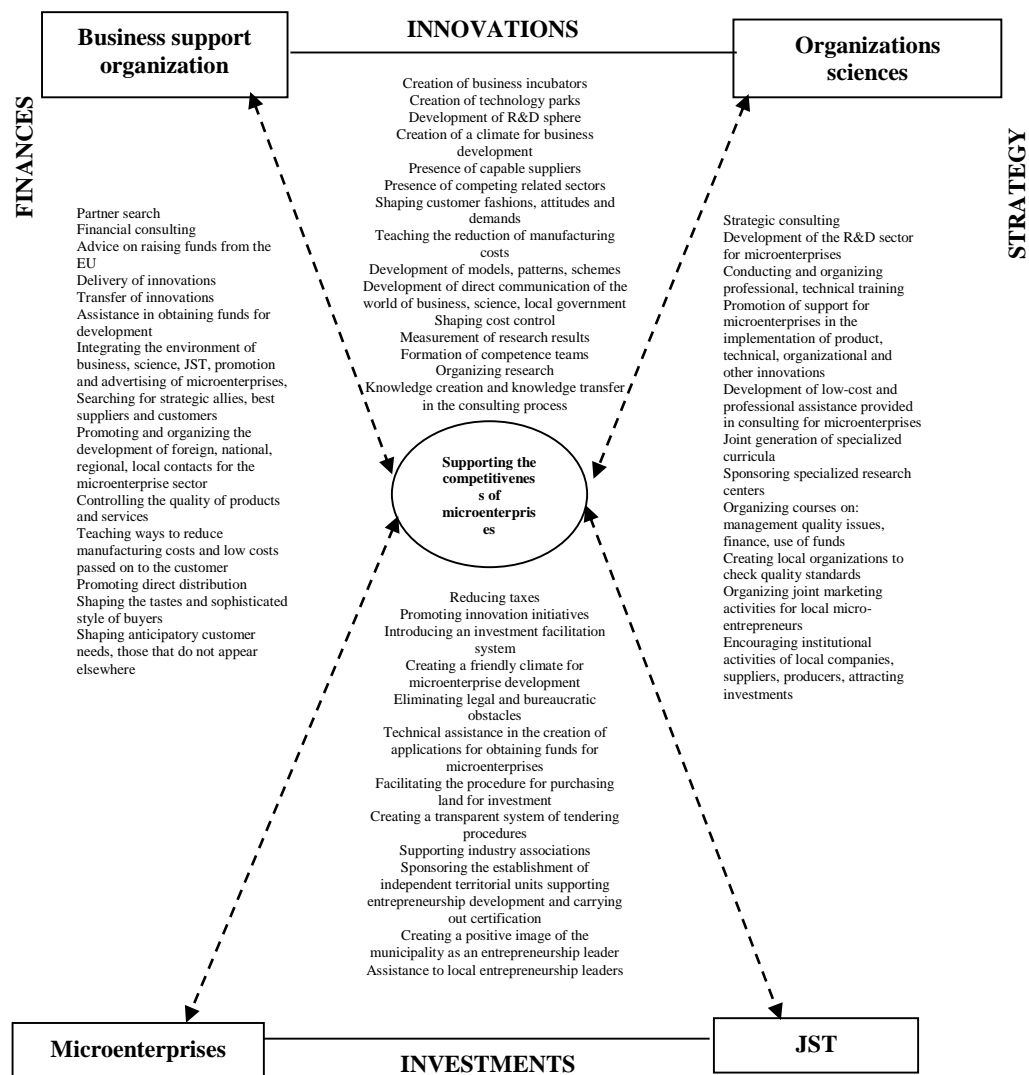


Figure 1. Model of inter-organizational cooperation in the region.

Source: Author’s original work based on Porter, 2006.

Figure 1 shows that modern institutions have innovative potential in the ability to build an effective system of communication with partners, knowledge related to establishing beneficial contacts with local governments, science organizations and business support organizations, the ability to seek and use new opportunities (e.g. EU funds and programs, modern means of communication, the Internet, etc.), and the ability to cooperate with local governments as well as governmental, non-governmental, financial, insurance and marketing institutions.

The analysis of research on inter-organizational cooperation in the SME sector in the Świętokrzyskie region between 2006-2019 (Predygier, 2019; Olesiński, 2007) showed a low degree of cooperation and inter-organizational relationships. The key task of the region’s managers should be to support real strategies for inter-organizational cooperation of entities: enterprises, scientific organizations, business environment organizations, local governments. Today’s regional management should be focused on the development of these inter-organizational relationships. Management taking into account building inter-organizational

relationships as a result of synergistic cooperation may be conducive to the creation of a formal or informal cluster. The greatest benefits from the implementation of an inter-organizational cooperation strategy can be obtained by including scientific, cultural, art and sports institutions, in addition to business and science. The article includes case study research and analysis of the Kielce Science Festival, the Kielce Technology Park, the Świętokrzyskie Centre for Innovation and Technology Transfer, and the Collegium Medicum.

3. An example of inter-organizational cooperation between business, science, culture, art and local governments: Kielce Science Festival

The Kielce Science Festival was an initiative to promote the development of science, culture and art in the Świętokrzyskie region. It was implemented between 2002–2012 and covered the region's communes and counties, as well as foreign contacts.

The Kielce Science Festival organized in 2012 in the Świętokrzyskie Province achieved the key goal that was to popularize the achievements of science, culture, art and sports on a national and international scale. The Festival featured many carefully selected, very interesting and substantively valuable lectures, workshops, multimedia presentations, trips, debates and events, which were visited by over 30,000 people across six towns. It was an opportunity to discover and display the talents and interests of junior high school, high school and university students. Owing to the Festival, the society of the region gained the opportunity to acquire knowledge in various fields of science presented in an accessible form of interactive shows, games and activities, promoting the latest scientific achievements. To summarize the activities of the Kielce Science Festival, one needs to take into account over ten years of implementation of this project. The idea of holding these scientific events was born in the minds of participants around 2000, when initiators and science enthusiasts under the leadership of Professor Krzysztof Grysa began to establish small clubs to connect people interested in various fields of science.

The agreement on organizing an event with this name in Kielce was signed by: Vice-Marshal Włodzimierz Wójcik, MA, on behalf of the Local Government of the Świętokrzyskie Province; Mayor of Kielce Włodzimierz Stępień, MSc Eng., on behalf of the City of Kielce; Chief Education Officer Andrzej Sygut, MA, on behalf of the Board of Education; Rector Professor Wiesław Trąmpczyński, PhD Eng., on behalf of the Kielce University of Technology; Rector Prof. Adam Massalski, PhD, on behalf of the Jan Kochanowski Pedagogical University and the Kielce Scientific Society; Rector Rev. Kazimierz Gurda, PhD, on behalf of the Higher Theological Seminary; Director Prof. Zbigniew Kowalczewski, PhD, on behalf of the Polish Geological Institute, Świętokrzyskie Branch in Kielce; Director Stanisław Gózdź, MD, on behalf of the Świętokrzyskie Oncology Centre.

The number of supporters, participants and originators working completely free of charge increased from year to year, and the idea of annual meetings became established. The idea of the Kielce Science Festival was successfully implemented on an annual basis, introducing new participants, sponsors and presenters every year. Over ten years, approximately 20,000 presenters from all over Poland as well as Germany, Ukraine, Israel and Belarus have performed in various roles during lectures, galas, workshops and shows. The number of recipients also increased during this period; in total, 300,000 people watched, listened to and participated in the festival events, most of them being high school and university students. After 2006, the Kielce Science Festival became a well-known and respected institution that gained the support of the Ministry of Science and Higher Education, and its events ceased to be regional, as they were joined by presenters from numerous research centres to create projects recorded in published articles; they included representatives of the University of Warsaw, the University of Rzeszów, the Jagiellonian University, the AGH University of Kraków, the Poznań University of Technology, and the Lublin University of Technology. Various institutions such as museums, cinemas, art galleries, philharmonic halls and cultural and sports centres also joined the festival projects, creating unforgettable works that carried out the mission of promoting the science, culture and art of the Świętokrzyskie region. The success of the Festival was not only the constantly increasing number of participants and presenters from domestic and foreign science centres, but above all, the popularization of regional science achievements through closer cooperation with the business community, media and local government. Since 2008, the Kielce Science Festival integrated all communities to eliminate social divisions and discrimination, while developing cooperation with the leaders of local communities. Cooperation with teachers from the local schools was a new stage in the Festival's history. Through their work and meetings with them, the Festival became a tool for recruiting students and an instrument for effective promotion. The implementation of the idea of the Festival has had a significant impact on the development of human capital in the society of the Świętokrzyskie region, especially when it comes to directing the interests of young people from small towns and rural areas. In this respect, the impact of the Kielce Science Festival is invaluable (Historia Kieleckiego..., 2023).

Cooperation as a basic strategy for the competitiveness of local science in the global world was the basis for the implementation of the Festival with universities. The strategy of joint promotion of science was implemented particularly effectively by the University of Economics and Law in Kielce, the University of Arts and Sciences in Kielce, the University of Commerce in Kielce, the Holy Cross University in Kielce, the University of Tourism, the Kielce University of Technology, the University of Humanities and Natural Sciences in Sandomierz, and the University of Business in Ostrowiec Świętokrzyski. Through cooperation with universities from the region, the bond of implementing joint scientific, research and promotional projects was strengthened. Owing to this cooperation, the popularization of science gained real impact, and the Kielce Science Festival became a tool through which the society of

the region gained the opportunity to acquire knowledge in various fields of science presented in an accessible form of interactive shows, games and activities, promoting the latest achievements of science. The Kielce Science Festival is an event appreciated in Poland and abroad, which implemented the concept of popularizing the achievements of science, culture, art and sports on such a large scale.

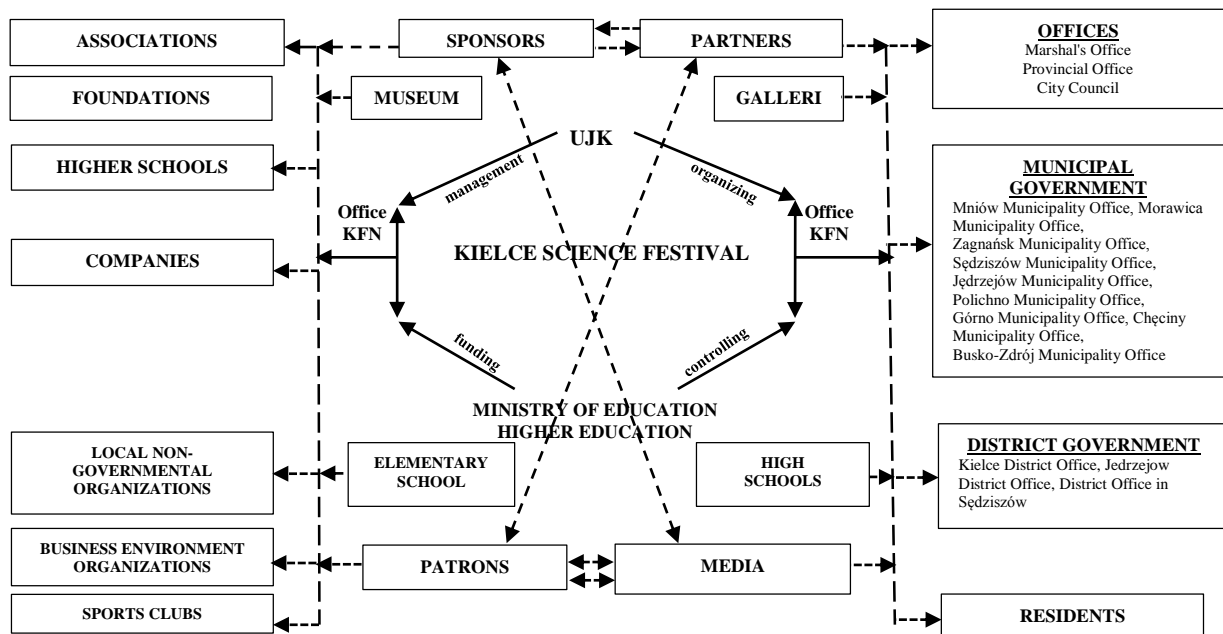


Figure 2. Cultural and scientific group of the Kielce Science Festival.

Source: Author's original work.

Figure 2 describes the cultural and scientific group of the Kielce Science Festival and its impact on the dissemination of achievements in science, culture, art and sports. During the ten years of its operation in the Świętokrzyskie region, the Kielce Science Festival developed inter-organizational cooperation of over 3000 organizations (associations, offices, foundations, companies, etc.) that actively participated in the Festival's events to promote science and culture. Considering that the Festival started as a small initiative of several universities, its development and network of initiatives and inter-organizational relationships should be deemed a success. The Kielce Science Festival also developed cooperation with foreign and supra-regional entities (Jewish Festival, German Foundation, Finnish Association in Reykjavik). The strength of inter-organizational relationships helped build the promotion of science and culture in the region through university, secondary school and primary school leaders. Over the course of ten years, the Festival implemented nearly 500 cultural and organizational initiatives annually, and also gained an increasing number of sponsors and participants. The Kielce Science Festival ended its activities in 2012, but initiatives for the promotion of science, culture and art are still implemented in other regions (Mazovia, Lower Silesia, Lesser Poland); therefore, the conclusions contained in the article may be helpful for the managers of similar regional promotion initiatives in terms of cooperation between representatives of science, culture, art and business.

4. An example of inter-organizational cooperation between business environment institutions, science centres and business: Kielce Technology Park

Among the many tasks included in the “Strategy for the city of Kielce for 2007-2020” created in 2006 was the establishment of a science and technology park. The strategy assumed that the existence of a technology park would have a huge positive impact on the image of Kielce and the region in the eyes of current and potential investors. The Kielce Technology Park began its operations in 2007 with the implementation of a project entitled “Kielce Technology Incubator” with the support of EU Funds. In 2008, the Kielce Technology Park was established. Its creation was the result of cooperation between local government structures and scientific and business communities, which determinedly sought to increase the competitiveness of the region (Historia, 2023).

The Kielce Technology Park cooperates with business environment institutions, local government, research centres and entrepreneurs. By implementing many projects that encourage entrepreneurial attitudes among the inhabitants of the province, it builds a knowledge-based economy and contributes to the increase in competitiveness and development of the Świętokrzyskie region. It cooperates not only with local units, but also with institutions from outside the region, and implements a number of national and international projects.

The Park offers modern infrastructure and developed investment areas. Companies operating in its area can use amenities and tax privileges. The institution always tries to meet the individual needs of potential collaborators.

The Kielce Technology Park has a quality management system certificate according to the PN-EN ISO 9001:2015-10 standard. Since 2011, it has had a quality management certificate. In January 2021, it successfully passed the certification audit of the quality management system according to PN-EN ISO 9001:2015-10. The certificate was granted for the provision of services to individual clients, institutions and companies as part of the tasks carried out by the Park.

The Quality Management System according to ISO 9001 is a recognized standard of enterprise management and confirms that the services provided by the Park comply with the relevant standards and meet high quality requirements (System..., 2023).

The Kielce Technology Park has investment areas divided into four zones. Its partners have 15 hectares of investment areas at their disposal (Tereny inwestycyjne, 2023). The Park’s operations include the Technology Centre, which is intended for new and existing enterprises that base their development on innovative technological solutions used in production and services. Entrepreneurs have over 20,000 m² of space at their disposal, including: a service, laboratory and production building consisting of 8 modules with the possibility of independent

division and operation, and 4 production halls consisting of independent modules with entresols (Centrum..., 2023; Kielecki Park..., 2023).

The Kielce Technology Park offers support in the form of consulting and training services dedicated to micro-, small- and medium-sized enterprises, as well as their employees. The support covers issues necessary for implementing and developing a business idea as well as market expansion. The list includes basic and specialized services, which are free, paid or subsidized by the Development Services Base. The Park offers services in the following fields: support in the area of market verification of a business idea, support in obtaining funds for development, consultations and services in the field of marketing, branding and other sales-supporting issues, consultations with an internationalization expert, and support in preparing applications for external funds (Usługi..., 2023, Kielecki Park..., 2023).

From 1 January 2023, the Kielce Technology Park became the Digital Innovation Centre and offers support for enterprises from the Świętokrzyskie region. The scope of support includes a wide range of digitalization services, from digital maturity assessment to the implementation of new solutions (Cyfryzacja..., 2023).

5. An example of inter-organizational cooperation between business, business environment institutions, local government and science: Świętokrzyskie Centre for Innovation and Technology Transfer

The Świętokrzyskie Centre for Innovation and Technology Transfer was founded on 18 December 2001 by the Świętokrzyskie Voivodeship, the City of Kielce, the Świętokrzyskie University of Technology and the Staropolska Chamber of Industry and Commerce, as non-profit institutions, to support and channel the development of creativity and potential of the Świętokrzyskie region (ŚCITT..., 2023).

The key shareholders of the Świętokrzyskie Center for Innovation and Technology Transfer are public entities of the region, i.e. the Świętokrzyskie Province (90.83% of shares) and the Świętokrzyskie University of Technology (9.17% of shares) (O nas..., 2023).

The Centre's mission is to strive to strengthen and stimulate the competitiveness of the Świętokrzyskie Province in the field of production, services, education and management through the transfer of scientific and research achievements, economic information for SMEs, ISO quality systems, online education, fairs and conferences. As one of the leading entrepreneurship support centres in the region, the company offers a range of information, advisory, training and expert services to enterprises, individuals and public entities (ŚCITT..., 2023).

The Świętokrzyskie Centre for Innovation and Technology Transfer implements key projects for the development of the Świętokrzyskie region in the field of supporting entrepreneurship, audits and technology transfers, public-private partnerships, and analyses in the area of energy efficiency and renewable energy sources. The aim of the Centre is to initiate economically important activities that will enable close cooperation between entrepreneurs, local governments and scientific communities in the Świętokrzyskie region. Entrepreneurship, new technologies and knowledge transfer are the factors that determine the development of a region. Innovations are possible in virtually every field; therefore, the Centre focuses its activities on finding strong points and using them effectively (ŚCITT..., 2023).

The task of the Świętokrzyskie Centre for Innovation and Technology Transfer is to obtain financial resources from European Union aid programs to support innovative solutions in the areas of production, services, education and management.

Currently, the Świętokrzyskie Centre for Innovation and Technology Transfer participates in the implementation of a number of projects, including:

- Implementation of the ISO quality system, Environmental Management and Occupational Health and Safety,
- Enterprise Europe Network – a business support network,
- Preparation of applications for Structural Funds,
- Consultation Point for SMEs,
- Quality management and IT training.

Partners of the Świętokrzyskie Centre for Innovation and Technology Transfer include: small- and medium-sized enterprises, newly established companies, scientific and research centres, local governments, individual entrepreneurs and inventors (O nas..., 2023).

As one of the leading centres in the region, the Świętokrzyskie Centre for Innovation and Technology Transfer offers a range of information, advisory, training and expert services for entrepreneurs. The quality of the services provided is guaranteed by certificates and accreditations granted to the Centre by the Polish Agency for Enterprise Development and the National Contact Point for EU Research Programs. Owing to the fact that the Centre participates in national and international cooperation networks – such as the National Service System, the National Innovation Network, the network of Regional and Industry Contact Points for EU Research Programs, or the Enterprise Europe Network – it is able to provide many services free of charge (Oferta dla..., 2023).

The Świętokrzyskie Centre for Innovation and Technology Transfer provides consulting and advisory services in the field of applying for co-financing of investment projects from structural funds, such as: consulting for SMEs, preparing business plans and loan applications, coordinating activities related to obtaining subsidies, a full range of services related to obtaining subsidies, from the moment of completing the application to the full implementation of the subsidized project (Oferta dla..., 2023).

The Centre also provides general services, i.e. preparing financial analyses and financial forecasts for enterprises, advice on the search for accreditation units that are potential contractors of services provided as part of subsidized projects, supporting SMEs in their competitiveness, advisory and expert services under the Centre's accreditation, advisory and expert services within Management Systems, including the implementation of Quality Management Systems (QMS), Safety Management Systems (SMS), Environmental Management Systems, HACCP, and advice on the possibilities of using renewable energy sources (Oferta dla..., 2023).

The Centre's offer for entrepreneurs also includes pro-innovation advisory services (technology audits, assessment of the company's technological potential/needs, preparing applications to obtain funds for financing innovative projects, searching for partners, assisting and helping in negotiations); information services (informing about the available offer of external financing, maintaining a database of companies cooperating with the Centre, informing about economic conferences and events held, informing about the available offer in the field of cooperation between science and business, providing information and suggestions to foreign investors regarding cooperation with Polish entrepreneurs) and training services (systemic management in the areas of quality, safety, environment, safe food production (QMS, HACCP, energy audit), open and closed courses for auditors and representatives of quality management systems, organizing postgraduate studies in the field of systemic quality management, and seminars on the possibilities of obtaining funds for co-financing economic and investment projects) (Oferta dla..., 2023).

In addition, the Świętokrzyskie Centre for Innovation and Technology Transfer has an interesting offer of services for local governments. These include: services in applying for funding from structural funds, expert services in the development of planning documents (e.g. Local Development Strategy for Renewable Energy Sources, Local Development Plan), general consulting services (e.g. preparation of financial analyses) and training services (e.g. systemic management in the areas of quality, safety, environment, open and closed courses) (Oferta dla jednostek..., 2023).

The most important achievements of the Świętokrzyskie Centre for Innovation and Technology Transfer include: the creation of the Advisory Centre for Efficient Use of Energy and Renewable Energy Sources and the Efficient Use of Energy Innovation Circle to provide substantive and technical support to entities, establishing a research laboratory for solid biomass, biogas and biofuels to research and find ways of their efficient energy use, the creation of the Erasmus Program for Young Entrepreneurs to enable the exchange of future and aspiring entrepreneurs and learning from experienced entrepreneurs, obtaining subsidies for entrepreneurs and local government units in the total amount of PLN 330,000,000.00, the construction of an autonomous house for the purposes of energy efficiency research for the development of the Świętokrzyskie region, and strengthening the connections of the R&D sphere with enterprises in the Świętokrzyskie Province by establishing cooperation between business environment institutions and universities (Nasze..., 2023).

6. An example of inter-organizational cooperation between health care institutions, science and local government: Collegium Medicum

The Collegium Medicum operates under the Jan Kochanowski University of Kielce, which was established in 2011 in the city of Kielce. Originally, from 1969, the university operated as the Teacher Training College. In the following years, it underwent numerous transformations; in 2008, it was recognized as an adjectival university, and then a classical university in 2011. Jan Kochanowski has been the patron of the university since 1979. The university offers education in 50 fields of study and nearly 150 specializations in almost all scientific fields, including humanities, social sciences, medical and health sciences, exact and natural sciences, and art. The university's educational offer is successively expanded with new proposals for fields of study that meet the needs of the modern labour market. In recent years, several fields of study that are very popular among young people have been introduced, such as law, psychology, applied criminology, cosmetology, dietetics, data engineering, social communication, and medicine – in Polish and English (English Division). One of the new fields of study in the 2019/2020 academic year is general speech therapy. The university offers doctoral studies in 10 fields, with nearly 300 doctoral students enrolled currently (50 lat uczelni, 2023). The university offers education in 58 fields of study across 6 faculties, in almost all scientific fields, including humanities, social sciences, medical and health sciences, exact and natural sciences, and art (Uczelnia w liczbach, 2023). In September 2019, the Jan Kochanowski University became a signatory of the University Social Responsibility Declaration. University Social Responsibility (USR) is defined as a strategic and systemic approach to university management and building cooperation and dialogue with stakeholders that will contribute to sustainable development, shaping the values and attitudes of civil society, supporting academic values and creating new ideas, and developing scientific and teaching competences to influence the effectiveness of operations and innovation. The USR is a voluntary activity that goes beyond the obligations arising from legal provisions. It means greater openness of internal stakeholders (students, employees) and external stakeholders (local community, local authorities, entrepreneurs, graduates, non-governmental organizations, etc.) to promoting the idea of sustainable development and social responsibility in educational programs, scientific research and management and organizational solutions of universities (Społeczna..., 2023).

The Collegium Medicum was originally established in 2005 as the Faculty of Medicine and Health Sciences. It consists of the Institute of Medical Sciences and the Institute of Health Sciences. The Institute of Medical Sciences was established in 2015 within the structure of the Jan Kochanowski University in Kielce, Faculty of Medicine and Health Sciences, and is currently part of the Collegium Medicum. The Institute of Medical Sciences has been providing medical education in Polish since the 2015/2016 academic year and in English since 2016/2017 (O Instytucie..., 2023).

The development of practical skills for the medical field is possible thanks to the Medical Simulation Centre financed under the project called “MEDICUS - medical simulation centre of the Jan Kochanowski University” no. POWR.05.03.00-00-0004/18 implemented by the Jan Kochanowski University of Kielce (O Instytucie..., 2023). Clinical education in medicine is carried out in cooperation with the Provincial Hospital in Kielce, the Świętokrzyskie Oncology Centre, the Provincial Specialist Hospital of St. Raphael in Czerwona Góra, the Saint John Paul II Hospital of the Ministry of Interior and Administration in Kielce, the Kielce Hospital of Saint Alexander in Kielce, the Świętokrzyskie Centre for Psychiatry in Morawica, the Specialist Hospital of the Holy Spirit in Sandomierz, the Świętokrzyskie Mother and Newborn Centre in Kielce, as well as facilities providing outpatient specialist care and primary health care. The above-mentioned units provide facilities for the education and scientific development of medical studies. Employees of the Institute of Medical Sciences and medical students have thus gained access to a modern teaching and research base (O Instytucie..., 2023).

The history of the Institute of Health Sciences dates back to 2001, when, in cooperation with the authorities of the then Świętokrzyska Academy, within the structures of the Faculty of Pedagogy and Health Sciences, the Institute of Medical Education was established. By decision of the Minister of National Education of 29 September 2005, the Faculty of Health Sciences was established at the Świętokrzyska Academy with three Institutes: the Institute of Nursing and Midwifery, the Institute of Physiotherapy, and the Institute of Public Health.

The Institute of Health Sciences currently operating within the Collegium Medicum structure was established in 2019 by merging these Institutes. The Institute of Health Sciences educates nurses, midwives, paramedics, physiotherapists, dietitians, cosmetologists and specialists in physical education and public health. Employees and students have access to modern premises, equipped with specialized equipment, laboratories and medical simulation rooms. Practical education of students takes place, among other facilities, in the Monoprofile Medical Simulation Centre with high-fidelity nursing and midwifery laboratories, the Posturology Laboratory and the Nutrition Planning and Dietetics Laboratory (O Instytucie..., 2023).

The Collegium Medicum implements projects financed by the European Union. Its currently ongoing projects include: MEDICUS, MEDPAT, Nowe Perspektywy, Okno Na Świat, and RID (Regional Excellence Initiative for Science and Health) (Projekty w realizacji, 2023). The most important projects completed include: Absolwent dla regionu, MEDIC, MEDREH, Operacja STAŻ, SONAR, and SIMED (Projekty w zrealizowane, 2023).

7. Conclusion

The analysis and evaluation of the presented case studies give answers to the questions posed in the article and provide knowledge about the possibilities of developing and managing inter-organizational cooperation initiatives in the world of science, culture, art, health care and business while maintaining ethical principles. Promoting the achievements of science, culture, art and business favours inter-organizational cooperation carried out by local authorities as leaders of change, builds local initiatives and popularizes their activities. Creating a climate of inter-organizational cooperation, promoting local achievements, institutions, and supporting change leaders helps develop peaceful solutions to local problems, promote innovation, and create an information society that develops inter-organizational relations using the latest knowledge and technology in a climate of tolerance and promoting ethical behaviour in business. Building lasting inter-organizational relationships in an atmosphere of cooperation promotes the development of regions. Competitive strategies based on peaceful forms of cooperation, promoting innovation, and supporting local change leaders contribute to the promotion of culture, art, business and sports, as well as satisfying the needs of local societies and increasing the competitiveness of the region. Such activities influence the assessment of the effectiveness and efficiency of the region's managers, who carry out their tasks in line with the challenges of the 21st century and the needs of local society.

Managing the region in the aspect of building inter-organizational cooperation brings many benefits, added values and synergistic effects that promote the region:

- popularization of science, culture, art, sports and business activities,
- promotion of local initiatives to support inter-organizational cooperation,
- promotion of local activities in the region,
- creating lasting bonds with the environment, influencing the environment, shaping trends in the development of cooperation by strengthening and maintaining relationships between entrepreneurs, science, associations and local governments,
- development of relationship marketing, seeking direct contacts between participants of the informal group of the Kielce Science Festival,
- creating an emotional bond and continuous cooperation for greater understanding and increasing the benefits related to the exchange of experiences in the fields of science, business and activities for enterprises,
- development of participants' intellectual capital, transfer of knowledge through conferences, seminars, lectures, workshops, trips,
- development of social capital – promoting basic values such as loyalty and integrity, the need for continuous education and improvement of participants in the life of an integrated society, taking advantage of cultural and educational offers,

- “learning through play” – promoting learning in interesting and engaging ways, experiences and experiments, developing the habit of learning,
- a wide scale of promotion of science, culture and art,
- fostering and building interpersonal and inter-organizational contacts,
- eliminating discriminatory behaviour, antagonisms, social conflicts,
- building inter-organizational cooperation and “business angels” society to support science, culture and art,
- promoting training and scientific initiatives,
- presenting contemporary achievements of science, culture, art and sports to the local society,
- creating a climate of inter-organizational cooperation,
- teaching how to take advantage of opportunities, shared experiences and knowledge,
- transfer of knowledge and shaping refined tastes of local society, which will choose higher culture and art instead of cheap entertainment,
- creating opportunities to exchange views and have debates and discussions on the management of the region and the role of science, culture and art,
- Kielce Science Festival as an instrument of communication between business, science, culture, art and local and government administration,
- shaping refined tastes and ethical social behaviour,
- presentation and popularization of the achievements of local scientists, artists, representatives of culture and art,
- creating “talent incubators”, promoting talents in science, culture, art, and local entrepreneurship leaders,
- the opportunity for society to participate in interesting and developing cultural and scientific events,
- shaping the need for learning and self-improvement habits in order to increase the intellectual and social capital of the region’s inhabitants,
- development of lasting forms of inter-organizational cooperation between science, business, culture and local government,
- bringing the achievements of science, culture and art closer to society in an accessible form,
- developing good habits and higher needs, sensitizing society to manifestations of intolerance and discrimination,
- developing attitudes of continuous intellectual development and habits of using and appreciating the achievements of science, culture and art.

Modern regional management in the aspect of building inter-organizational relations becomes an effective tool for peaceful resolution of conflicts and socio-economic problems and the implementation of strategies for the well-being of residents if the basis for the activities of local authorities, science, business and culture is the inter-organizational cooperation for the

promotion of local initiatives. The region's managers will achieve competitive success if they develop entrepreneurial behaviour in the local society aimed at implementing interregional cooperation and developing inter-organizational relationships in the fields of business, science, culture and art. The inter-organizational cooperation initiatives analysed in the article influence the development of lasting inter-organizational relationships, which build a lasting competitive advantage of the region in terms of joint problem solving and building a strong bond to support the development of innovation, science, culture, art and business.

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