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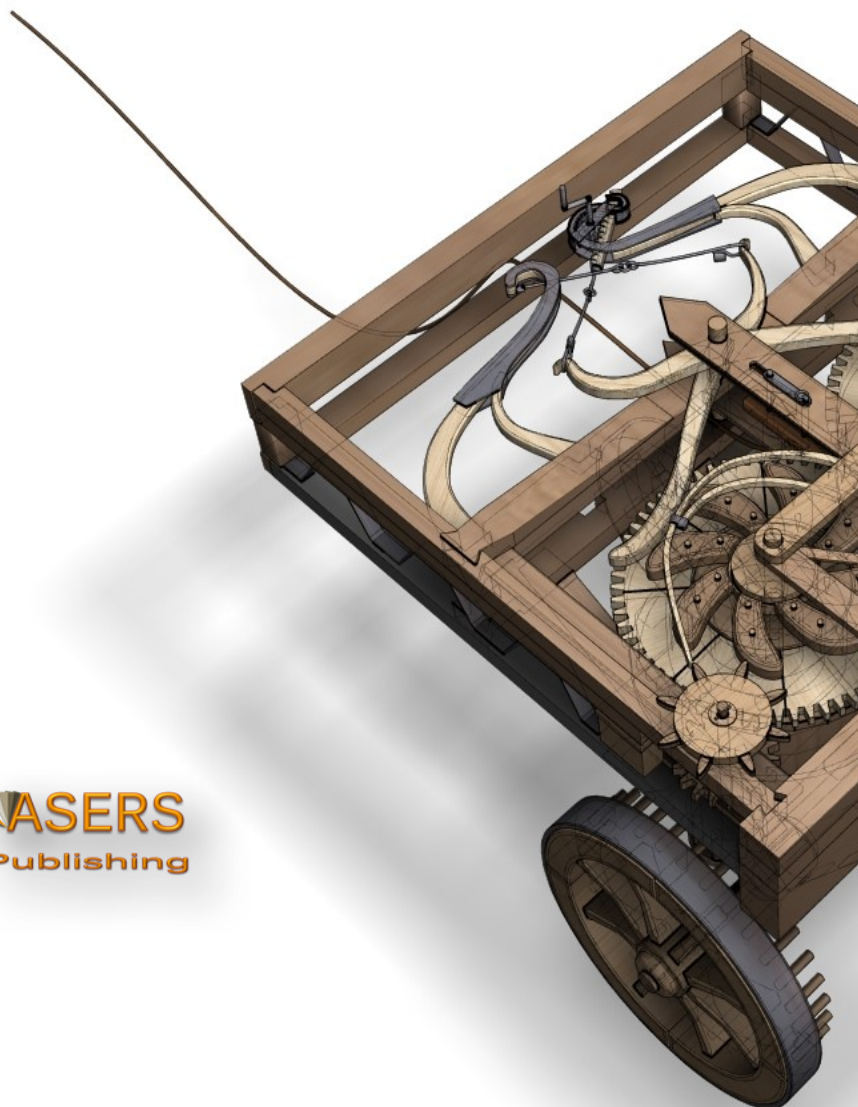
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Implementation of the Provisions of the Cluster Theory into the Accounting System: Genesis and Evolution

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Abstract: *In current economic conditions, a large number of enterprises carry out their activities by joining into network (cluster) structures, which is one of the means of improving competitive relations in the external environment. To ensure the integration of the interests of participants in network structures by increasing the coordination and controllability of interactions, a significant place is given to the accounting system as the main source of information. The article aims to study the theoretical and methodological foundations of implementing the cluster economy concept in the accounting system. The methodological basis is the fundamental provisions of modern economic institutional theory and scientific works of scientists. As a result of the research, it was possible to analyze the historical aspects of the development of accounting support for managing cluster structures. The areas of development of accounting based on the provisions of economic theory and taking into account the specific features of cluster structures are identified and substantiated.*

Keywords: cluster; network; economic theory; institutional theory; accounting.

JEL Classification: O17; P30; M41.

Introduction

In connection with the global financial crisis, the consequences of the COVID-19 pandemic and military actions in Ukraine in recent years, the issues of restoring and increasing the competitiveness of the national economy have become important. Taking into account the strengthening of the processes of globalization and competition in the

world economy, objective prerequisites for Ukraine arose and the need to change the paradigm of competitiveness management, which consists of the rejection of traditional industrial policy and the transition to cluster policy. The cluster model of economic development is considered by many scientists as a tool for sustainable development and increased competitiveness due to the synergistic effect, the basis of which is the quality and optimal combination of elements included in the system, and the effectiveness of their interaction.

The purpose of the article is to study the issues of implementing the provisions of the cluster theory into the accounting system. The structure of the work is as follows: Chapter 2 discusses the theoretical foundations of this study. The methodology of the research is given in Chapter 3. The identified and worked-out results are described in Chapter 4. In Chapter 5 there is a discussion of the main results of the work.

1. Theoretical Background

1.1. Emergence and Approaches to the Classification of Cluster Economic Theory

To study the theoretical and methodological foundations, it is advisable to consider the main theories that became the basis of the formation of the cluster model of the national economy. The concept of national, state and local competitiveness in the context of the world economy, in which economic clusters play a key role in creating competitive advantages, was most fully and clearly described by Prof. Harvard Business School M. Porter. He owns the basic definition of a cluster as a group of geographically adjacent, interconnected companies (suppliers, manufacturers, etc.) and related organizations (educational institutions, public administration bodies, infrastructure companies) operating in defined areas and complementing each other (Porter 1998). The American scientist M. Enright, who notes in his research that competitive advantages are created at the regional level, and not at the supranational or national level, concludes that regional clusters exist, which is an industrial clusters in which participating firms are in close relationship connection (Enright 2003).

After the theoretical justification by M. Porter and M. Enright, the cluster model of economic development became widespread and is used in civilized countries of the world as an effective tool for increasing competitiveness. "Being essentially a meta-theory, that is, a theory of a higher order, the cluster theory initially had an extremely eclectic, fragmentary, mosaic character" (Sheikin 2016). However, it is worth noting that in recent decades the theory of clusters has undergone certain metamorphoses under the influence of economic theories. Thus, Karapetyan and Kvasovskyi (2014), studying cluster theories in chronological order, indicate that "the modern concept of clusters has absorbed the achievements of numerous theoretical approaches, simultaneously acting as an "umbrella" model that creates a coordinate system and a common basis for many more specialized scientific studies". Pankova (2019) conducted fundamental studies of the evolution of the theory of clusters in the directions of economic thought, and identified the following four stages: 1. The stage of formation of the fundamental theoretical and methodological foundations of the theory of clusters (XIX century – beginning of the XX century); 2. The stage of systematic development and specialization of scientific theories and concepts in the context of the formation of the theory of clusters (50-80s of XX century); 3. The stage of formation of the basic principles of the theory and concept of cluster development (80-90s of XX century); 4. The stage of cross-paradigm synthesis of modern features of cluster theory (the 90s of the XX century – the beginning of the XXI century).

The scientific literature (Kyzym 2011) singles out five main classical scientific schools that made the greatest contribution to the theory of spatial economy and are the basis of the cluster approach in the industrial policy of the countries of the world, namely:

- the German School of production placement (Tunen I., Laungardt V., Weber A., Kristaller V., Lösch A.);
- theory of English industrial districts (Marshall A.) and Italian industrial districts (Becattini J.);
- the French school of poles of growth and competitiveness (Perroux F., Boudville J., Pothier P., Aglietta M., Boyer R.);
- the American "centre-periphery" model (Friedman J.);
- Soviet School of territorial and production complexes (Aleksandrov I., Kolosovsky M., Bandman M., Sauskin Yu., Palamarchuk M., Baranovsky M.).

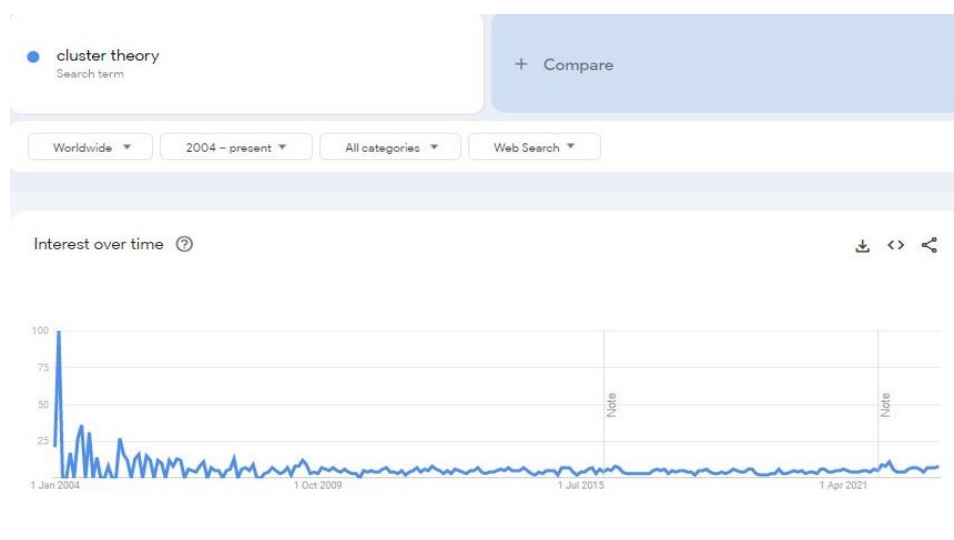
A slightly different opinion is held by Karpenko *et al.* (2021) noting that the following theories are the most important: regional specialization (Smith A., Ricardo D., etc.); location of production (Tunen J., Launhardt V., Weber A., Loesch A., etc.); industrial districts (Marshall A.); cumulative growth (Perru F., Boudville J.-R., Potier P., Myrdal G., etc.); innovative (Schumpeter Y.); economic zoning and territorial production complexes (Kolosovsky M.); industrial districts (Bocattini J.); network (White H., Granovetter M. and others).

Rybak (2012) presented a classification of cluster theories, which allowed the author to distinguish the main scientific schools and historical stages in their development: the 1st stage, the French-Italian school (Perrou F., Tolenado I., Saulier D., May D., Becattini J.); 2nd stage, American and British schools (Marcusen E., Porter M., Enright M., Rosenfeld S., Maskell P., Hart D., Delgado M.), 3rd stage, European and Scandinavian schools (Solvel O., Ketelz K., Petrin T.).

The current stage of cluster theory formation (which began after 2000 years) was associated with the growth of globalization and the transition to an innovative model of economic development. This has led to the emergence of a number of studies on the role of clusters in the process of economic growth by creating an environment conducive to the creation and commercialization of innovations (Vysochan *et al.* 2021; Vysochan *et al.* 2022b; Kyriazis and Metaxas, 2023; Kulyniak *et al.* 2022).

To track the dynamics of the popularity of the term “cluster theory” (cluster theory), a public web application of the Google Corporation – the Google Trends tool – was used. The results of the analysis are shown in Figure 1.

Figure 1. Search results in Google Trends by keyword cluster theory for 2004-2023



Source: generated by the authors using Google Trends (<https://trends.google.com/trends/explore?date=all&q=cluster%20theory&hl=en-GB>)

As can be seen from Figure 1 volume for this search query in this topic is quite unstable, and the biggest peak fell in the late 90s – early 2000s, which is associated with the rapid development of this concept. Since 2010, the trend has started to decline and the popularity of using the term has decreased somewhat, but in the last few years, this trend has changed radically, indicating that this topic remains relevant in the future.

1.2. The Practice of Introducing the Concept of Cluster Economy in Ukraine

Analyzing the domestic experience of applying the cluster approach, it should be noted that starting from 2003, the Cabinet of Ministers of Ukraine adopted several normative legal acts, which deal with the expediency of clustering the economy of the country and its regions. In particular, the draft order of the Cabinet of Ministers of Ukraine “On approval of the concept of creating clusters in Ukraine” (2008) was presented, in which regional production clusters were considered as a basis for increasing the competitiveness of the national economy. The need to accelerate cluster development is outlined in the Project of the national cluster development program until 2027. In several other Resolutions of the Cabinet of Ministers of Ukraine, which related to the state development of industry, the strategy of regional development and the economic target program, the creation of innovation clusters was also provided for. However, such efforts remained unsystematic, and as a result, the implementation of the cluster approach in Ukraine became fruitless (Hyk *et al.* 2022a). Despite this, there are attempts to independently identify and structure clusters in some regions of the country.

In recent years, an active transition to the introduction of cluster policy and the formation of a modern competitive economy has been observed in Ukraine. Several indicators reflecting economic, political and social factors are used to assess the level of competitiveness of a country's economy (Hyk *et al.* 2022b). To establish the place and role of the country in the global economic space, and to establish the competitiveness of the

national economy in the world, several ratings have been developed. The results of monitoring the positioning of Ukraine in the ranking among the countries of the world in the period 2020-2022 by separate indices are shown in the table 1.

Table 1. Place of Ukraine among the countries of the world according to individual indices in the context of the cluster model of economic development

Index name	Index value (place)		
	2020 year	2021 year	2022 year
The Global Sustainable Competitiveness Index	46.7 (76/180)	45.8 (79/180)	46.9 (49/180)
Network Readiness Index	49.43 (76/134)	55.70 (53/130)	55.71 (50/131)
Global Innovation Index	36.32 (45/132)	35.6 (49/132)	31.0 (57/132)
Transitions performance index. Towards fair and prosperous sustainability	48.50 (64/72)	48.51 (64/72)	There is no information

Source: generated by the authors based on [*<https://solability.com/the-global-sustainable-competitiveness-index/downloads>; **<https://networkreadinessindex.org/>; ***https://www.wipo.int/global_innovation_index/en/; ****<https://op.europa.eu/en/publication-detail/-/publication/50fff167-a34e-11ec-83e1-01aa75ed71a1/language-en>].

From the data in the table 1 shows that although the value of the Global Sustainable Competitiveness Index of Ukraine has practically not changed, in 2022 it has risen in the rating by 17 positions. Positive dynamics are also observed according to the Network Readiness Index, which characterizes the level of development of information and communication technologies and the network economy in the countries of the world. According to this comprehensive indicator, Ukraine rose both in absolute terms and in terms of position (26 steps higher than in 2020).

In the Global Innovation Index Report in 2022, Ukraine took 57th place among 132 countries in the world and worsened its position compared to previous years (Hyk, 2021). The dynamics of indicators according to the Global Innovation Index allow us to conclude the lack of active support of innovation policy by the state.

According to the Transitions performance index. Towards fair and prosperous sustainability, which measures the effectiveness of countries at four stages of transition: economic, social, environmental and managerial, Ukraine remains in an unchanged position.

In general, according to the above indices, Ukraine managed to maintain its position or improve in some ratings, but these fluctuations were insignificant. Among the main problems and challenges facing Ukraine are the large-scale invasion of Russia and overcoming the consequences of the COVID-19 pandemic. In such conditions, one of the drivers of growth and countering crisis phenomena is the implementation of the cluster model of economic development.

2. Research Method

The research was carried out based on a systematic approach to the knowledge of the theoretical and methodological foundations of the cluster model of the development of accounting with the use of general scientific and special principles and methods (scientific abstraction – to understand problematic issues and in-depth study of the implementation of the cluster model of the economy in the accounting system, comparative analysis – to identify attributes and main directions, generalization – for systematization of approaches, specification – for characterizing the theoretical toolkit, meaningfulness and formation of the author's proposals for the development of accounting, graphic – for the non-textual display of research results).

3. Result

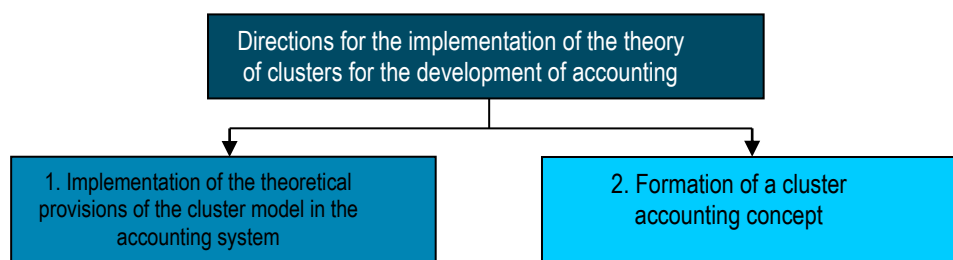
The processes of formation of cluster formations in the economy of Ukraine are caused by the integration of the interests of branch structures and subjects of regional socio-economic development. Cluster associations have great potential for diversification of production and cooperation, and the introduction of innovative products to the market. For the effective implementation of the cluster policy, an important place is given to the accounting system as a source of information for making management decisions. Accounting must reflect the economic processes taking place in the conditions of clustering of the economy of Ukraine.

The following foreign scientists paid attention to the problems of accounting provision of inter-organizational management of cluster structures in their works: Anderson S., Berry A., Broadbent J., Varoutsas E., Ditillo A., Dekker G., Kallio A., Karlsson-Wall M., Kraus K., Kulmal H.I., Lind J., Mahama H., Mouritsen J., Otley D., Revellino S., Scapens W., Tomkins K., Train S., Chapman C.S., Chua W. F., Hakansson H., Hopwood A. G. and other.

In Ukraine, this issue was considered in their works by Vysochan O. S., Gogol M. M., Zhiglei I. V., Zhuk V. M., Kireytsev H. G., Levina M. V., Legenchuk S. F., Pylypenko A. A., Sadovska I. B., Semenyshena N. V., Slozko T. M., Struk N. S., Yukhymenko-Nazaruk I. A. and others. However, despite the considerable interest and relevance of this issue, it is worth noting that there are currently no comprehensive studies and a clear mechanism for practical implementation. Therefore, there is an objective need to study the possibilities and directions of implementation of the concept of economic clustering through the accounting system.

Based on the results of researching the scientific literature, it is possible to single out the following areas of implementation of the theory of clusters for the development of accounting (Figure 2).

Figure 2. Directions for the implementation of the theory of clusters for the development of accounting



Source: generated by the authors

1. Implementation of the theoretical provisions of the cluster model in the accounting system.

Accounting is closely related to various classical sciences and theories. As Bondar (2010) noted at one time, "... the science of accounting must function in a close relationship with other economic theories and teachings".

Inclusion in the accounting theory of the provisions of the cluster model of economic development must be carried out taking into account its specific features:

a) *geographical concentration and proximity of associations of enterprises that carry out joint financial and economic activities.*

A significant contribution to the foundation of the theory of clusters was the research of Marshall (1920), published in the book "Principles of economics". He claimed that groups of small and medium-sized enterprises, provided they are geographically located in one "industrial district", will be more efficient and lead to better economic development.

The foundation of the theory of the new economic geography was laid by the Nobel laureate in Economics Krugman (1991) in the work "Increasing returns and economic geography". The basis of this theory is the concept of regional development "core-periphery", according to the provisions of which network interactions between individual individuals and firms accelerate the introduction of innovations and lead to the development of a colossal economic agglomeration. Further development of the provisions of the concept found its continuation in the theory of Ellison and Glaeser (1999) about the "natural advantages" of geographical concentration. The combination of geographic and organizational concentration as a tool for increasing joint activity in the cluster is substantiated in the theory of economic proximity by Torre (2006). He modelled the so-called "ideal cluster", the key characteristic of which is the presence of geographical and organizational proximity of the participants.

An overview of the theory of agglomeration and clusters in different spatial contexts is thoroughly described in the work Handbook of Research on Cluster Theory under the scientific supervision of Karlsson (2008).

Enterprises united in a cluster receive competitive advantages from joint activities while maintaining their autonomy. The OECD Principles of Corporate Governance (2015) can be considered the theoretical basis for the formation of a cluster association of enterprises. The paradigmatic attitudes of these principles regarding the formation of the theory of clusters are that the corporate governance system should take into account not only the interests of the cluster itself but also the interests of other counterparties of the corporation.

The association of enterprises in clusters form a characteristic economic space with the purpose of exchange of accounting information, free movement of capital and human resources and performing the functions of structural elements of the global system. Separate issues of corporate accounting in clusters were reflected in the work of Pylypenko (2012), who substantiated the approach to reflexive management of cluster development, focusing on the use of consolidated accounting information of cluster participants, and Sadchenko

and Gogol (2010) proposed approaches to improving management accounting in conditions of vertical integration and clustering of business.

b) the social nature of the network form of interaction and partnership relations between cluster participants.

Networks take the form of a variety of dyadic and more complex relationships and encompass several different inter-organizational relationships, such as joint ventures, strategic alliances, research consortia, and clusters. The network form of business organization is described in the theory of information society by sociologist Castells (2010). Cluster-type network structures can efficiently process information, implement innovations and generate new knowledge. Gordon and MacCann (2000) proposed a “social network” model, according to which clusters are represented by stable local networks, in which interaction within the established institutional environment is carried out based on interpersonal and trusting relationships.

Many scientists (Etzkowitz, 2002; Voynarenko, 2008; Ulyanchenko, 2010; Gordon and MacCann, 2000; Sokolenko, 2004; Castells, 2010; Issabekov *et al.* 2022) think that the synergistic effect of clusters is realized thanks to the interaction of three leading institutional components – science (universities), business and authorities (Figure 3).

Figure 3. The social model of the triple spiral according to Etzkowitz (2002)



Source: Etzkowitz (2002)

Later, this cooperation mechanism was described by sociologists as a triple helix model (“Triple Helix Model”), which consists in the fact that the areas of the functional sphere of the intersection of three sectors become a universal institutional matrix and ensure the dynamic development of the cluster.

Interpersonal relationships are also described in the cluster model according to Storper and Venables (2003). Face-to-face contacts help to communicate more effectively, solve problems of stimulation, activation of socialization and training. In the clusters, a process occurs, which they denoted by the term “buzz”.

A significant contribution to modern cluster theory was made by García-Villaverde *et al.* (2018), proposing a cross-organizational approach to contextualizing and understanding the relationship between structural social capital and knowledge acquisition. The authors analyze how firms can gain valuable knowledge from their networks inside and outside clusters.

Cluster studies by Ukrainian scientists were primarily carried out in the context of regional development and business management and network cooperation. Thus, the basic conditions for the formation and vital activity of clusters are defined by Voynarenko (2008) in the “5I” concept, according to which the main factors for the functioning of clusters are defined as initiative, innovation, information, integration and interest. Ulyanchenko (2010) proposed the concept of clusters, which is built on the creation of conditions for the sustainable development of regions and the coordination of interests of all its participants.

Accounting should be a component of the cluster management system, the essence of which is the coordination and optimal distribution of information between its participants. The theoretical and methodological foundations of accounting for network interactions and the concept of network accounting are described in the work of Yukhymenko-Nazaruk (2017).

Therefore, the use of the provisions of the cluster economy in accounting forms and activates the mechanism of coordination and coordination of the interests of regional business, science and the state, which is the basis of the successful development of regions due to the achievement of a significant multiplier, synergistic effect and the solution of significant socio-economic tasks.

c) availability of scientific infrastructure and innovative orientation.

The theory of economic development based on the formation of innovation clusters was developed by economists Audretsch and Feldman (2004). Combining into innovation clusters leads to the generation and

transfer of new knowledge between firms and industries. Hamdouch (2007) emphasizes the inter-organizational and interpersonal relations between the participants of the innovation cluster, which help to achieve different types of innovations in a certain field.

The cluster model of development as a factor of increasing competitiveness is a characteristic feature of the modern innovative economy. In recent years, due to the growing role and importance of innovations, the term “innovation cluster” has been singled out in the economic literature. In particular, according to the definition of the Community Framework for State Aid for Research and Development and Innovation EU (2006), “an innovation cluster is a group of independent enterprises – innovative start-ups, small, medium and large enterprises, as well as research organizations that operate in a certain industry and region and are intended to stimulate innovative activity through intensive interaction, joint use of capacities and exchange of knowledge and competences, ensuring contribution to the transfer of technologies, creation of networks and dissemination of information between cluster subjects”.

The relationship between the cluster theory and the modern teachings of innovative development was described in the concept of “blocks of development” by Dahmen (1988), which can be considered a prototype of modern innovative clusters; Lundvall (2010) theories of the “learning economy” and the national innovation system; theories of the regional innovation system Asheim and Isaksen (1996); models of cluster competitiveness “buzz-and-pipeline” Bathelt *et al.* (2004) on mutual exchange of information in the local environment and establishment of global channels of knowledge between cluster participants; theories of Sölvell (2008) about the relationship between the cluster and social factors (employment, labour productivity); the “multi-cluster” theory of Simmie and Sennett (1999) about the internal characteristics of firms and the capabilities of a large agglomeration, which are critical for successful innovation in a region.

Today, cluster structures are one of the most effective forms of organizing innovation and investment processes. The formation and display of information about innovative activity in the cluster should take place in the accounting system (Vysochan *et al.* 2022a; Hyk *et al.* 2021; Lehenchuk *et al.* 2020). We agree with the opinion of the authors Mehovych and Demydenko (2018) “Accounting functions must be aligned with the goals of the system management of innovative activities in the cluster and cover all the various spheres of activity of the cluster member enterprises”.

d) reduction of costs associated with the organization of the entrepreneurial process.

The formation of a cluster reduces the transaction costs of its participants. The founder of the theory of transaction costs is the Nobel laureate in economics Coase (1988), who in the work “The Nature of the Firm” formulated the existence of transaction costs, the reduction of which is influenced by the presence of an organization and vertical integration. Reduction of transaction costs is possible due to the joint use of information and application of standard contracts. By combining enterprises into clusters, it is possible to reduce the costs of searching for information, searching for partners and concluding contracts, protecting property rights, and opportunistic behaviour.

The use of the provisions of the theory of transaction costs has left its “imprint” on the accounting system. Thus, Levina (2015) analyzed the current state of the clustering of hotel enterprises and proposed a methodology for forming an accounting policy regarding the transaction costs of a hotel cluster. The improvement of the mechanism of strategic management cost accounting of enterprises in the conditions of economic clustering in Ukraine is presented in the work of Glasov (2020).

Thus, it can be stated that the formation of the cluster theory of accounting took place under the influence of classical economic theories. The theory of clusters emerged at the intersection of research on spatial (including regional) economics on the one hand, and innovation economics on the other. The cluster approach in economics represents a synthesis of several directions, including local industrial specialization, spatial economic agglomeration and regional development, institutional theory and the position of strategic management (Vysochan *et al.* 2021). That is, having a generalizing character, the cluster theory of accounting organically “absorbed” various elements of alternative concepts.

2. Formation of a cluster concept of accounting.

In recent years, organizations have shown increased interest in the collaboration that crosses company boundaries through the creation of new organizational forms, such as strategic alliances, partnerships, joint ventures, outsourcing and networks, and clusters. This event posed new challenges to accounting and prompted scientists to study this issue and expand the scope of research.

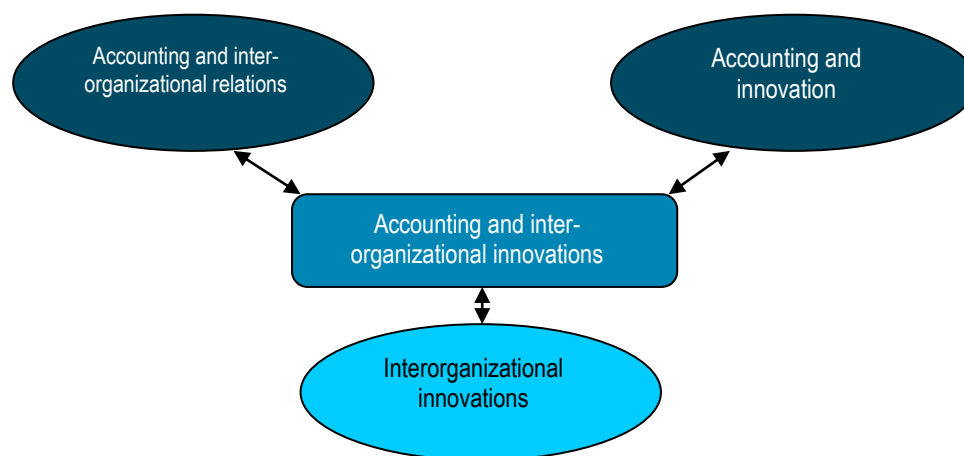
In the mid-1990s, several accounting scholars emphasized the importance of expanding the field of accounting beyond the traditional boundaries of the firm. Two important contributions were by Hopwood (1996)

and Otley *et al.* (1995). Hopwood (1996) emphasized that historically accounting was concerned with managing vertical relationships within firms and its key functions were to create firm boundaries and reinforce organizational hierarchies. This historical picture of accounting's vertical focus contrasts with contemporary and often contradictory changes in organizational arrangements between firms, such as outsourcing, which emphasize horizontal relationships between legally independent firms rather than vertical activities within firms Otley *et al.* (1995).

In the future, the formation of the cluster concept of accounting was studied in the following works: Chapman (1998) on the involvement of accounting in the coordination of network activities; Tomkins (2001) on the interaction between trust and accounting information in the context of inter-organizational relations; Håkansson and Lind (2004) on accounting and classical forms of hierarchy coordination; Mouritsen and Thrane (2006) on accounting, management control and inter-organizational relations; Kulmala (2002) on Open-Book Accounting in Networks and others.

An interesting view of this problem is presented in the work under the scientific supervision of Carlsson-Wall (2018), in which accounting research is correlated with innovations and inter-organizational relations in this form (Figure 4).

Figure 4. Correlation of accounting with innovation and inter-organizational relations according to Carlsson-Wall (2018)



Source: Carlsson-Wall (2018)

In the upper left corner, the authors cite the literature on “accounting and inter-organizational relations”, when accounting scholars began to pay more attention to various forms of inter-organizational arrangements, such as strategic partnerships, alliances, outsourcing relationships, and joint ventures.

In the upper right corner, the authors note that accounting affects decision-making regarding the implementation of innovative projects. Thus, Mouritsen *et al.* (2009) describe how accounting affects intra- and inter-organizational innovation processes, and Revellino and Mouritsen (2009) outline how different forms of accounting were part of the coordination of the inter-organizational innovation process in the development of the Italian company Autostrade's Telepass system. It is important to note that an important contribution to the literature on “inter-organizational innovation” was the emphasis on the unpredictable and interactive nature of the innovation process.

The first work that comprehensively covered the new issue of accounting and control in horizontal relations between legally independent organizations was the book “Accounting in Networks” by Håkansson *et al.* (2010). Central to this book were the various theoretical perspectives presented in chapters covering economics perspectives and transaction cost accounting (Anderson, S. and Dekker, H.), accounting and industrial network approaches (Håkansson, H., Kraus, K., and Lind, J.), the theory of the network of “actors” and the study of inter-organizational network relations (Mouritsen Y., Mahama H., and Chua V.F.) and perspectives of the institutional theory of accounting in inter-organizational relations (Skapens R. V. and Varoutsas E.).

The last decade is characterized by the increased development of complex business networks, which pose new challenges for accounting. Kireytsev (2011) emphasized the need to create an appropriate accounting system: “The activity of enterprises as components of clusters requires the creation of new management accounting systems. These should be systems of adaptive orientation and satisfy the informational needs of management at the local and regional levels.” A similar opinion was held by Vysochan (2016), who researched establishing the content of creating the concept of cluster accounting.

Creating a management system in the cluster involves streamlining processes to achieve a high level of socio-economic development and increase the competitiveness of the integrated structure. The management system of cluster associations in modern conditions requires the use of new perspective approaches with functional aspects of management to formulate the mission and development strategies. The effectiveness of the management system in the cluster largely depends on information support, an important element of which is accounting. Account information, which is part of the information support of the management system, is an array of data necessary for users to make management decisions.

The new global economy formed in recent years has led to the emergence of accounting, capable of generating data and providing information interaction between economic entities on the one hand, and the other hand providing the maximum level of accounting efficiency within corporate interconnected networks with a high level of commercial security. In addition, significant changes are currently taking place in the internal and external economic environment of the functioning of enterprises, which determines the need to improve the accounting system.

Conclusions

Thus, all of the above indicates that in modern conditions, cluster associations face the task of creating and effectively using a system of accounting and information support for management and strategic management, which, as a rule, involves significant qualitative changes in the formation of an information field to support the adoption economic decisions. One of the main tasks of accounting is the formation of complete and reliable information about the activities of cluster-type organizations.

In the modern conditions of the formation of a cluster economy, the accounting system is transformed from a source of information for the analysis of the state of economic facts into a complex accounting system of information support to manage an integrated structure. The information purpose of accounting is influenced by global factors, as institutional subjects (regulators of the legal bases of accounting and directly economic subjects) are also included in business integration processes and form relevant accounting and analytical information. Under these conditions, the information mission of accounting changes and becomes interdependent with globalization trends, determining the need for the formation of structured information capable of providing real assistance in making strategic and operational economic decisions.

The conducted research is the initial stage of the process of the theoretical and conceptual development of the accounting and information structure of the management system in the cluster. The following studies will be directed to the development of the fundamental principles of the institutional concept of accounting in the cluster.

Credit Authorship Contribution Statement

Oleh Vysochan: Conceptualization, Methodology, Supervision, Writing – original draft.

Natalia Stanasiuk: Investigation, Validation, Writing – original draft.

Svitlana Honchar: Investigation, Validation, Writing – review and editing.

Vasyl Hyk: Conceptualization, Methodology, Project administration, Writing – original draft.

Olha Vysochan: Methodology, Visualization, Writing – review and editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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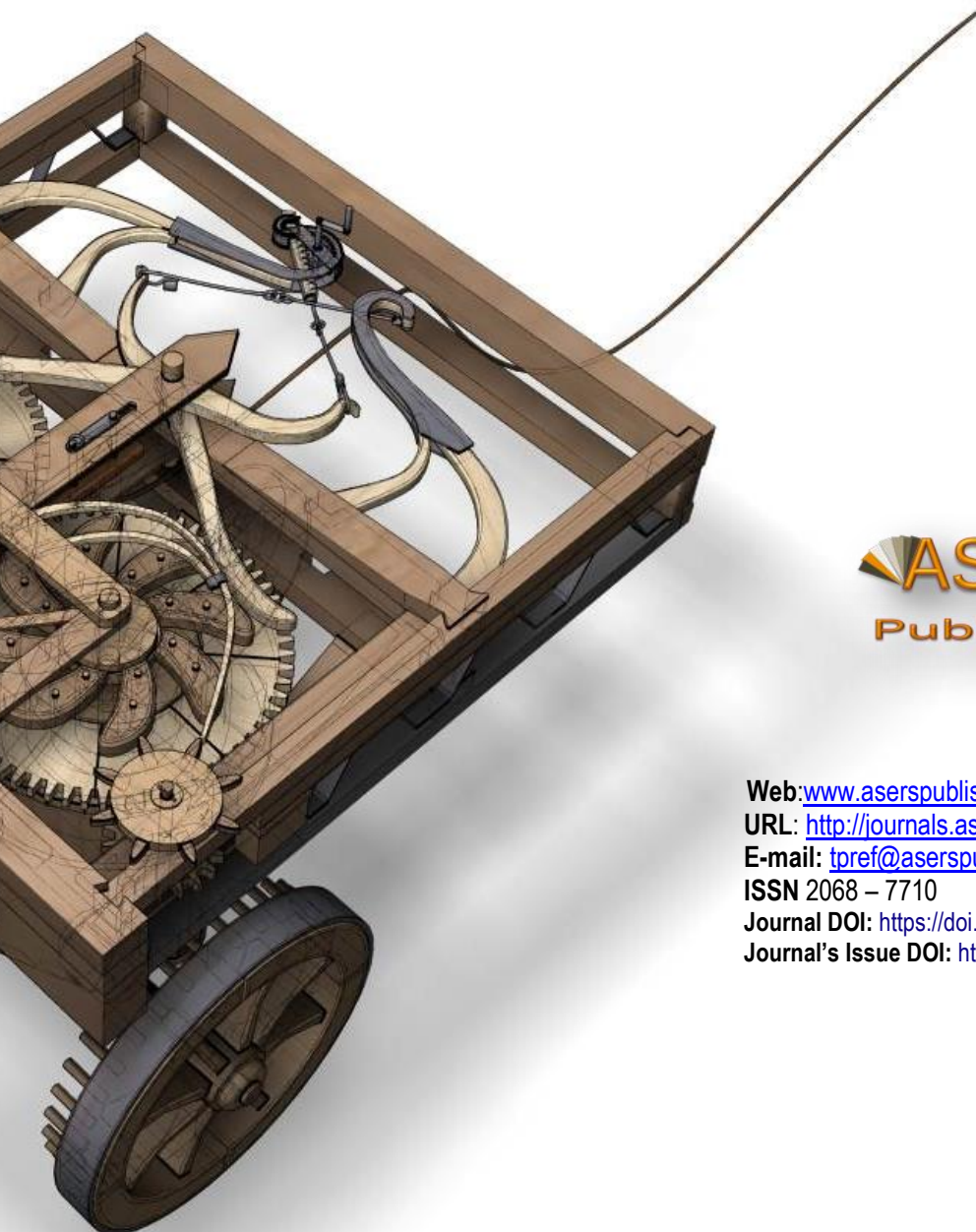
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