INTRODUCTION. The architecture of an integrated structure as an organizational and economic form is a set of individual elements organized into a single system by production-technical and financial connections, the specific meaning of which is reflected through specific forms of integration. In terms of business organization, integrated business structures are important, usually aimed at obtaining income, maximizing capital and directing it to the financial and economic goals of such structures.

RESEARCH METHODS. The research used methods of comparative analysis and synthesis, induction and deduction, monitoring of international best practices in the field of managing the development of the potential of cluster integrated business structures.

THE HYPOTHESIS OF THE RESEARCH is that based on the channelization of the best practices of international experience, it is possible to justify the components of the management system for the development of the potential of cluster integrated business structures.

PURPOSE of the article is to study the components of the management system for the development of the potential of cluster business structures.

RESULTS. The theoretical and methodological basis of management systems for developing the potential of cluster integrated business structures has been studied and improved. In general, the system of management of the development of the potential of the KISB is defined as the activity of the purposeful influence of the managing subject of management on the relations between the participants of the cluster regarding the effective generation, distribution and use of the potential of the KISB through the appropriate management mechanism (methodology, structure, techniques, adjustment of business processes) with the aim of accumulating the maximum synergistic effect from such activity and its further transformation into value (material, immaterial) for the end consumer.

KEYWORDS: integration; integrated business structures; management; clustering; cluster mergers of enterprises; cooperation; business partnership.
ОСНОВНІ СКЛАДОВІ СИСТЕМИ УПРАВЛІННЯ РОЗВИТКОМ ПОТЕНЦІАЛУ КЛАСТЕРНИХ ІНТЕГРОВАННИХ СТРУКТУР БІЗНЕСУ

Юрій ГРЕЧИШКІН

ВСТУП. Архітектоніка інтегрованої структури як організаційно-господарської форми являє собою сукупність окремих елементів, організованих у єдину систему за виробничо-технічними і фінансовими зв’язками, певний зміст яких відображається через конкретні форми інтеграції. В аспекті організації підприємництва, важливими є інтегровані структури бізнесу, що спрямовані на отримання доходу, максимізації капіталу та його спрямування на фінансово-економічні цілі таких структур.

МЕТОДИ ДОСЛІДЖЕННЯ. У дослідженні використовувалася методи порівняльного аналізу та синтезу, індукції та дедукції, моніторинг кращих міжнародних практик у сфері управління розвитком потенціалу кластерних інтегрованих структур бізнесу. У загальному вигляді систему управління розвитком потенціалу КІСБ визначено як діяльність із цілеспрямованого впливу керуючого суб’єкта управління на відносини між учасниками кластера щодо ефективного генерування, розподілу та використання потенціалу КІСБ через відповідний mechanіzм управління (методологію, структуру, техніки, налагодження бізнес-процесів) з метою акумулювання максимального синергетичного ефекту від такої діяльності та його подальшого перетворення на цінність (матеріальну, нематеріальну) для кінцевого споживача.

ГІПОТЕЗА ДОСЛІДЖЕННЯ полягає в тому, що на основі каналізу кращих практик міжнародного досвіду можливим є обґрунтування складових системи управління розвитком потенціалу кластерних інтегрованих структур бізнесу.

МЕТОЮ статті є дослідження складових системи управління розвитком потенціалу кластерних структур бізнесу.

РЕЗУЛЬТАТИ. Досліджені та вдосконалено теоретико-методологічний базис систем управління розвитком потенціалу кластерних інтегрованих структур бізнесу. У загальному вигляді систему управління розвитком потенціалу КІСБ визначено як діяльність із цілеспрямованого впливу керуючого суб’єкта управління на відносини між учасниками кластера щодо ефективного генерування, розподілу та використання потенціалу КІСБ через відповідний механізм управління (методологію, структуру, техніки, налагодження бізнес-процесів) з метою акумулювання максимального синергетичного ефекту від такої діяльності та його подальшого перетворення на цінність (матеріальну, нематеріальну) для кінцевого споживача.

КЛЮЧОВІ СЛОВА: інтеграція; інтегровані структури бізнесу; управління; кластеризація; кластерооб’єднанні підприємства; кооперація; бізнес партнерство.
Statement of the problem. The fact that in itself the management of a number of interconnected, but still legally independent enterprises, is a more complex and multifaceted phenomenon than the management of a single organization as a system; taking into account the scientific work of foreign scientists, organizations and institutions on the formation and development of cluster structures, their management (European Commission, 2019; Scheer and Zallinger, 2015; Chen et al., 2022; Negrușa et al., 2014) it seems necessary to define the main components of the management system for the development of the potential of cluster structures.

Analysis of recent studies and the unresolved part of the problem
Domestic and international scientific work on the management system of integrated business structures shows that there is no single approach to its interpretation. Yes, A.A. Pylypenko and I.V. Yaroshenko ISB is defined as "a set of economic agents heterogeneous in composition, each of which has its own unique characteristics, between which there are significant and regular relationships that cause mutually conditioned influence on each other" (Pylypenko and Yaroshenko, 2008, p. 86). Other domestic scientists V.I. Kutsyk, O.V. Gatala and L.L. Kalinichenko see in ISB a combination of structurally disparate economic elements with their own characteristics and stable relationships, which determine the existence of a mutual influence of one element on another, and vice versa (Kutsyk and Gatala, 2014, p. 74; Kalinichenko, 2011). Hanushchak-Efimenko L.M. approaches the interpretation of ISB based on an innovative approach, emphasizing innovativeness as a component of such structures, which is the integration of various types of potentials in order to obtain a synergistic effect and manage the obtained synergistic potential in general (Hanushchak-Efimenko and Kobernyk, 2012).

The aim is a rationale of the components of the management system for the development of the potential of cluster business structures.

Presentation of the main material In general, the system of managing the development of potential (hereafter SURP) of cluster integrated business structures (Fig. 1) can be defined as an activity of the purposeful influence of the managing entity of management (for example, a cluster organization or a cluster council) on the relations between cluster participants regarding the effective generation, distribution and use of the potential of KISB (object of management) through the appropriate management mechanism (methodology, structure, techniques, adjustment of business processes) with the aim of accumulating the maximum synergistic effect from such activity and its subsequent transformation into value (tangible, intangible) for the final consumer (client, cluster participant, community of the region where the cluster structure is located).
Developments in the field of cluster policy and cluster management of the European Commission (Pellegrin et al., 2020), Ukrainian scientists (Klymenko, 2022; Hanushchak-Iefimenko, 2012; Voinarenko, 2011; Voinarenko et al., 2019), we have singled out the key components of the management system for the development of the potential of cluster integrated business structures, which are structured according to individual blocks.

Unit 1. The structure and methodology of the development of the potential of the KISB (management entity and management unit). This block, first of all, is connected with the set of management bodies (management apparatus), the management functions assigned to them, the interrelationships of the management apparatus with the management participants themselves – the management structure, which determines the limit and specifics of the direction of the available resources and capabilities of all subjects of the CISB (potential) to get the most out of the integration.

The management structure depends on the organizational structure of the cluster entity itself. Actually, the organizational structure of the cluster is of central importance, since the rules and formal arrangement of relations regarding the partnership ensure transparency and accountability for the participants of the latter, which forms the basis for trust and successful cooperation, and contributes to the emergence of a kind of "corporate identity". The organizational structure is determined by the legal form (legal status) and the structure of management bodies (competencies and communication channels) (Scheer and Zallinger, 2015, p. 30).

As for the legal form that can significantly limit the use of company resources or, on the contrary, contribute to their better distribution and the
opening of new opportunities through the mechanisms of legal instruments embedded in such a legal form (legislative restrictions, permits, tax norms, benefits, etc.), abroad KISB can be created in the form of associations (non-profit or profitable), private companies, joint-stock companies, hybrid forms (a combination of an association and a private company), foundations. In Ukraine, cluster formations also do not have a clear organizational and legal form of consolidation, however, according to the Economic Code, they can be formed as associations, public associations, unions, other unions, which are not prohibited by law.

If we talk about management bodies (management entities), the participants of KISB usually choose one of three solutions (Fig. 2): or a separate cluster organization is created, which coordinates the actions of the participants with its board, advisory board, and working groups (research by foreign scientists prove that the development of large KISBs takes place more successfully in the presence of a specialized management organization, which is entrusted with the coordination of the activities of participants (Ketels and Protsiv, 2016; Ketels et al., 2013); or a coordination body is formed (without a separate company) – Meetings – which includes the heads of participating enterprises; or a governing body is formed an organization (organ) based on the existing organizational structure of one of the enterprises of the cluster formation (as a rule, such a company belongs to the core of the cluster).

Source: constructed by the author.

Fig. 2. Management structure of cluster integrated business structures
The choice of one or another organizational structure of KISB depends on a number of factors, among which the most significant are: the size of the cluster structure and the scope of its activities; geographical location; technology; relation to the KISB on the part of the managers and the managed; the strategy that will be implemented by the cluster, factors of the external environment.

In addition to the management structure, Block 1 includes the management methodology, which is characterized by set goals, principles, methods, functions, types of construction of organizational management structures. Such a mechanism is essentially the foundation for the formation of a control system (control control unit) within the framework of the KISB SURP (Fig. 3).

The following can be attributed to the general principles of building management structures for the development of the potential of KISB:

- the management structure should be built in such a way as to ensure accurate, quick, effective achievement of goals with the least expenditure of labor, material and financial resources.

- the formation of management structures should be aimed at the concentration of homogeneous types of management activities, the elimination of multi-levels and the elimination of redundant management links in order to increase efficiency;

- the management structure should ensure the stability of the cluster

Block 2. The process of managing the development of the potential of cluster integrated structures (object block of the system). This block answers the question of what exactly needs to be done and how to transform input resources into output results in order to achieve a synergistic effect from integration. The specifics of this block are determined by the specifics of the construction of the KISB itself, in particular, the following management contours: the use of a process approach in management; description and development of cluster services among the stakeholders of KISB.

Since KISB is, after all, the integration of legally independent enterprises and organizations, taking into account globalization, the transition to a knowledge-based economy, which leads to the complication of market conditions and individual customer needs, we agree with (Scheer and Zallinger, 2015) that the cluster structure (especially for clusters small and medium-sized enterprises) in a highly competitive and dynamic environment, organized through the presence of purely functional departments, will quickly reach its limits, with increasing interaction problems and difficulties. Therefore, for domestic KISB SMEs, it is necessary to move from functional orientation to process orientation in management.

The process approach in management is, of course, even more important for clusters, since in such integrated associations it is necessary to coordinate a number of often very heterogeneous enterprises, institutions and structures,
which, moreover, are legally autonomous. Accordingly, the problem of interrelationships and vested interests is more acute than in the case of a separate business, so the management of the business processes of the development of the potential of KISB is another key element in the overall management of the cluster. Each cluster structure needs clearly defined processes that are jointly implemented and worked out. This creates efficiency and transparency for both internal and external stakeholders of the cluster. Within the cluster, process orientation helps to highlight cause-and-effect relationships, synergistic benefits, and global perspectives. Accordingly, there is also a close connection with the concept of an integrated value chain.

We note that in the context of managing the development of the potential of cluster integrated structures of small and medium-sized businesses, process orientation has the following specific advantages: market and client orientation; increasing efficiency and savings; holistic thinking in integrated structures; better coordination and cooperation; improved integration of value added chains; flexibility and responsiveness; fewer contacts between cluster members; more effective (thrifty) management of the cluster; transparency; quality management (orientation on the process as a starting point for quality management).

We can distinguish the following types of processes:
1) management processes;
2) main processes;
3) support processes (provide the provision of information and resources necessary for unification) (Scheer and Zallinger, 2015, p. 42). Other types of processes that are particularly important for a cluster are learning and informing (knowledge management) processes.

The general process of direct management of the development of the potential of KISB (Fig. 3) can be described using the well-known PDCA methodology (Schuhart-Deming cycle) (Schönsleben, 2012), which includes planning (Plan), execution (Do), check (Check) and making a further decision from process adjustment (Act).

The planning stage includes the development and formulation of common goals and a strategy derived from them for further activities for the development of the capacity of the KISB. It plays a central role in the integration of cluster members and promotes their identification with the cluster. The set of goals represents a combination of the interests of the companies participating in the cluster association, which are often very different, and determines the general direction in which the cluster will move. Defining individual goals depends significantly on what goals, desires and expectations the participants associate with the cluster. Typical goals may include: joint research and development,
promotion of innovation, joint marketing, export promotion, development of new markets, joint procurement,

- business processes of managing the development of innovative potential;
- business processes of managing the development of scientific and research potential;
- business processes of managing the development of production and technological potential;
- business processes of managing the development of personnel potential;
- business processes of managing the development of marketing and information potential;
- business processes of managing the development of financial potential.

INTEGRATED COMPETITIVE ADVANTAGES

Source: constructed by the author (based on the Shewhart-Deming cycle).

Fig. 3. The process of managing the development of the potential of the KISB

Basically, the cluster strategy should cover the following points or sections: analysis of the industry competitive situation; systematic SWOT analysis; analysis of trends; international benchmarking; analysis of cluster potential; cluster vision; cluster goals; spectrum of KISB assessment indicators; action plan; financial and resource support (Scheer and Zallinger, 2015, p. 16).

Let's add that each of the business processes of managing the development of the potential of KISB needs to define the beginning and end of each process,
the participants or functions involved, as well as the structure of cooperation (who works with whom). Next, the individual steps of the process or action (for example, sending the application form) are distributed among the responsible functional units (for example, the cluster manager) in a time and logical sequence. Each process must be assigned a "process owner" who is responsible for the progress and results of the process.

With regard to the stage of control of the process of direct management of the development of the potential of KISB, taking into account the significant independence of the participating enterprises, it is possible to apply a "satellite" (satellite) model of management, in which dynamically developing companies, due to the need for improvements or for the purpose of positioning in fast-growing markets, have to discuss their plans with the management of KISB at shorter time intervals and, accordingly, more intensively than participating enterprises that develop within the normal limits. That is, the satellite model of management provides for a different degree and frequency of control for cluster participants for their different status.

Cluster services play a central role in the development of the potential of the CISB and its management. A cluster structure can attract and retain participants in the long term only if its management manages to develop and offer services aimed at meeting the needs and eliminating the "bottlenecks" of participating enterprises. In this regard, cluster management requires a particularly intensive and creative focus on the client, and the most important clients of the cluster are the enterprises themselves. The sooner and more concretely the participants benefit from using the cluster's services, the more attractive the cluster will be. Businesses should feel from the outset that they are in the spotlight and can gain specific competitive advantages and additional benefits from cluster services, such as increased sales, increased productivity or improved quality.

Another important aspect of cluster services is their use to generate revenue and finance the cluster, so pricing should include an adequate margin if the provision of services cannot be covered by membership fees.

Block 3. Innovative block of management of the potential of KISB. The main goal of managing the potential of cluster integrated business structures is the maximum use and "processing" of all available resources and opportunities that can be obtained from the integration, in order to create such goods / services that could fully satisfy the end consumer. The most famous concept of competitive advantages belongs to M. Porter (1985), who includes patented technology, differentiation of products or services, high professionalism of personnel, etc. as competitive advantages of the highest level. That is, an important source of formation and maintenance of such competitive advantages
is the constant renewal and innovative development of production within the framework of the cluster structure.

Integrated competitive advantage is formed due to the fact that a cluster participating firm focuses on its core competencies, delegating the rest of activities to other participating enterprises, forming competitive advantages throughout the chain of interconnected value-creating firms.

Currently, the development and implementation of integrated (collective) competitive advantages should be based on the selection of the optimal type of strategy for the innovative development of production (including the creation of an innovative product) as a key element of the chain of added value of the cluster.

Block 4. Resource support for the management of the development of the potential of the CSB (resource-providing control block). A cluster structure must have certain resources at its disposal for effective functioning and expansion of its potential for development. The specificity of the use of these resources is first of all manifested through the integration interaction, when instead of the limit of resources and capabilities of only one enterprise, due to synergy, access and the real ability to join certain resources of the participants of such an integration association appear in KISB. This especially applies to SMEs, since they get access to innovations, know-how, technologies of more developed stakeholders and, very importantly, financial prospects for attracting funds on more favorable terms are opened for them (for example, banks can provide a loan to a small enterprise participating in the cluster under a lower percentage than if this enterprise was not part of it).

Resources within the framework of the development of KISB can be very diverse: financial, research, production, personnel, intellectual, informational, marketing, legal, etc. When we talk about a cluster structure, it is impossible to imagine it without an effective system of interaction between its members, therefore any KISB needs the formation of a powerful information and communication system to ensure the latter's activity, taking into account joint marketing.

Information work and marketing are fundamental to the success of clusters. Clusters as open learning networks often have more than 100 different partners and need a rich and clear information base to be internally integrative and externally attractive.

Since clusters include both business and government institutions, as well as a large number of different stakeholders, communication must take into account the different expectations and habits of different target groups. Yes, businesses usually expect information to be very concise and have a clear benefit; administrative bodies and politicians usually want information that presents their own contributions in a vivid and visible way; promotion agencies need
documentary information that would show activities and results; regional developers and officials are looking for information that would give a general idea of the quality of the region; mass media expect short, bright and personal stories; practitioners want access to data that they can turn into information (and knowledge) for their own purposes; evaluators need information on development and results in the form of indicators.

Coordination of the interests of all participants of KISB is precisely what the information and communication system is designed to solve, which should be based on modern ICT solutions (in particular, the Internet, artificial intelligence, digital tools), and which can significantly increase the efficiency of managing the development of the potential of clusters and related processes and types of activities.

The information and communication system includes 3 key components:
1) Information.
2) Communication.
3) Cooperation and coordination.

Information and knowledge are not only factors of production, but also factors of competition and success. The preparation, storage and presentation of relevant information to KISB participating enterprises, respectively, play a particularly important role in innovation-oriented clusters in knowledge-intensive industries. ICT is an important element in the knowledge management system of the cluster structure, which primarily concerns the management of integrative organizational knowledge. Integrative organizational knowledge is knowledge that is associated with a community or group rather than with a specific individual, that is, it arises from the interaction and pooling of information between individuals within a cluster. The central process of creating added value is the transfer of individual knowledge to collective knowledge, and vice versa. ICT here becomes a bridgehead for providing information and establishing stable connections between cluster participants. They provide the necessary "capacity" for storing and processing information, making it part of "organizational memory" (Scheer and Zallinger, 2015, p. 54).

Cluster communication can also be more efficient and effective through the use of IT. This applies to both internal communication with KISB participants and external communication with the mass media (PR) and customers. It should be noted that today a number of new IT programs and technologies enable not only classic one-way communication, but also interactive communication between several subjects.

We believe that ICT is of central importance, especially in supporting cooperation and coordination within the cluster association. The special features of clusters place extremely high requirements on the management of KISB and
projects related to them. Collaboration software can help implement joint projects and processes not only more efficiently, but also more transparently.

Conclusions. Summing up, it must be said that the components of the development management system of cluster integrated business structures is a complex concept that permeates the entire set of relationships between the participants of such structures. The creation and further development of any of the previously described blocks of the KISB SURP, in the final version, will still be reduced to obtaining a sustainable integrated competitive advantage due to the integration of the potentials of all participating enterprises of the cluster association and its effective management.

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