

FEATURES OF MANAGING THE CREATIVE DEVELOPMENT OF THE SOCIO-ECONOMIC SYSTEM IN THE CONDITIONS OF INFLUENCE OF COVID-19 PANDEMIC

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Abstract. The main purpose of the study is to model the process of managing the creative development of the socio-economic system in the conditions of influence of COVID-19 pandemic. For this, we have applied the methodology of functional modeling and graphical display, which includes the possibility of structural analysis and serves as effective information technology for any control system. Socio-economic systems are a large number of complex organizational structures with a large number of management processes. The largest of these are companies and organizations with appropriate personnel, on which it depends on where the company will move. It is impossible to compete without creative development. For an illustrative example, we used the current socio-economic system in the form of a company, in which creativity and creative development play an important role. As a result, we reflected how, through a convenient and easy-to-use model, it is possible to form clear steps and stages that would informatively reflect creative development for the socio-economic system (company).

Keywords: creative development, creativity, management, socio-economic system, system.

Introduction

One of the main components of the development potential of the socio-economic system is the intellectual resources of the subjects of management. Considering that the subjects of management have different levels of professional training, work experience, collective and

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individual goals, which are based on needs, preferences, ambitions, *etc.*, the use of intellectual resources for the development of an organization is quite problematic. The problem is that there are still no scientifically grounded theoretical foundations and methodological and applied recommendations for building systems for managing the intellectual resources of enterprises, in particular, such systems as a system for managing creative development. Ensuring the continuous development of companies and their competitiveness in the context of the intellectualization of capital is impossible without the formation of personnel with the necessary knowledge and competencies. In the context of the intellectualization of capital, the so-called innovative workers are of particular value at the enterprise, whose competencies include creativity, originality of ideas, creativity, and non-standard approaches to solving professional problems. According to these trends, a specific branch of management has emerged – management of creative development, aimed at the formation, maintenance, and development of creative workers under the influence of COVID-19 pandemic.

The phenomenon of creativity was and will be of interest to many scientists since it is a part of thinking and the result of the interaction of motives and incentives, it can be traced in physiological and mental processes. If earlier creativity was considered as a way of human self-development, then recently attention has been paid to the applied aspect of the problem: how to use creativity for the good of the organization, what working conditions should be, ways of motivation, relations between employees, in addition to how to analyse and use the results of intellectual activity of employees, *etc.*

Currently, creative employees are breaking stereotypes in the activities of the socio-economic system, often demonstrating, if not outrageous, then eccentric behaviour, the temporary mode of their work is not regulated, and therefore hardly fits into the general temporal order of the organization, they need independence, a sense of freedom, lack of bureaucratic manifestations, understanding of the meaning of control over their activities. That is, an adequate and effective system for managing the creative development and creative activity of personnel should be created.

Personnel plays a decisive role in ensuring innovative changes at the enterprise, the effectiveness of which is one of the main indicators for assessing the management systems of innovative processes. In this regard, the need for the formation of creative abilities, the creativity of personnel is of particular importance for the innovative development of the enterprise, its competitiveness. The main thing here is the formation of a team of creative individuals capable of adequately responding to innovative changes at the enterprise and initiating such changes. The formation and development of the creative abilities of the personnel of the enterprise is the task of creative management. In creative management, as in any other science, theoretical and applied aspects are distinguished.

The following main features can be distinguished that characterize a developed creative personality under conditions of quarantine: independence-personal standards are more important than group standards, non-conformity of assessments and judgments; the depth and breadth of knowledge, the ability to apply it in various situations, formed a steady need for the constant restoration of knowledge and new ones; purposeful pursuit of truth, high tolerance to uncertain and unresolved situations, constructive activity in these situations, the ability to penetrate deeply into the essence of the problem, to show connections between

phenomena, that is, the ability to analyse and synthesize, the ability to work independently systematically, an irresistible desire for self-improvement and self-realization; constructive criticism and self-criticism, the ability to abandon outdated habits and views, to reconcile the new with the previous personal experience and the experience of others; scientific outlook; developed aesthetic sense, striving for beauty.

To a large extent, the staff rely on creativity and innovation to make a product or service unique and thus provide them with excellent quality and competitive advantage in a COVID-19 pandemic environment. Given that in COVID-19 pandemic and post-COVID-19 pandemic times, the issues of managing creative development are especially relevant in the context of the resumption of the crisis functioning of socio-economic systems, the issue of forming a clear methodology for creative development is especially relevant. Thus, the main goal of the study is to model the process of managing the creative development of the socio-economic system under the influence of COVID-19 pandemic. To achieve the goals of the study, we used the methodology of functional modeling and graphical display. As a result, we reflected how, through a simple construction and a flexible model in use, it is possible to form stages that would informatively reflect the creative development of a socio-economic system (company).

1. Literature review

Modern economic trends require companies to change their approaches and tools for solving certain problems, since the standard approaches have exhausted their reserves of increasing the efficiency of the company. One of the possible options for successfully solving problems is the use of creative management tools that contribute to personal and professional self-development and self-improvement, the development of initiative of the company's personnel. In addition, successful creative management allows the company to form a positive image, increase competitiveness, use limited resources more efficiently, and increase profits. Considering all of the above, it can be argued that the issues raised in the article are relevant and timely (Johnson & Turner, 2010; Melnikas, 2019).

Creativity for professional activity is one of the most important parts. But the process of developing creativity is a complex process and its organization requires some effort (Armstrong, 2006; Bilan et al., 2019). As noted by Reimeris (2016), creative development involves working through a significant number of aspects and emotional moments.

In exploring the essence of creativity and creative development, we partially agree with scientists and also believe that specialists and specialized teams should be engaged in creative development.

Creativity is an important part of any socio-economic process. Examining its place in the economy, many scholars (Markusen et al., 2008; Madrak-Grochowska, 2015) note how important creativity is for companies to dominate the market and improve their own performance.

At the same time, an analysis of the literature shows that creative development should be carried out by specialists and professionals in their field (Daubaraitė & Startienė, 2015; de Beukelaer, 2014).

We agree with the scientific idea that creativity from the standpoint of economics and management is the ability to create and find new ideas, deviating from the accepted thinking patterns, to successfully solve the problems facing the socio-economic system in a non-standard way. Creativity involves seeing problems from a different angle, which leads to the development of original ways to solve them (Pefanis Schlee & Harich, 2014; Sułkowski et al., 2020).

Creative development in socio-economic systems is an issue that has been worrying many scientists for more than a year, so Khanin et al. (2021) in their work investigated the impact of activating the innovative and creative sphere of personnel in the context of enterprise development at the local level. As a result of the study, they found that the emphasis on creative development of the socio-economic system is decisive for the continued functioning and development of enterprises in COVID-19 pandemic and post-COVID-19 pandemic times.

The question of the formation of a more or less clear system of creative development of the socio-economic system in the context of the existence of COVID-19 pandemic and post-COVID-19 pandemic consequences is raised in the study of Bilovodska et al. (2021), who studied the better performance of socio-economic systems in COVID-19 pandemic times than those who relied on established business methods.

Summarizing the study of the literature (Kačerauskas, 2012; McMullan & Kenworthy, 2015; Powell & Powell Rey, 2015), we suggest that the management of creative development should be understood as one of the functions of management activity, which assumes, on the one hand, the work of specialists in the direction of comfortable working conditions, a favorable moral and psychological climate in the team, the development of fair material and material motivation, the development and development of an appropriate corporate culture, on the other hand, the intensification of the initiative and creative activity of employees in generating, searching, developing, combining creative ideas, evaluating and choosing them to implement the innovative development of the company, which ultimately leads to an increase in the level of competitiveness, contributes to the formation and maintenance of a positive image of the socio-economic system, the growth of the final results of work.

Given due respect to the significant contribution to the development of solving problems of creative development management, we concluded that there is still no detailed modelling of this process in the management system of such a socio-economic system as a sales company. Because in such companies this issue is simply neglected and we believe that this is in vain.

2. Methodology

In general, we have used several key methods that shape our methodology. First of all, we applied theoretical methods of analysis and synthesis to generalize scientific and practical information to understand the essence of the creative development management system and what basic structural stages it should provide for the socio-economic system.

The second method in our methodology was the method of functional modelling, which allows us to graphically describe the processes we have specified. It is perfect for

displaying the main stages of a management system, including for creative development. The main feature of the integrated computer aided manufacturing definition for function modeling (IDEF0) methodology implies an emphasis on the key processes of the control system and allows you to understand the main purpose of the model through a detailed graphical representation. The IDEF0 methodology itself was first formed specifically for socio-economic systems. We have chosen the methodology of functional modeling, since it is the one that can best reflect the process of achieving the goal and demonstrate step-by-step processes and sub-processes.

For practical use, we have contacted and used the data of the limited liability company (LLC) *Brilliant-Toyota*, which is an official *Toyota* dealer in Ukraine and is engaged in the sale of cars. They have asked for help to improve their creative development and they do not have any department to deal with this. So, for demonstration, this is the best option. The initial data for the formation of our model will be:

1. The purpose of the model formation: the development of a model for the management of creative development;
2. Target audience: company management, its personnel;
3. Model context: a set of functions and objects;
4. Development of modelling: IDEF0;
5. Software: an example of a program for the formation of vector diagrams.

So, the demonstrative application of the methodology we have chosen will go further in the text for the company of an official *Toyota* dealer dealing with the sale of cars today, under the influence of COVID-19 pandemic.

3. Research results

So, let us apply our proposed methodology using the example of LLC *Brilliant-Toyota*, which is the official dealer of *Toyota* in Ukraine.

To begin with, it is necessary to establish the appropriate designations for all structural stages of achieving our main goal of modelling, namely “formation of a creative development management system (T0)”. To do this, a number of subprocesses should be performed:

T1 – the formation of a new policy of creative development in the company. The challenge for every company is to succeed in a changing world. Creative thinking is a component of business thinking that helps to adapt in the face of uncertainty and respond to the challenges of change. Today, in the context of COVID-19 pandemic, the creative policy should be aimed not only at creating comfort for the client but, above all, to ensure his safety. Selling cars is a very individual matter and there must be an approach that will ensure the desired level of safety;

T2 – creation of a new specialized department for creative development. For the example we have chosen, it will be extremely important to attract professionals. Analysis of literature and practice shows how important it is for a team of specialists to be involved in creative development. Where a team of specialists in creative development has been formed, there is already a department for creative development. Such a product as a car from an authorized

dealer is an expensive thing that requires an individual approach, a creative approach. The department can guide this personalized approach through creativity to a unique approach. And this will significantly affect the sale;

T3 – implementation of new measures to change the creative environment. A salon where sales take place, a place that requires a creative approach. It should be noted that the creative development management system should be aimed not only at the company’s personnel but also at the environment of its activity. Here, every detail of the internal and external environment is a new opportunity for creativity, which the results of the formation of the department of creative development can bring to life.

The first stage will be the formation of a basic diagram of the model itself, in which the main inputs, outputs, driving aspects, and mechanisms with the appropriate arrows and designations will be presented (Figure 1).

So, having described the main stages of our main decomposition, we will present its main structural form through the functional model of the creative development management system (Figure 2).

The next step is to detail each of the sub-processes of the main decomposition of the creative development management system for the selected company. Therefore, to reach T1 “formation of a new policy of creative development in the company”, the following sub-processes should be implemented:

T11 – expanding the boundaries of creative solvability. We all intuitively understand that creativity is very important to the business. If interesting and useful ideas are generated for

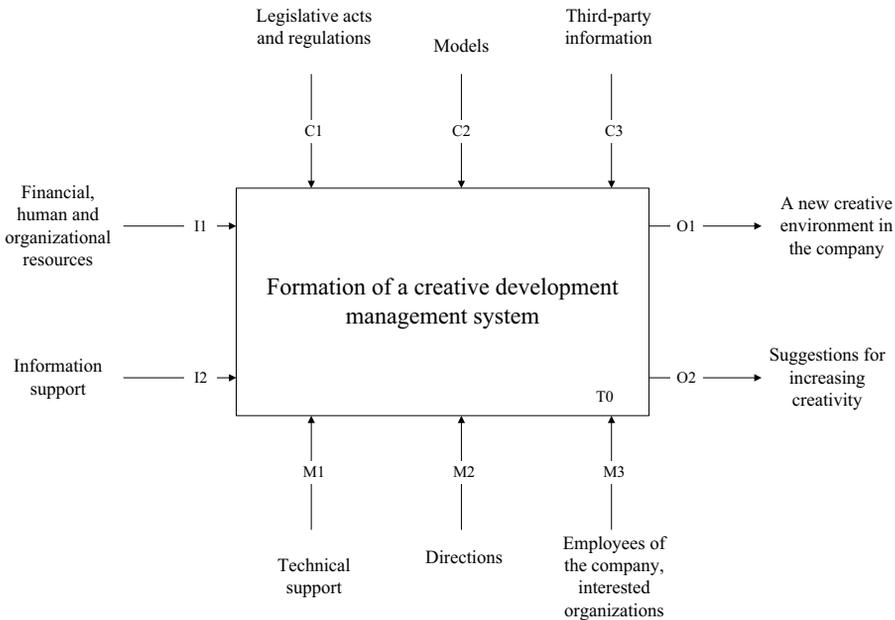


Figure 1. Basic diagram of the model itself, in which the main inputs, outputs, driving aspects and mechanisms with the appropriate arrows and designations (source: created by authors)

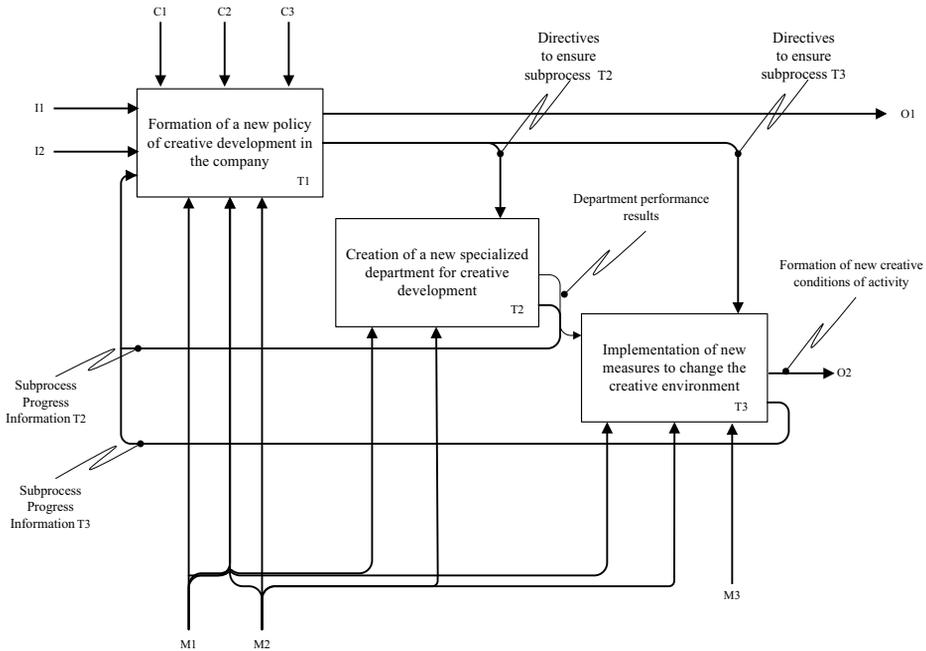


Figure 2. Demonstration of the structural decomposition of the functional model of the creative development management system for the selected company (source: created by authors)

the company, subsequently, they turn into innovations. And innovation is the key to the development of the company. Workers should spend part of their working day at a different pace – in the “laboratory” mode. It is vital for creativity because it allows you to stop and concentrate on one task in a calm, routine-free environment – generating new high-quality ideas. The mode in which managers work can be compared to the emergency room – lightning-fast response, running around, sleepless nights at the monitor, constant surprises. The problem with most companies is that very often they sit in the emergency room. Naturally, in this mode, the company is obliged to work most of the time, but not 100%. You need to find a harmonious combination of the two modes for yourself and your company, which will not only provide balanced economic growth but also raise the personal level of employees and increase the pleasure of work;

T12 – encouraging innovative ideas. The company should encourage innovative ideas, not block them. In the modern world, the problem of innovation is considered from the point of view of effective, profit-oriented innovation management in enterprises. Recently, in all industrialized countries of the world, more and more attention is paid to the management of innovation processes;

T13 – formation of a system of motivation for creativity. The motivation system is another important element for creative development. Encouraging creativity should be stimulated by leadership. This is the only way to interest employees in creative development (Figure 3).

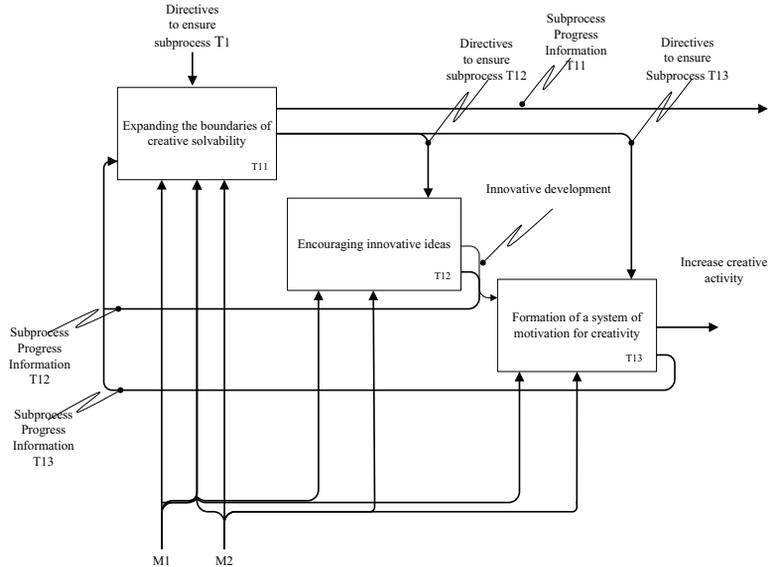


Figure 3. Demonstration of the structural decomposition of the functional model of the creative development management system for the selected company with stage detailing T1 (source: created by authors)

To reach T2 “creation of a new specialized department for creative development”, the following sub-processes should be implemented:

T21 – forming a team of specialists in creating development. They correctly point out that each business has its own specialists. A dedicated team should be involved in creative development in the company. These should be the right people with the appropriate psychology and personal development skills;

T22 – granting full powers of the department. Any new department should have a free hand. Creativity is an area in which it is impossible to create without freedom. The development of creativity should take place freely and therefore there should be corresponding free (as far as) powers;

T23 – involvement of department in all areas of the company. As a result, the department must again actively interact with other departments of the company. Have a close relationship with other employees. This is the only way to form an effective development strategy (Figure 4).

The creative environment for a manager is a set of methods for finding and implementing managerial decisions in the process of implementing innovative activities. It includes both social norms and values of society, and norms and rules that have arisen directly from the practice of implementing innovations at a particular enterprise. The creative environment of a manager is also determined by his socio-psychological characteristics, certain stereotypes of behaviour, social and value orientation and professional orientation. To achieve T3 “implementation of new measures to change the creative environment”, we also have to form a number of process steps, which are shown in Figure 5.

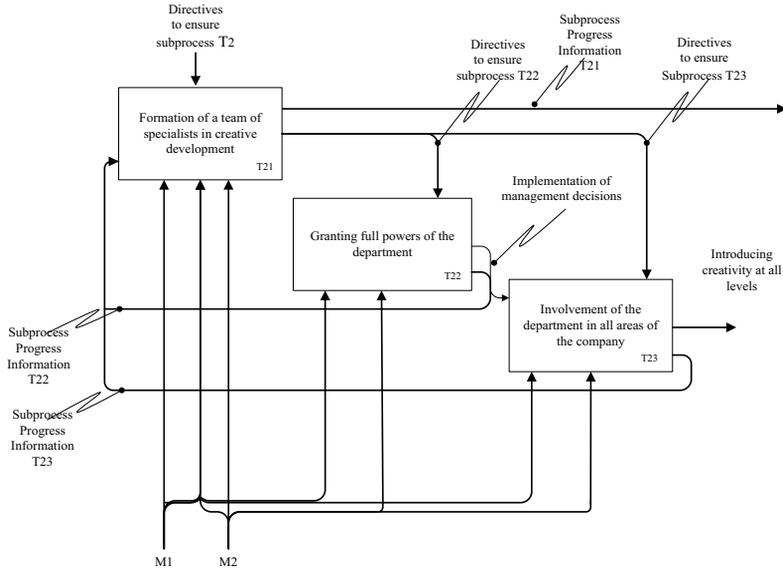


Figure 4. Demonstration of the structural decomposition of the functional model of the creative development management system for the selected company with stage detailing T2 (source: created by authors)

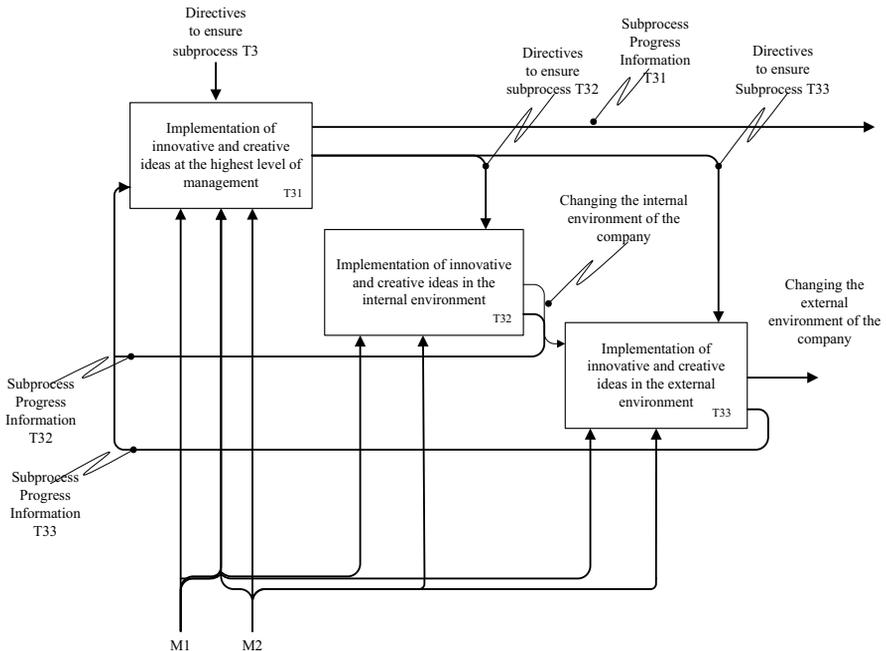


Figure 5. Demonstration of the structural decomposition of the functional model of the creative development management system for the selected company with stage detailing T3 (source: created by authors)

T31 – implementation of innovative and creative ideas at the highest level of management. Top managers of the company should not be limited in creativity. Creative development should take place at all levels, including the highest. The top management of the company must demonstrate by their own example a creative approach to solving a particular problem;

T32 – implementation of innovative and creative ideas in the internal environment. In order to properly organize the process of developing creativity in the environment of the company, the leader must conduct an analysis of the existing situation. It is carried out in three stages: assessing the level of development of the organization, creating an appropriate atmosphere, motivation for creativity. At each stage, the leader must solve a certain range of issues. In our case, it is necessary to create an atmosphere of frankness and interaction in which subordinates can stimulate in each other greater awareness and the advancement of ideas. Providing the opportunity to appeal ideas by “raising” the level of tasks and projects to a little higher than the known abilities of subordinates;

T33 – implementation of innovative and creative ideas in the external environment. As in the case of the internal environment, creativity must manifest itself in the external environment of the company’s functioning. Innovation and creativity can be manifested during international negotiations when decorating premises from the outside. Advertising for a car sales company is key. It is the creativity of advertising that is the key to the company’s success. Creative advertising is designed to distinguish one or another product or service from a competitive group. Such advertising has the greatest impact on the consumer, generating positive reviews and emotions.

Discussion

When discussing the results of the study, it should be noted what exactly we did and how it differs from similar studies. First of all, we note that for Ukrainian companies, for example, Skavronska (2017) raised questions and considered the features of creativity. However, we tried to use the Ukrainian company only as an example of our established model.

This is not the first time that certain application technologies have been tried for creative development (Kačerauskas, 2015; Mareque et al., 2019). We, in turn, tried to introduce modelling technologies into the development of information and graphic display of the main aspects of the creative development management system.

The question of the importance of the existence of a significant level of creative potential in the process of formation and maintenance of socio-economic systems at different territorial levels of government was raised by Mazurkiewicz and Szara (2018). In their research, they limited themselves to carrying out analytical calculations and determining the correlation between the level of creativity and the success of the functioning of socio-economic systems. In our study, a clear system of creative development of the socio-economic system in the conditions of influence of COVID-19 pandemic was given.

In general, the process of managing creative development was the attention of many scientists (Danko et al., 2017; Białoń, 2015), but not all focused on the formation of the main stages of implementation of the relevant department, which consisted of a team of specialists.

An important place is also taken by the modern conditions of development for the socio-economic system. For example, Ciurea and Filip (2019) and Stasiulis (2017) explored the main aspects of the impact of globalization on creative development.

As a result, the novelty of our research is the formation of a creative development management model for the socio-economic system under the influence of COVID-19 pandemic, which consists in reflecting the structure of the system itself through functional and graphic modelling.

Conclusions

So, according to the results of our research, we tried to form an effective functional model of the creative development management system for the socio-economic system through the company. Demonstrations of its example of an application made it possible to conclude that this model is an informational and graphic display of the main structural stages of how it is possible to effectively manage creative development.

In our opinion, for such socio-economic systems as companies selling expensive cars, a separate specialized department for creative development should be formed and fulfilled clearly defined goals of an innovative nature, which may relate to the development of innovative products or the improvement of existing ones, improvement of technological processes, implementation of information and analytical functions for the development of non-standard solutions, the production of creative ideas to ensure the strategic development of the company. Certain of its main stages were reflected in our work.

Research has a limitation. We did not take into account the specifics of all socio-economic systems and took only the specifics of the activities of a particular company specializing in sales. We also choose a company that certainly does not have a separate, dedicated creative development department.

Further research requires applying our model to new companies and identifying other paths for creative development beyond the creation of a new department.

References

- Armstrong, M. (2006). *A handbook of human resource management practice*. Kogan Page Business Books.
- Beukelaer, de Ch. (2014). Creative industries in “Developing” countries: Questioning country classifications in the UNCTAD creative economy reports. *Cultural Trends*, 23(4), 232–251. <https://doi.org/10.1080/09548963.2014.912043>
- Białoń, L. (2015). Creating marketing strategies for higher education institutions. *Marketing of Scientific and Research Organizations*, 4(18), 129–146.
- Bilan, Y., Vasilyeva, T., Kryklii, O., & Shilimbetova, G. (2019). The creative industry as a factor in the development of the economy: Dissemination of European experience in the countries with economies in transition. *Creativity Studies*, 12(1), 75–101. <https://doi.org/10.3846/cs.2019.7453>
- Bilovodska, O., Kholostenko, A., Mandrychenko, Zh., & Volokitenko, O. (2021). Innovation management of enterprises: Legal provision and analytical tools for evaluating business strategies. *Journal of Optimization in Industrial Engineering*, 14(Special Issue), 71–78.
- Ciurea, C., & Filip, F. G. (2019). The globalization impact on creative industries and cultural heritage: A case study. *Creativity Studies*, 12(2), 211–223. <https://doi.org/10.3846/cs.2019.7753>

- Danko, L., Bednář, P., & Matošková, J. (2017). Managers' activities within cultural and creative clusters: An essential element for cluster development in the Visegrád countries. *Creativity Studies*, 10(1), 26–42. <https://doi.org/10.3846/23450479.2016.1266049>
- Daubaraitė, U., & Startienė, G. (2015). Creative industries impact on national economy in regard to sub-sectors. *Procedia – Social and Behavioral Sciences*, 213, 129–134. <https://doi.org/10.1016/j.sbspro.2015.11.415>
- Johnson, D., & Turner, C. (2010). *International business: Themes and issues in the modern global economy*. Routledge.
- Kačerauskas, T. (2012). Creative economy and technologies: Social, legal and communicative issues. *Journal of Business Economics and Management*, 13(1), 71–80. <https://doi.org/10.3846/16111699.2011.620151>
- Kačerauskas, T. (2015). Technologies in creative economy and creative society. *Technological and Economic Development of Economy*, 21(6), 855–868. <https://doi.org/10.3846/20294913.2015.1036325>
- Khanin, S., Arefieva, O., Dergaliuk, M., Popelo, O., & Tulchynska, S. (2021). Concepts of the activation of intellectual and innovative determinants for the development intensification of regional economic systems. *Laplage em Revista*, 7, 234–244. <https://doi.org/10.24115/S2446-622020217Extra-E1180p.234-244>
- Madrak-Grochowska, M. (2015). The knowledge-based economy as a stage in the development of the economy. *Oeconomia Copernicana*, 6(2), 7–21. <https://doi.org/10.12775/OeC.2015.009>
- Mareque, M., Prada, de E., & Pino-Juste, M. (2019). Creativity among business and tourism management university students: Determining sociodemographic factors. *Creativity Studies*, 12(2), 258–279. <https://doi.org/10.3846/cs.2019.6925>
- Markusen, A., Wassall, G. H., DeNatale, D., & Cohen, R. (2008). Defining the creative economy: Industry and occupational approaches. *Economic Development Quarterly*, 22(1), 24–45. <https://doi.org/10.1177/0891242407311862>
- Mazurkiewicz, A., & Szara, K. (2018). Creativity as a stimulant of socio-economic development of the Podkarpackie voivodeship. *Proceedings of the 2018 International Scientific Conference Economic Sciences for Agribusiness and Rural Economy*, 2, 287–293. <https://doi.org/10.22630/ESARE.2018.2.38>
- McMullan, W. E., & Kenworthy, Th. P. (2015). *Exploring diversity in entrepreneurship. Creativity and entrepreneurial performance: A general scientific theory*. A. L. Carsrud & M. Brännback (Series Eds.). Springer International Publishing. https://doi.org/10.1007/978-3-319-04726-3_8
- Melnikas, B. (2019). Sustainable social development, economic growth and technological breakthroughs: Creativity and creative change. *Creativity Studies*, 12(2), 301–314. <https://doi.org/10.3846/cs.2019.10335>
- Pefanis Schlee, R., & Harich, K. R. (2014). Teaching creativity to business students: How well are we doing? *Journal of Education for Business*, 89(3), 133–141. <https://doi.org/10.1080/08832323.2013.781987>
- Powell, K. K., & Powell Rey, M. (2015). Do they really know their customers? Exploring relationship marketing from the student stakeholder perspective. *Journal of Management and Marketing Research*, 19. <http://www.aabri.com/manuscripts/152212.pdf>
- Reimeris, R. (2016). Theoretical features of the creative society. *Creativity Studies*, 9(1), 15–24. <https://doi.org/10.3846/23450479.2015.1088902>
- Skavronska, I. V. (2017). Creative industries in Ukraine: Analysis and prospects of the development. *Economics and Sociology*, 10(2), 87–106. <https://doi.org/10.14254/2071-789X.2017/10-2/7>
- Stasiulis, N. (2017). The idea of the creative society and the development of creative industries. *Economics and Sociology*, 10(2), 217–226. <https://doi.org/10.14254/2071-789X.2017/10-2/16>
- Sułkowski, Ł., Lenart-Gansiniec, R., & Bilan, S. (2020). Crowdsourcing creativity in government: State of the field in the four research paradigms. *Creativity Studies*, 13(2), 419–436. <https://doi.org/10.3846/cs.2020.12265>