



RESPONSIBLE MANAGEMENT OF KNOWLEDGE AND INFORMATION SYSTEMS IN THE DIGITAL ECONOMY IN THE ESG SYSTEM

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ABSTRACT

This paper is devoted to the comprehensive study of the problem of responsible knowledge management and the development of information systems in the conditions of the digital economy from the position of the ESG system. It points to the relevance of the problem of knowledge management in the conditions of modern challenges, characterises processes connected with knowledge management from the position of sustainable development, and points to the potential of information systems and digital technologies from the position of the perspective of intellectual potential development.

The methodological framework of the research is comprised of general economic and special research methods. They are founded on the interconnected categories of responsible knowledge management, social responsibility, sustainable development, etc. To justify the offered hypothesis, the methods of correlation & regression analysis and empirical methods of analysis, synthesis, generalisation, and observation were used.

The main value of this paper lies in the scientific substantiation of the fact of ambiguity in the assessment of the influence of the processes of sustainable and intellectual development on the economic state of Russia. According to this, the irrationality of financing scientific and innovative developments was established, and the expedience of stimulating the further implementation of information systems and technologies of knowledge management into the practice of companies' activities was determined.



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1. INTRODUCTION

Quick changes in all spheres of life set new demands for business. New risks and challenges require quick reaction and the corresponding setting of the system of

management, as well as the search for ways for further development through the resolution of current and expected problems. The most relevant challenges of modern times include the problems of climate change, global safety, hunger, social protection of vulnerable

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groups of the population, etc. The mechanisms of dealing with these problems have been well developed and substantiated within the institute of the UN Sustainable Development Goals, the concept of corporate social responsibility, non-financial reporting, responsible investing, and ESG management. Their application in the activities of business structures has a systemic character and clear value orientations, which allows improving the possibility of reaction to global challenges due to the appropriate actions at the level of companies.

The COVID-19 pandemic showed that humanity, while remaining very vulnerable against hidden threats, has, at the same time, a large creative, intellectual, and social potential, to deal with complex and non-typical problems with the help of intellectual resources, which are combined with new technologies and forms of organisational cooperation. It was the restrictions caused by the pandemic that became factors in the mass dissemination of digital innovations not only in high-tech sectors of the economy but also in everyday life, school education, trade, communications, etc. This showed that the real capabilities of the human mind are much larger than it was believed.

On the other hand, digital breakthroughs, which took place in crisis conditions, facilitated the attraction of attention to the abilities of digital technologies for their use for the purpose of dealing with critically important global problems. One of such directions is an increase in the level of sustainability of the functioning of business structures, which is achieved due to the gradual integration of ESG management elements into the practice of companies' activities. The initial action in this context involves the creation of the corresponding resource support, which is based on the achievement of a critical level of knowledge about the essence and relevance of the problem, an understanding of the mechanisms of its development, and the capabilities of business in overcoming them within its intellectual and production potential.

2. EXPERIMENTAL SECTION

Knowledge management is often limited by the sphere of science and innovations, which rather objectively characterise the successfulness of socioeconomic processes. However, the process of knowledge management (Miković et al., 2023) is much wider. This is connected with the very essence and parameters of knowledge. They are not just formal in the form of patents, copyrights, and other types of non-tangible assets. It is much more difficult to assign material form to non-formalised knowledge in the form of information and experience of a certain individual, group interaction of a certain collective, or creative potential. These indicators are partially manifested through the level of education, number of representatives of research and innovative establishments, creation of art, etc. However,

the present possibility of assessing the above indicators does not allow for the full and objective evaluation of the level of knowledge management.

Dialectics of scientific cognition views the problem of research through the bond between humans and nature and the mutual influence of environmental processes on the results of human activities. Characteristics of knowledge from the position of the environmental component are also taken into account. In this context, it is information, competencies, and experience connected with understanding natural processes, including the danger of anthropogenic influence on the state of the environment and knowledge about the possibility of avoiding negative influence, its reduction or recovery of the damaged elements of the environment.

Application of such knowledge in the economic activities of economic subjects has a dispositive character, i.e., in most cases, companies independently determine the necessity for their use. According to this, the methodological substantiation of the processes of knowledge management is realised within certain scientific constructs, including "Green management of human resources", "Environmental knowledge", "Corporate social responsibility", the system of "Sustainable environmental indicators", "Responsible knowledge management", etc. Responsible knowledge management differs from the traditional treatment of knowledge in business because it belongs to the sphere of society's interests and goes beyond the organisational boundaries of the company. Apart from this, it does not reject the skills and competencies of any representative of the organisation or society, ensuring inclusiveness and close group interaction of stakeholders (Durst, 2022). Thus, all types of knowledge and its carriers are considered equal and valuable and fit for joint use.

Given the methodological specifics, the method of studying the issues of responsible knowledge management depends on the research context. Thus, extrapolation of the process of knowledge management on the processes of active digitalization and the use of information systems in the conditions of ESG management predetermine the need to use the interdisciplinary and systemic approach, which would cover the tools of scientific cognition of managerial, technical & technological, innovative, socioeconomic, environmental, and institutional processes. An important element of such methodology is the use of factor analytical models, including correlation-regression analysis, and empirical scientific method.

The main studies, which are used in this work, are devoted to different aspects of using digital technologies and knowledge management in the context of sustainable development and ESG practices. They consider the issue of globalisation of education and formation of the knowledge economy (Bogoviz et al., 2020), the concept of responsible knowledge

management in organisations (Durst, 2022; Bloomfire, 2022), methodology of measuring the knowledge economy (Chen & Dahlman, 2006), problems of integration of knowledge management into the ESG system (Fedoseeva & Generation KM, 2022; Sroufe et al., 2013), the roles of environmental management of human resources and responsibility in sustainable environmental activities (Bazrkar et al., 2022), management of the digital economy, technologies, and tools (Shabaltina et al., 2020), place of knowledge management in the system of quality support in Industry 4.0 from the position of sustainability and competitiveness (Yuldashev et al., 2023), synergy of software for knowledge management and large speaking models (Elium, 2024), characteristics of the advantages of knowledge management systems (Knowmax, 2024), application of machine learning in ESG analytics and knowledge management (IFC, 2024), and description of technological trends in the sphere of AI and data analytics (McKinsey, 2023).

Based on the general theoretical arguments, the key hypothesis of this research is that factors of intellectual and sustainable development, together with digitalisation, should have a positive effect on the level of economic development. This is confirmed by strong scientific & theoretical and analytical bases. However, in the conditions of a dynamic market environment and growth of global challenges, additional studies of the processes of knowledge management and information systems in the conditions of the digital economy and ESG management are based on relevant tasks that are aimed at the necessity of revealing and substantiating the cause-and-effect relationships between the phenomena of sustainability and digitalization, as well as processes of knowledge management within information systems.

3. RESULTS

ESG system allows combining economic and environmental processes within one criterial and cost framework. Organisation's initiatives, connected with ESG, coordinate their activities in combination with their goals and the goals of sustainable development, assess the consequences of their activities, and develop processes according to regulatory environmental demands. Knowledge, especially environmental, is an important factor in ensuring the effectiveness of ESG management. Possession of knowledge allows employees to better understand environmentally-oriented instructions of the management, manifest their initiative, and facilitate the achievement of the Sustainable Development Goals.

In the system of human resources management, the presence of environmental knowledge can be viewed as a factor of advantage during hiring, career-building, or other types of stimulation. In this context, responsible or green management of human resources shifts accents of effectiveness and productiveness of work, involving

categories and elements of sustainability in the values, criteria, and goals of labour resources' development.

The concept of green management of human resources contributes to the achievement of several effects from the position of sustainability. It brings value elements to the company's strategy and forms conditions for its implementation through the corresponding resource support. Apart from this, it influences the organisational culture, raising the level of environmental awareness of employees and the entire organisation. In such conditions, environmental initiatives are rather quickly disseminated in the environment of partners and stakeholders, allowing for an improvement of general information and cultural background. Based on this, knowledge management in such companies is a factor in an increase in their image in the market and, in certain cases, legitimise their activities, especially in the sector of energy, heavy machinery, transport, and infrastructure.

Integration of responsible management into the system of green HRM expands the set of procedures that are to coordinate the goals and resources. According to this, HRM processes are supplemented by additional surveys on available and hidden environmental knowledge, training and development of personnel in the context of environmental knowledge, implementation of the responsible system of motivation that contains certain elements of motivation for responsible activities, or achievement of a certain level of sustainability of personality in the company. These processes allow improving labour resources' perception of environmental norms and demands, intolerance to environmentally irresponsible activities, raising the level of resource-saving, etc.

According to the studies, employees' environmental knowledge is a factor in an increase in the environmental effectiveness and sustainability of the company. Understanding environmental demands, employees are more inclined to join sustainable initiatives that are connected with the reduction of the carbon footprint, resource-saving, preservation of natural diversity, etc. The more knowledge they have, the better they work from the position of environmentally responsible behaviour (Bazrkar et al., 2022).

ESG forms the conceptual basis for the complex assessment of sustainable development of companies in different sectors. The environmental dimension of the concept concerns the careful use of natural resources, energy consumption, and reduction of waste and greenhouse gas emissions. The social dimension covers fair and inclusive interaction with communities, employees, and society. The managerial dimension is connected with internal procedures, mechanisms of control, observation of norms and ethical standards, management of data and business processes, and transparency in managers' decision-making. Knowledge

management is an inseparable element of the ESG system. It is a kind of ecosystem, which unites humans, processes, and technologies for the effective execution of the organisation's tasks today and in the future. The functioning of such a system must be coordinated with the general strategy of the organisation and adapted to changes. In future, knowledge management will cover the synergetic interaction between humans, machines, and algorithms, which mutually supplement each other (Fedoseeva & Generation KM, 2022).

Knowledge management in the ESG system has many manifestations, for the very sphere of responsible management and socio-environmental development is very complex from the position of its study and structuring. In the conditions of quick technological development and digitalization, a large share of management tools are gradually moved into the digital and information space. This is manifested in the creation of the corresponding platforms, programmes, and other tools, which facilitate an increase in the level of responsibility for knowledge in the processes of its disclosure, dissemination, storage, etc.

The main manifestations within which responsible knowledge management is realised are found in several different spheres: the sphere of management (through integration into the company's strategy, manifestation through management's functions, systems of analysis and managerial decision-making, etc.), the sphere of implementing the values and criteria of sustainable development, which conform to the the corresponding Sustainable Development Goals (in particular, SDG 4, SDG 8, SDG 9, SDG 12, and SDG 17), and the system of knowledge management, which involves focusing processes that are connected with knowledge on the key values and criteria to which knowledge that is operated by the management must conform.

At present, ESG management has several levels of treatment and interpretation, given the position of the management subject. Thus, global and national institutes, while interpreting the essence of the ESG concept, point to its important social role, contribution to sustainable development, and a high level of relevance, in view of growing risks and goals that are defined by the global community. At the same time, for many economic subjects, the role of ESG is limited not by financial reporting, and influence is not limited by the desire to improve own image in society or the circle of investors and partners. Without a doubt, general global acceptance of this category influences market processes and gradually strengthens its own treatment of goals and values of sustainable development in the business environment. To a large extent, this takes place through the system of education, propaganda, and economic stimuli. Thus, knowledge of sustainability is gradually integrated into the system of values and goals of companies in the different sectors of the economy.

Thus, the presence of knowledge about the implementation of responsible activities and observation of ESG demands are not always the factors in the company's success. In many cases, organisations' management lacks systemic thinking and understanding of processes of knowledge management. They cannot be implemented within a separate department or office but must be integrated into all processes of the company (Bloomfire, 2022).

This is primarily due to the differences in goals, interaction, strategy, tactics, operation capacities, etc. An additional condition for the general integration of knowledge management into corporate management is the absence of understanding of the criteria of its effectiveness. What exactly can be treated as success in the sphere of knowledge management, without limiting its potential? Attention should be also paid to the necessity for the development of not so much the function of knowledge management as only the designation of the corresponding roles at the levels or departments of the company. Very often, the main mistake of the management regarding knowledge management lies in associating it only with IT. Such an approach allows for better development of knowledge banks and building the corresponding information platforms. But it bereaves the process of knowledge management of the key feature - multifunctionality.

Knowledge management is the basic notion in the organisational intellect, which is manifested through the execution of the entire set of organisation's functions, including the activities in the ESG sphere. According to this, organisations that have communities that are grouped around values, possess know-how, and have intellectual capital and well-developed data flows, which include also automatized systems of decision-making, corporate management, elements of HRM, and other progressive tools of management, possess substantial competitive advantages and are characterised by sustainability from the position of doing business (Fedoseeva & Generation, 2022).

In this context, the opportunities for sustainable development based on ESG management principles are implemented well within the knowledge economy. Therefore, investing in education, science, and technological innovations, together with the development of infrastructure, are important factors for the development of the economy and improvement of the population's well-being due to an increase in the level of effectiveness and competitiveness of the economy (Chen & Dahlman, 2006; Bogoviz, et.al, 2020).

The basis for responsible activities of companies, including green management, corporate social responsibility, climate-oriented management, and ESG is the UN Sustainable Development Goals. These are seventeen global goals, adopted by all UN members in

2015, to end poverty, protect the planet, and ensure peace and prosperity for all until 2030. These goals include such aspects as the fight against poverty and hunger, support for quality education, gender equality, clean water and sanitation, renewable energy, economic growth, industrial innovations, sustainable cities, responsible consumption, climate action, life under

water and on land, and partnership for the achievement of goals (UN General Assembly, 2015).

Each SDG determines certain problems and tasks the achievement of which is determined with the help of a certain set of indicators. The most relevant goals in the context of this research are SDGs 4, 8, 9, 12, and 17.

Table 1. Goals and indicators of sustainable development that characterise responsible knowledge management and information systems in the digital economy in the ESG system

No. of the indicator	Indicator of the SDGs
SDG 4 “Quality education”	
4.4.1	Share of youth/adults with ICT skills
SDG 8 “Decent work and economic growth”	
8.2.1	Growth of GDP per one employed
SDG 9 “Industry, innovation and infrastructure”	
9.5.1	R&D in % of GDP
9.c.1	Share of population covered by mobile communications
SDG 12 “Responsible consumption and production”	
12.6.1	Share of companies that publish sustainable development reports
SDG 17 “Partnership for the goals”	
17.6.1	Share of fixed Internet traffic in the global Internet traffic
17.8.1	Share of the population using the Internet

Source: Compiled by the authors based on the UN Statistics Division (2024).

To check the hypothesis on the positive impact of the factors of intellectual development, achieved level of sustainability, and digitalization on the general level of economic development of the country, a sample of indicators was formed. After the analysis of the

completion of data, the sample was narrowed down to five main indicators, which characterise the general economic, intellectual, digital, and sustainable development of the Russian Federation (Table 2).

Table 2. Input data of the model of assessing the influence of the factors of intellectual, sustainable, and digital development on the development of the Russian Federation

Years	GDP per capita, USD	9.5.1 R&D in % of GDP, %	17.6.1 Share of fixed Internet traffic in the global Internet traffic, %	17.8.1 Share of fixed Internet traffic in the global Internet traffic, %	Carbon dioxide damage, % of GNI
	y	x ₁	x _{2,1}	x _{2,2}	x ₃
2000	1,902	1.0498	n/a	1.98	11.47455
2001	2,255	1.1769	n/a	2.94	10.05868
2002	2,553	1.2465	0.0076	4.13	9.308672
2003	3,198	1.2860	0.2366	8.30	8.109444
2004	4,404	1.1513	0.4676	12.86	6.108395
2005	5,709	1.0680	1.105	15.23	5.030877
2006	7,426	1.0729	2.0232	18.02	4.222458
2007	9,761	1.1161	3.4238	24.66	3.360100
2008	12,464	1.0443	6.4856	32.00	2.751645
2009	9,157	1.2519	9.0107	42.55	3.611036
2010	11,431	1.1302	10.9604	49.00	3.128592
2011	14,306	1.0154	12.3007	58.00	2.552528
2012	15,288	1.0277	14.5676	66.00	2.432266
2013	15,929	1.0273	16.4948	67.97	2.385004
2014	14,008	1.0724	17.2925	70.52	2.725680
2015	9,258	1.1009	18.5814	70.10	4.177148
2016	8,724	1.1024	18.9669	73.09	4.546537
2017	10,724	1.1097	21.3838	76.01	3.894108
2018	11,262	0.9900	22.0132	80.86	4.024638
2019	11,555	1.0353	22.545	82.64	4.237060
2020	10,155	1.0910	23.2756	84.99	4.752700
2021	12,219	0.9620	23.8609	88.21	4.398096
2022	15,646	0.9358	24.7821	90.42	n/a

Source: Compiled by the authors based on the UN Statistics Division (2024), the World Bank (2024a) and the World Bank (2024b).

Given the logic of the model formation, the indicator of general economic development (GDP per capita – y) is a dependent factor, while the indicators of intellectual development (9.5.1 R&D in % of GDP – x1), digitalization (17.6.1 Share of fixed Internet traffic in the global Internet traffic – x2.1 and 17.8.1 Share of population using the Internet – x2.1), as well as sustainable development (carbon dioxide damage, % of GNI – x3) – are factor features.

Based on the data in Table 2, a correlation analysis was conducted. Its results are presented in Table 3. A factor that requires additional analysis and justification within the model is the time factor (years). Coefficients of paired correlation with this factor reflect time dynamics. According to this, the sample shows stable positive trends for the growth of digitalization in time (x2.1, x2.2) and an increase in the level of economic effectiveness, expressed through y.

Table 3. Results of the correlation analysis of the sample

	Years	y	x ₁	x _{2.1}	x _{2.2}	x ₃
Years	1.000					
y	0.745	1.000				
x ₁	-0.607	-0.661	1.000			
x _{2.1}	0.986	0.678	-0.625	1.000		
x _{2.2}	0.982	0.802	-0.607	0.993	1.000	
x ₃	-0.629	-0.902	0.448	-0.451	-0.660	1.000

Source: Authors.

Instead, the factors of intellectualisation of labour and sustainable development (x1, x3) are characterised by reverse connection with time factors. Similar correlation ties are connected also with the resulting factor (y). Thus, the digitalisation of the economy is in direct connection with the level of its economic development, while the factors of sustainability and intellectual development, included in the model, are characterised

by reverse dependence on the indicators of economic development.

For an in-depth study of the above assumptions, a regression analysis for two samples of data was conducted: model 1 (y, x1, x2.1, x2.2, x3) and model 2 (y, x1, x2.2, x3). The results of the analysis are given in Tables 4-5.

Table 4. Results of the regression analysis with the data of model 1

Variable		Coefficients	Standard error	t-Stat	p-Value
Constant		20,271.76	5,985.654	3.3867	0.0038
Expenditures for R&D, % of GDP	x ₁	-4,856.84	5,638.379	-0.8614	0.4017
Share of Internet traffic, %	x _{2.1}	114.4717	47.155	2.4276	0.0274
CO ₂ emissions, % of GNI	x ₃	-1,487.68	246.479	-6.0357	0.0000

Regression statistics	
R-square	0.876612
Adjusted R-square	0.853477
F-statistics: 37.89 (p<0.05)	37.89
Observations	20

$$Y_1 = 20,271.76 - 4,856.84 x_1 + 114.47 x_{2.1} - 1,487.68 x_3 + \varepsilon$$

Source: Authors

The results of the analysis of model 1 demonstrate the regressors in the model explain the change in Y1 by 87.7 %. The value of F-statistics of 37.89 and the corresponding p-values within 0.0-0.3 for x2.1 and x3 show that, except for x1, the model, on the whole, is statistically significant at the level of significance of 5%, and the share of fixed Internet traffic in the global Internet traffic and CO2 emissions are statistically

significant determinants of GDP per capita at the level of 5% and 1%, accordingly. According to this, an increase in the share of fixed Internet traffic of 1% is associated with an increase in GDP per capita of USD 114.47 on average, all other conditions being equal. At the same time, an increase in CO2 emissions of 1% is connected with an increase in GDP per capita of USD 1,487.68.

Table 5. Results of the regression analysis based on the data from model 2

Variable		Coefficients	Standard error	t-Stat	p-Value
Constant		23,534.40	5,437.320	4.3283	0.0004
Expenditures for R&D, % of GDP	x ₁	-9,582.10	4,637.604	-2.0662	0.0535
Share of Internet traffic, %	x _{2.2}	33.99	15.047	2.2590	0.0365
CO ₂ expenditures % of GNI	x ₃	-1,098.75	167.657	-6.5535	0.0000

<i>Regression statistics</i>	
R-square	0.8997
Adjusted R-square	0.8830
F-statistics: 37.89 (p<0.05)	53.81
Observations	22

$$Y_2 = 23,534.40 - 9,582.10 x_1 + 33.99 x_{2,2} - 1,098.75 x_3 + \varepsilon$$

Source: Authors

Regression model 2 with the high coefficient of determination (0.8997) demonstrates that regressors in the model explain the change in Y2 by almost 90 %. At that, the share of Internet users and CO2 emissions are statistically significant by 5% and 1% level of significance, respectively. In particular, an increase in the share of Internet users of 1% is associated with an increase in GDP per capita of USD 33.99 on average, all other conditions being equal. An increase in CO2 emissions of 1% is connected with an increase in GDP per capita of USD 1,098.75. The coefficient for R&D expenditures is negative, and its significance equals 10%.

Thus, both models point to the positive influence of digitalization on the economic development of the Russian Federation, which is combined with the negative effect of environmental factors on economic development, according to the sustainable development concept. At the same time, the role of innovations in models is ambiguous and requires further research.

The conclusions obtained demonstrate a good level of the use of the potential for digitalization to ensure economic development. At the same time, the ambiguity of the impact of intellectual potential on the level of economic development of the country points to the ineffectiveness of the system of knowledge management and innovative development, in particular, in the part of rational financing of R&D. According to the analysis, the main factor in the development of the economy based on the principles of sustainability, digitalization, and knowledge management is the tools of the digital economy. By stimulating their dissemination and widely implementing them in the system of knowledge management, the Russian Federation can achieve serious results in the world market, including high-tech and knowledge-intensive sectors.

At present, conditions of labour and the workplace itself undergo large-scale changes, which is primarily manifested through the integration of software for knowledge management (KMS) and large language models (LLM) into the system of the management of labour resources and knowledge. These technologies offer completely new opportunities for the search, creation, dissemination, and use of knowledge. Thus, KMS acquires the status of the key information system in the management of information, including key knowledge. This system offers new opportunities for storing, search, processing, protection, and dissemination of information, accelerating information processes and ensuring the quick movement of

information and knowledge within economic ecosystems. Joining LLM and KMS expands opportunities for the search and understanding of data and facilitates better substantiation of managerial solutions based on newly revealed data and knowledge (Elium, 2024).

Knowledge management becomes more complex in the dynamic environment of innovative development. Possession of knowledge alone is not enough to ensure its constant relevance and ability for reorientation in case of the loss of relevance. Tools of the digital economy facilitate the support for the relevance of knowledge through the acceleration of the processes of collection, processing, and generation (UNCTAD, 2021). Knowledge management requires constant updates and adaptation as a response to changing conditions, due to the capabilities of digital technologies.

Around 75% of organisations think that in case of effective use, the tools of knowledge management can raise company productiveness by 10-40%. The system of knowledge management (Knowledge Management System, KMS) is software for knowledge management, a platform that makes the creation, organisation, exchange, and use of knowledge within an organisation easier.

One of the promising tools of knowledge management in the conditions of the digital economy within the ESG system is MALENA. This is an analytical system of artificial intelligence, aimed at revealing relevant ideas and messages from large-scale non-structured ESG data, which facilitates their quick analysis, an increase in productiveness, and strengthening of investors' trust. The use of MALENA for the analysis of non-structured ESG data may have a range of positive consequences for responsible knowledge management, which will be manifested in the following:

- Improvement of the process of collection and synthesis of relevant knowledge from diverse sources;
- Increase in the quality of analysis due to the use of powerful algorithms for justified decision-making;
- Resources-saving and improvement of effectiveness due to automatization of repeated processes;
- Growth of trust of interested parties through demonstration of responsible treatment;

- Facilitation of the dissemination of responsible practices in different sectors (IFC, 2024).

One of the key challenges of development in the conditions of the digital economy is a real deficit of talent. The system of knowledge management in the digital economy must conform not only to the current demands but also to forecast directions and rates of evolution of the labour market in the short term (McKinsey, 2023).

4. DISCUSSION

The multidisciplinary of this research, which is manifested in the combination, within the ESG system, of different approaches, theories, and methodologies of management, ecology, digitalization, and informatization leads to a range of discussion, which require additional discourse and deep scientific cognition. The main aspect of such discourse is the absence of a clear understanding of the effectiveness of responsible management in economic systems. More attention should be paid to the criteria of "responsibility" in the economic activities of companies. What intensity must be seen in ESG measures that are implemented by companies to be considered responsible? From the position of responsible knowledge management, this discourse acquires larger relevance, given the complexity of the determination of knowledge connected with responsible management and the possibility of using it in mankind's interests.

Knowledge in scientific literature has a rather ambiguous treatment from the position of its ability to ensure the achievement of certain results. On the one hand, the factors in understanding processes and phenomena are seen as factors in active actions and changes. On the other hand, knowledge does not call for actions, and, in many cases, it is a restraining factor. Therefore, the treatment of knowledge only as a factor that facilitates the achievement of certain results is subjective and requires additional scientific discussion. In this context, skilful knowledge management is a stimulus for solving current problems of humanity.

There is also a discussion on the selection of data for analysis or modelling of ties between different factors in the context of the assessment of the influence of intellectual capital, digitalization, and sustainable

development on the economic indicators of the country and business. In this context, it is important to conduct large-scale research that would cover the indicators of different countries or economic regions, sectors of the economy, or organisations. Depending on the context, the results of the analysis may differ by values or treatment. Therefore, the results obtained can be considered only as empirical substantiation of the advantage of digital technologies from the position of their influence on economic development and as an argument regarding the necessity of transforming the system of financing science and innovations in Russia.

5. CONCLUSION

In the conditions of quick changes and global challenges, effective knowledge management acquires critical importance for the sustainable development of business structures. Responsible knowledge management plays a key role in implementing the principles of sustainable development and ESG practices in the organisations' activities. Formation of the ecosystem, which combines human resources, technological solutions, and effective processes of knowledge management, allows companies to raise personnel's awareness, integrate the values of sustainable development into their own culture, make more justified decisions, and increase the trust of interested parties. At the same time, the success of responsible knowledge management depends on the systemic approach at all levels of the organisation.

The results of the conducted correlation-regression analysis showed that the hypothesis on the direct influence of intellectual and digital potential, as well as sustainability, on the economic development of systems does not have undisputed proof of its correctness. Thus, among the mentioned factors, only the development of digital tools and infrastructure is characterised by a close direct connection with the indicators of the system's economic development. Factors of sustainable management and development of intellectual capital in the conditions of Russia require reconsideration and additional assessment. The main measures in knowledge management in modern conditions must be information systems and platforms that are based on digital economy tools.

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