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MECHANISM OF FORMATION OF INDUSTRIAL ENTERPRISE DEVELOPMENT STRATEGY IN THE INFORMATION ECONOMY

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Abstract. In the context of the information economy, industrial enterprises face the challenge of adapting their development strategies to align with global transformations in production, marketing, and management. This adaptation is essential for maintaining competitiveness and fostering sustainable growth. However, existing development strategies often fall short of addressing the complexity of integrating modern business process management systems with traditional enterprise structures. The main gap lies in the lack of a comprehensive mechanism that harmonises specialised business processes with overarching management systems and incorporates advanced technologies for automation and informatisation. The aim of this study is to develop a robust mechanism for formulating a development strategy for industrial enterprises that aligns with the demands of the information economy. The proposed approach is grounded in a model that ensures the harmonisation of specialised business processes with business process management practices, facilitates the integration of these systems into the general management framework of an enterprise, and utilises informatisation and automation to enhance efficiency. The methodology involves a combination of qualitative and quantitative analysis to assess existing management practices and to design a model capable of harmonising business processes within an enterprise. Empirical data were collected from industrial enterprises, and the analysis focused on the impact of the proposed mechanism on various performance indicators, such as competitiveness, sales growth, and cost reduction. The results indicate that the implementation of the developed mechanism enhances the overall competitiveness of industrial enterprises, increases sales, and reduces production costs. The findings contribute to the understanding of how integrated business process management can be effectively adopted in the information economy. In the discussion, the study emphasises the practical implications of the proposed mechanism and how it can be adapted across different industrial sectors. The conclusions underscore the necessity for continuous adaptation and innovation in management strategies to align with technological advancements. Future research should explore the scalability of this model across various types of industrial enterprises and examine its long-term impact on organisational growth and resilience.

Keywords: mechanism, strategy, development, industrial enterprise, information economy, business processes, management, automation

JEL Classification: C130, L690, G140

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1. Introduction

The management of the development of an industrial enterprise requires the formulation of an appropriate strategy, in which measures for the development of various spheres of the industrial enterprise are integrated and coordinated, and the specific development characteristics influenced by the external environment are considered. In the context of the information economy, special attention should be given to the development of the managerial sphere of an industrial enterprise. This involves the culmination of the development of other areas and the integration of automation, robotisation, and informatisation measures developed within this framework into the overall strategy for the enterprise's development.

The information economy is expanding in multiple ways. The global production of information and communication technology (ICT) goods and services now accounts for an estimated 6.5% of global gross domestic product (GDP), employing approximately 100 million people in the ICT services sector. Exports of ICT services increased by 40% between 2010 and 2015. In 2015, worldwide e-commerce sales reached $25.3 trillion, with 90% in the form of business-to-business (B2B) transactions and 10% as business-to-consumer (B2C) sales. According to UNCTAD estimates, cross-border B2C e-commerce was valued at about $189 billion in 2015, representing 7% of total B2C e-commerce. Robot sales are at an all-time high, while global shipments of three-dimensional printers more than doubled in 2016, reaching over 450,000 and expected to rise to 6.7 million by 2020. By 2019, global Internet traffic volume was projected to increase by a factor of 66 compared to 2005 (UNCTAD, 2017). The top 10 economies by value added from ICT services in 2015 are shown in *Fig. 1*.

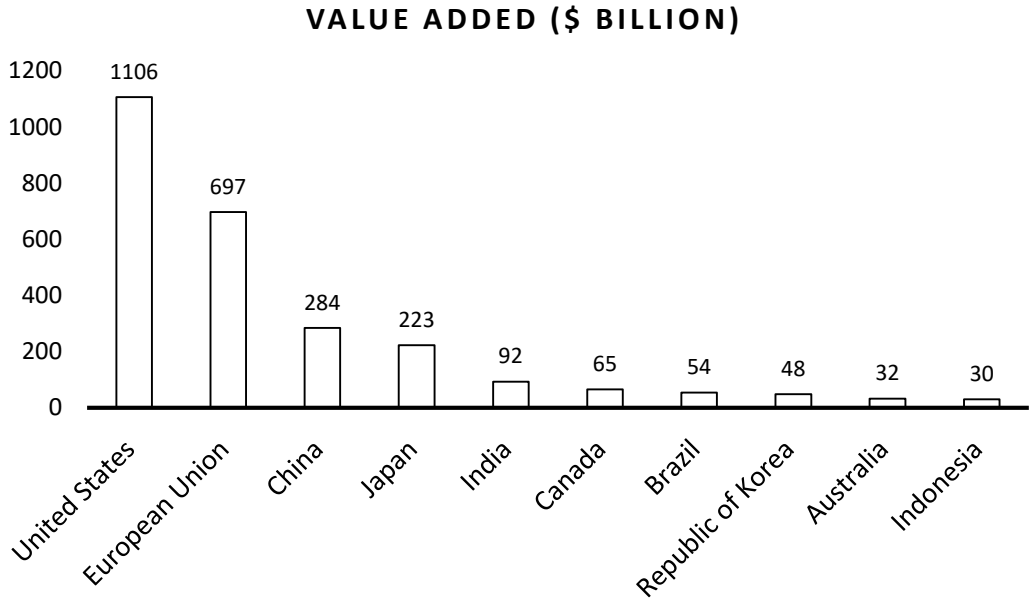

Figure 1. Top 10 economies by value added of ICT services in 2015
Source: own research on the basis of Eurostat data.

Top 10 economies by number of Internet users in 2015, and growth rates in number of users, 2012−2015 are shown in *Fig. 2.*

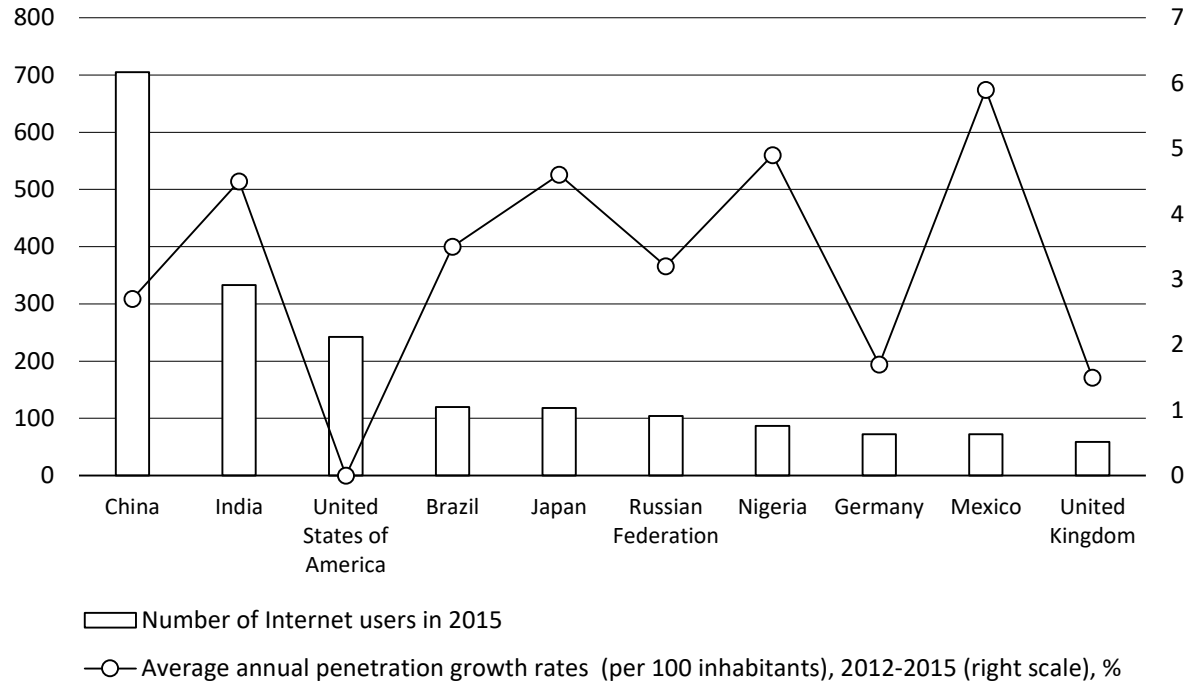

Figure 2. Top 10 economies by number of Internet users in 2015, and growth rates in number of users, 2012−2015
Source: own research on the basis of Eurostat data.

UK businesses around the world make intelligent use of information technology and data. Together with the government's industry, it began a program to support the aspirations of industrial enterprises to take advantage of all the opportunities provided by the information economy. The program should reach 1.6 million enterprises over the next five years. The program will be built on existing governmental support, including tips on improving their cyber security and protecting their intellectual property (Information economy strategy UK, 2013).

Consequently, it is necessary to take advantage of such perspectives for the development of industry in general and the development of enterprises in particular.

2. Literature review

Some questions about the specifics of the information economy were discussed in the papers (Arrow, 1999; Bagheri & Hjorth, 2007; Aumann & Heifetz, 2002; Brynjolfsson & Saunders, 2009; Elsneret al., 2015; Kwilinski 2018; Lacy et al., 2010; Lakhno et al., 2018; Lippman & McCall, 2015; Marston et al., 2011; Morris, 2009; Mycielski, 1992; Reddy et al., 2009; Roome, 2013; Shenhar et al., 2007; Sun et al., 2017; Douma & Schreuder, 2013; Yakubovskiy et al., 2017). However, despite the considerable contribution of scientific works, existing approaches

differ in their narrow orientation; therefore, the study of their individual advantages and restrictions in use will allow determining the main directions of development in the conditions of the information economy.

Sustainable development is much debated as the burning challenge of the 21st century (Lacy et al., 2010). The most commonly accepted definition, penned by the Brundtland Report (World Commission on Environment and Development (WCED), 1987), is the process of development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Sustainable development is a systems issue (Roome, 2013), which requires that understanding of the system's problems flow from larger systems to smaller systems and involve multi-stakeholder perspectives (Bagheri & Hjorth, 2007).

Some authors propose to develop and implement a strategy for enterprise development through the construction of an integrated information system whose task is to provide managers with quality information. The peculiarity of this system is the use of integrated reporting, which makes it possible to establish a dependency between the indicators of enterprise sustainability, its ability to create value and reduce reputational risks. Integration is generally considered to go beyond mere interoperability to involve some degree of functional dependence (Panetto, 2007; Tvaronavičienė, 2014).

The main disadvantage of the approach is financial development, due to which insufficient attention is paid to the automation and informatization of the manufacturing sphere, which are very important in the conditions of the modern economy (Pajak et al., 2016).

One of the main factors that will have an impact on the development of industrial enterprises in the information economy is cloud technology, for which global leaders need to develop an appropriate IT development strategy (Marston et al., 2011). They offer an IT strategy for the development of an industrial enterprise in five directions: the development of infrastructure, services, applications, business processes and sourcing. Thanks to this, industrial enterprises will be able to benefit from data processing and the ability to quickly change the corporate information system. But cloud storage is just one of the newest technologies that provides benefits in the functioning of the enterprise in the information economy, so the other areas of the development need to be taken into account to ensure sustainable development of the enterprise.

The main tool for the development strategy is an information system for automating management decisions (Reddy et al., 2009). The main features of the proposed system are the consideration of external factors in determining the direction of development of economic potential, using of fuzzy modeling and modeling of organizational interaction. The result should be an active, passive or compensatory development model. Ignoring the need for modernization of the industrial sphere of industrial enterprises and the need to reconcile this

modernization with the general strategy of enterprise development should be noted among the discussion points of this approach.

Jan Mycielski (1992) proposed an approach to automating the process of choosing an enterprise development strategy in a market environment and uncertainty, based on this approach, the game model and information system for its calculation are taken. The main criterion for optimizing the development strategy is the profit of the enterprise. But it is not sufficiently described which market uncertainty has been taken into account in the model, as well as how it is proposed to adapt to the modern information economy.

Adaptation of enterprises to the modern economy requires the creation of the appropriate infrastructure and proposes a strategy for the development of the information infrastructure of the machine-building enterprise (Hroznyi et al., 2018). The main attention in the proposed strategy is given to the informatization of the management system, the modernization of the organizational structure, the scientific substantiation of the composition of the management apparatus. However, the question of production, marketing, supply and other important for the manufacturing enterprise spheres of activity remained out of sight.

If you consider the strategy in individual projects, then the strategy research has focused largely on the strategic alignment perspective based on deliberate planned strategy between projects and parent organizations as a factor for successful projects and successful execution of organization strategy (Morris, 2009; Shenhar et al., 2007). Recent research acknowledges the strategic character of individual projects, enabling them to emerge strategy with stakeholders so that they are competitive in the project context (Vuori, 2013).

3. Methods

The analysis of the results of the research on the development of the industrial enterprise made it possible to establish that most researchers in solving the problem of forming a strategy for the development of an industrial enterprise in the modern economy are considering only individual components of the strategy, and generally development is considered in the general sense, without taking into account the features of the information economy. The enterprises that carry out production activities need to take into account the development of the manufacturing sector in the development strategy, and then build a strategy for general development, including the development of management, taking into account the need for automation, robotization and informatization of production and management processes in accordance with the requirements of the information economy. To solve this problem, a mechanism of the formation of the development strategy of an industrial enterprise in the information economy was developed, the main interrelations of which are shown in *Fig. 3.*

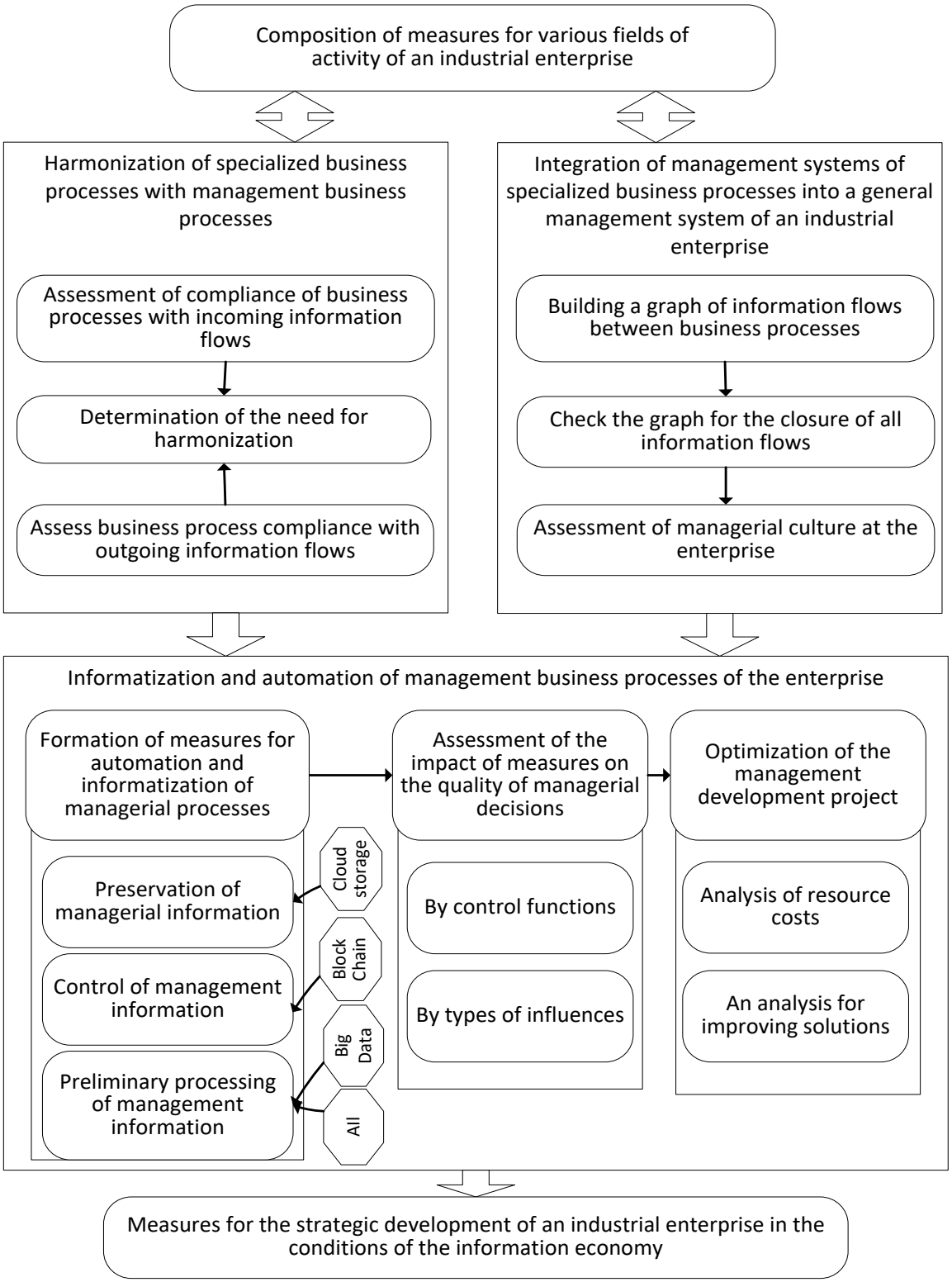

Figure 3. The mechanism of the development strategy formation of the industrial enterprise in the information economy
Source: own research.

It is proposed to distinguish the process of development of the management system of an industrial enterprise and the development of certain spheres of its activity. Moreover, in these spheres of activity of the industrial enterprise the production and management fields deserve special attention, because it is in these directions that the backlog from the world leaders negatively affects the efficiency of the industry. In each field of activity of an industrial enterprise there are specialized business processes that need to be improved, first of all, by automation and informatization in accordance with the requirements of the information economy. In addition, most enterprises need to improve the overall business process management.

The peculiarity of the information economy is the emergence of the latest methods to support the adoption of managerial decisions that ensure the availability of the necessary information and accelerate its processing, which makes it possible to develop more grounded management decisions.

From the point of view of a typical industrial enterprise, the main directions of improvement of the enterprise management system are:

- informatization and automation of business processes of the enterprise;
- integration of management systems of specialized business processes into a general management system by an industrial enterprise;
- harmonization of specialized business processes with management business processes.

The proposed mechanism of the development strategy formation of the industrial enterprise in the information economy has at the entrance the projects of modernization of other spheres of the industrial enterprise activity in the conditions of the information economy, including modernization of the industrial sphere of the enterprise, which is of particular importance in the conditions of the information economy. For these projects a composition of measures for various fields of activity of an industrial enterprise is carried out, the result of which is the basis for the development of a management system by an industrial enterprise.

With the development of an industrial enterprise in the information economy, informatization and automation of the business processes of the enterprise are a central element of development, as information from all specialized departments conducting the curriculum of certain spheres of the industrial enterprise activity should be assembled in a single decision-making center. It makes no sense to improve other areas of the industrial enterprise in accordance with the requirements of the information economy if the management system of the industrial enterprise as a whole cannot effectively communicate with the relevant departments and control the implementation of specialized business processes.

Business process management refers to the processes that result in the obtaining of managerial results or management (decision-making, control, analysis, etc.). The purpose of business process management is to manage other business processes (Suleymanova & Omarova, 2017).

In order to ensure the effectiveness of the managerial business processes of an industrial enterprise in the conditions of the information economy, the following tasks should be performed: information preservation management, information control management, information pre-processing management in order to support decision-making.

Preserving the management information and giving the access to it to all managers who need it become non-trivial tasks in a situation where information collection is carried out on many sites, especially when production and sales of products are distributed. For this purpose, it is expedient to use cloud storage that solves most of the problems of scaling and distributed collection and use of information.

Control of the management information is the provision of access to information only to those employees who have the appropriate rights, as well as the logging of changes made by responsible persons. To ensure that logs are unaltered, the most effective use of encryption algorithms BlockChain.

Preliminary processing of managerial information to support decision-making in the information economy has a huge amount of data collected, so the information system should use technologies of artificial intelligence (artificial intellect, AI) and processing big data (BigData).

Table 1. Range of evaluation of measures on informatization and automation of business process management

Type of management function	Type of influence on the decision		
	Speed	Reasonableness	Complexity
Planning	[-5;5]	[-5;10]	[-10;5]
Organization	[-10;10]	[-3;3]	[-3;3]
Motivation	[-5;5]	[-4;8]	[-7;7]
Control	[-4;4]	[-3;3]	[-10;10]

Source: own research.

Successful fulfillment of all these tasks and positive characteristics of the informatization of business process management constitute the overall quality of managerial decisions. Measures of informatization and automation of managerial business processes increase the quality of managerial decisions. Each of the measures can have both a positive and a negative impact on each of the managerial functions implemented by the business process management. In addition, each measure positively or negatively affects the speed, reasonableness and complexity of making managerial decisions. Thus, as a whole the measure affecting the informatization and automation of business process management must find the sum of all its influences. To form a plan for informatization and automation of business process

management, it is proposed to evaluate each of the possible measures in the ranges shown in *Table 1.*

To choose which of the possible measures should be implemented, it is proposed to use an optimization model whose purpose is to maximize the quality of managerial decisions:

$$\sum_{u}\left(\beta^{u}\cdot\sum_{f,s}\alpha_{\mathrm{f,s}}^{u}\right)\rightarrow\max, \tag{1}$$

$$\sum_{u}\left(\beta^{u}\cdot\sum_{s}\alpha_{\mathrm{f,s}}^{u}\right)\geq G_{f}, \tag{2}$$

$$\sum_{u}\left(\beta^{u}\cdot R^{u}\right)\leq \mathrm{G^{R}}, \tag{3}$$

where $\beta^{u}=0\ \mathrm{or}\ 1$ – a logical variable that reflects whether it should be implemented u-th an event on informatization and automation of managerial business processes;

$\alpha_{\mathrm{f,s}}^{u}$ – quantitative impact assessment u-th an event on informatization and automation of managerial business processes for the quality of managerial decisions for f-th type of management function and s-th type of influence on the decision;

G_{s} – the minimum need to improve the quality of managerial decisions by the s-th type of influence on the decision;

G_{f} – the minimum need to improve the quality of managerial decisions for the f-th type of management function;

G^{R} – available resources for implementing information and automation of business process management.

The integration of management systems for specialized business processes into the general management system of an industrial enterprise is the coordination of the channels of information transfer from the specialized units to the general system of management of the enterprise and in the opposite direction. It is necessary to ensure the following qualities:

- for each upstream information flow from specialized business processes there should be a corresponding receiving information flow from business process management;
- for each downstream information stream from management business processes there should be a corresponding receiving information stream from specialized business processes;
- each message must be processed - replied, redirected or included in the pool of information for further management decision.

All this can be done through the use of an appropriate information system that provides electronic document management and control of the movement of information messages. Moreover, in addition to technical support, an appropriate management culture at the

industrial enterprise is also required, in which managers of all units perform all necessary actions for the processing of information messages. The following indicator is proposed to evaluate the effectiveness of management culture in the processing of information messages:

$$In^K = \frac{\sum_i \left(w_i^K \cdot h_i^K \cdot b_i^K \right)}{\sum_i \left(w_i^K \cdot \tilde{h}_i^K \right)}, \quad (4)$$

where In^K – the indicator of the efficiency of management culture in the processing of information messages;

w_i^K – the importance of the type of information messages to which the i-th message relates;

h_i^K – the time actually spent on the performance of an i-th notification;

b_i^K – variable (0 or 1), which shows if the required action has been taken on the i-th notification;

h_i^K – the time for which the regulation is required for action on the i-th notification;

$i = 1,...,I$ – the index of actions that were analyzed in assessing the effectiveness of management culture in the processing of information messages.

An assessment of the importance of the action depends on its type and direction of the information message, which is shown in *Table 2.* The value of the received indicator of the effectiveness of management culture in the processing of information messages can be in the range from 0 to 1. The units correspond to the case of complete fulfillment of all duties on processing of information messages, without delays and omissions.

An indicator of the effectiveness of management culture in the processing of information messages can be calculated as a whole for all interactions of the industrial enterprise, and for certain types of interaction it is considered taking into account only informational messages between a separate unit or department and management, or only for certain types of specialized business processes.

Harmonization of specialized business processes with business process management is the creation of tools for balancing the information capabilities of related business processes.

That is, the input capabilities of business processes should correspond to those informational messages that come to them, and outsourcing must meet the requirements for the information that the recipient needs from the business process.

Table 2. Dependence of the importance of actions when processing information messages on their type

Recipient of an information message	Action	Importance
Lower link	Response to the acceptance of the order	1
	Response to the execution of the order	1
	Information on the current state of the protocol	2
	Informing about emergency events	5
Upper link	Confirmation of receiving an informational message	1
	Order	3
	Inclusion to the pool of information for further processing	2
Conjoined peer link	Informing about the need for coordination	2
	Coordination	2
	Forwarding	1

Source: own research.

To ensure the harmonization of specialized business processes with business process management, the following measures can be used:

- providing workers with technical means of collecting and transmitting information;
- training of information technology personnel;
- creation of systems of the automated information gathering and forecasting of the course of the business process;
- creation of automated information systems for all involved in the business process;
- creation of presentations and information systems, etc.

To determine if measures are needed to harmonize specialized business processes with business process management, it is suggested to use indicators of incoming and outgoing information flows for their loading.

To calculate, it is suggested to use the formula:

$$Cor_i^{In} = \frac{\sum_n \sum_a w_{a,n}^{Cor}}{\mathrm{N_i}}, \quad (5)$$

where Cor_i – the indicator of correspondence to the load of the information flow of the i-th business process;

$w_{a,n}^{Cor}$ – estimation of the a-th characteristic of correspondence to the load of the information flow of the i-th business process in the n-th direction;

N – the number of directions on which the information communication is carried out by the i-th business process.

In order to assess the incoming flows compliance, it is proposed to consider the following characteristics:

- suitability of the qualification of the compliance officer, which reflects the availability of the required qualities in the employee who, according to the job descriptions, must create informational messages;
- the ability to replace a responsible employee reflects whether there are employees who have the required qualities and can perform the necessary functions;
- the influence of the human factor is an assessment of the quality of the formalization of the instructions and processes for creating information messages, and which, in this case, the false actions of the responsible employee can influence the quality;
- the sufficiency of technical support for the receipt of information messages, their presentation and analysis, as well as means of further processing.

Quantitative evaluations of the characteristics of compliance with the information load of the incoming information flows from the specialized business processes and business process management are shown in *Table 3.*

Table 3. Characteristics of compliance with the information load of incoming information flows

Characteristics	Qualitative assessments	Quantitative estimates
Sufficiency of qualification in the responsible employee	Enough	0.30
	Satisfactory	0.15
	Inappropriate	0.00
Ability to replace responsible employee	Exist	0.20
	There is in part	0.10
	Not exist	0.00
Impact of human factor	There are systems of reminder and control	0.20
	Execution depends entirely on the employee	0.10
Sufficient technical support	Full	0.30
	Partial support	0.15
	Hand-crafted	0.00

Source: own research.

It is proposed to evaluate the conformity of incoming flows on the basis of the following characteristics:

- the degree of automation of the formation of information messages, which characterizes how exactly the collection, processing and sending of information are carried out - automated or with the use of manual intervention of the responsible officer;
- the existence of formal rules for the formation of information messages, such as the approved form of reporting, "protection against mistakes" (foolproof) when filling data, algorithms for performing functions of interaction in job descriptions;

- the adequacy of technical support characterizes the availability of means for collecting, processing, sending information and monitoring the performance of the function of information interaction.

Quantitative evaluations of the characteristics of compliance with the information load of the output information flows, specialized and managerial, are shown in *Table 4.*

Thus, the evaluation of compliance indicators with the information load of incoming and outgoing information flows gives an opportunity to evaluate the business process as a whole and analyze the components of this indicator for identifying the primary sources of the problem and developing measures for their elimination.

Table 4. Characteristics of the correspondence to the information load of the output information flows

Characteristics	Qualitative assessments	Quantitative estimates
The degree of automation of the formation of information messages	Enough	0.40
	Satisfactory	0.20
	Unsatisfactory	0.00
The presence of formal rules for the formation of information messages	Complete coverage of all functions	0.30
	Partial coverage of all functions	0.15
	Not developed	0.00
Sufficient technical support	Full	0.30
	Partial support	0.15
	Hand-crafted	0.00

Source: own research.

The developed mechanism of formation of the development strategy of the industrial enterprise in the information economy is based on the assessment of the conformity of business process management with other advanced business processes and provides an opportunity to improve the efficiency of the management system of an industrial enterprise. In this case, computerization, automation and robotization of business processes are carried out in accordance with the requirements of the information economy, which ensures the high competitiveness of the industrial enterprise.

4. Results

Approbation of the developed mechanism of the formation of the development strategy of an industrial enterprise in the information economy was carried out at *Enterpise A* while improving the enterprise management system in accordance with the previously implemented modernization of the manufacturing sector and taking into account the impact of the information economy on both internal and external markets for thermal equipment in some countries.

As a result of the analysis of the competitiveness of *Enterpise A* it has been established that, for most indicators, the company has a better competitiveness than its competitors on the market. But according to the "Degree of enterprise representation in the information space", the raiting of *Enterprise A* was 0.40, while on average it reached 0.42 among its competitors. This area of evaluation relates mainly to the marketing sphere of the enterprise, therefore, in addition to the previously described modernization of the manufacturing sector, the development strategy of *Enterprise A* must also include the improvement of marketing communications.

As a result of building graphs of information flows between the improved business processes of the production and marketing areas of the *Enterpise A* business and analyzing the closure of the links between them, it has been established that there are inconsistencies that require the implementation of measures to integrate the management systems of specialized business processes into the general control system of the industrial enterprise.

Among the main problems identified, the following should be noted:

- the absence of high-level management information processes and models for handling information messages from the manufacturing sector about positive deviations from the plan of pre-term execution, saving of raw materials or fuel, etc.;
- the absence of a high level of management information processes and models for processing informational messages from the marketing sphere concerning previous requests to *Enterprise A*, which were not completed by contracts.

To solve these problems, it is necessary to implement the following measures:

- development of staff assessment and promotion criteria with positive deviations from the plan;
- developing approaches to the continued use of good practices that have led to positive deviations from the plan;
- identifying the respondents for analyzing the potential unsatisfied demand resulting from the use of Internet communications.

In turn, when evaluating compliance of management and specialized business processes with incoming and outgoing information flows, it has been established that at the managerial level there are problems in the following areas:

- most management business processes have an unsatisfactory level in terms of "Possibility of replacing a responsible employee" (for 56% there is no possibility of replacement, for 23% there is a partial replacement);
- for all managerial business processes, "Impact of the human factor," implementation depends entirely on the employee, and there are no mechanisms for reminding and controlling the execution;
- for all managerial business processes, "The degree of automation of the formation of information messages" is unsatisfactory, that is, routine managerial decisions do not require the development of fundamentally new approaches, but can be created by the template, not automated;

- for specialized business processes in the industrial and marketing spheres of "Enterprise A", the indicator "The availability of formal rules for the formation of information messages" is unsatisfactory, and in the job descriptions there are no necessary items.

To eliminate these problems, it is necessary to implement measures for the harmonization of specialized business processes with business process management:

- improvement of organizational structure and extension of job descriptions in order to ensure interchangeability of officials;
- introduction of information management systems for document management and project management;
- carrying out researches on automation of the development of routine managerial decisions;
- improvement of job descriptions in order to formalize the rules of formation of information messages.

Thanks to the above-mentioned measures to improve the quality of managerial decisions, in addition to optimizing the integral indicator of the quality of managerial decisions of an industrial enterprise in the conditions of the information economy, an economic effect can be obtained.

To calculate the economic effect, it is proposed to use the formula (Zhadko, 2014; Lobov, 2014):

$$\mathrm{EF}_{t1}^{t2} = \Delta Cost_{t1}^{t2} + \Delta Earn_{t1}^{t2} - \mathrm{I}ntr, \quad (6)$$

where EF – economic effect for the time period t1-t2 from the implementation of the mechanism for forming the development strategy of an industrial enterprise in the information economy;

$\Delta Cost_{t1}^{t2}$ – reduction of the cost price for the period t1-t2 as a result of implementation of the mechanism of the formation of the development strategy of an industrial enterprise in the information economy;

$\Delta Earn_{t1}^{t2}$ – increase in sales volumes during the period t1-t2 as a result of implementation of the mechanism for forming the strategy of development of an industrial enterprise in the information economy;

$\mathrm{I}ntr$ – costs for the implementation of the mechanism of the formation of the development strategy of an industrial enterprise in the information economy.

The calculation of the economic effect has been carried out over three years, and it has been assumed that the internal and external markets for thermal equipment will have the unchanged development trends and there will be no crises or sharp changes in demand. At the same time, the increase in sales volumes to *Enterprise A* comes at the expense of redistribution of the market through better quality of products, more competitive price and the newest method of marketing information communications. Reducing the cost of

production is achieved by increasing the efficiency of the equipment (rotation of the dyeing chamber, automation of the control system of the drying chamber), reducing the number of defects (primarily due to the automation of the entrance control of shaped metal rolling, as well as the rotation of equipment), increase in productivity as a result of reducing the number of downtime and increasing ergonomics of production operations.

Costs of the implementation of the mechanism of the development strategy formation of an industrial enterprise in the information economy consist of the cost of purchasing new equipment, training workers, purchasing computer equipment, developing an information system.

The components of the economic effect from the implementation of the mechanism of the development strategy formation of an industrial enterprise in the information economy is shown in the *Table 5.*

Table 5. Economic effect from the implementation of the mechanism of the development strategy formation of an industrial enterprise in the information economy

Component of economic effect	Amount, thousand £
Reduced cost as a result of increased productivity	1200
Decrease the cost as a result of automation and rotation of production operations	5600
Increased sales due to improved product quality	4200
Increased sales due to lower prices	8700
Increased sales due to more efficient customer service	1200
Costs for the development of the manufacturing sector	9450
Costs for development of marketing sphere	560
Costs for development of managerial sphere	1300
Economic effect	9590

Source: own research.

Consequently, due to the implementation of the mechanism of the development strategy formation of an industrial enterprise in the information economy, the estimated economic effect at the *Enterpise A* is 9950 thousand pounds, which confirms the effectiveness and relevance of the proposed components of the development strategy.

5. Conclusions

Most researchers, when solving the problems of the development strategy formation of an industrial enterprise in the modern economy, consider only certain components of the strategy and consider the development of general content without taking into account the peculiarities of the information economy and the state of industry. Therefore, for enterprises that carry out production activities, it is necessary to develop a strategy taking into account

the need for automation, robotization and informatization of production and management processes in accordance with the requirements of the information economy.

In order to ensure high competitiveness, a mechanism of the development strategy formation of an industrial enterprise in the information economy is developed, which is based on the assessment of the conformity of business processes with other developed business processes and provides an opportunity to increase the efficiency of the management system of an industrial enterprise. In this case, computerization, automation and business processes are carried out in accordance with the requirements of the information economy.

The testing of the developed mechanism of the development strategy formation of the industrial enterprise in the information economy of enterprise A has been carried out, the enterprise management system has been improved taking into account the influence of the information economy on the internal markets of the thermal equipment of some countries.

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