Digitalization Of The Economy: Possible Benefits And Risks


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Abstract. The research paper discusses the problems of management in the digital economy, as well as the directions of development for their elimination. The necessity, possibility and expediency of introducing accurate (calculation) methods into the work of managers is noted. Within the framework of this task, the possibility of carrying out work on the creation and development of a parametric model of a social system operating in an active environment is shown to create appropriate techniques, tools, including computer programs for automating management activities, a simulation model of an enterprise, which can be used both in systems decision-making or decision support systems, and in training for the formation of decision-making skills.

Keywords: digital economy, digital management, parametric model of a company, parametric model of a social system.

Introduction. The economy of Uzbekistan this year continues to develop at a record pace. At the end of 9 months of 2021, the country's gross domestic product grew by 6.9%. For comparison, in the same period last year, due to the pandemic, economic growth was only 0.8% [1]. In the last decade of the 20th century and the beginning of the 21st century, the economic environment has undergone many changes, which resulted in the aggravation of competition at all levels. Nowadays, economic actors are faced with a difficult task - to gain a strong competitive advantage, such that the enterprise will not only survive in the war for the consumer, but also take the path of stable development. In such conditions, many new approaches to management have emerged - with a strategic focus.
However, traditional management accounting is not able to provide all the data required for successful strategic management. Today's information technologies make it possible to receive and process information much faster, more efficiently and more accurately. This means a minimum of routine work, a maximum of opportunities to solve long-term problems.

Many researchers criticize traditional management accounting for being one-sided - after all, it is based on internal processes in the organization, paying much less attention to external factors. This approach excludes the possibility of strategic planning.

Thus, we can conclude: in the conditions of the volatility of the modern economic environment, short-term advantages cannot be counted on; the stable existence of an organization can only be ensured by an orientation towards long-term goals.

To provide information for strategic decisions, new methods of management accounting have emerged, the totality of which is now commonly called strategic management accounting. The main difference between this type of accounting is that it is closely related to other economic disciplines - from marketing to econometrics - absorbing many concepts and principles from these areas of knowledge. We can say that strategic management accounting is the result of the merger of strategic management and management accounting.

So, strategic management accounting is an information base for making strategic decisions. This is its main difference from traditional management accounting, which is aimed at information support of current operational management decisions.

The development prospects of the state are determined by its natural, industrial, economic and human resources, and the effective use of the above resources is becoming the most important task of state regulation.

It should be borne in mind that the main factor of production, economic growth and, ultimately, the competitiveness of the state in the context of the digitalization of the economy are, first of all, human countries. The transition to an innovative digital economy requires a change in the approach to enterprise personnel management. According to forecasts published by the international consulting company McKinsey & Company, most countries, both developing and developed economies, will see a tremendous increase in the number of unemployed among medium- and low-skilled labor market representatives in the next decade [2-4].

The transition from an analogue economy to a digital economy faces the challenge of staffing quality. There is a need to form human resources with new competencies in the digital economy: these are both new graduates and “old” personnel who will be able to master new competencies.

The digital economy is a natural consequence of technological progress, the development of technological infrastructure and the use of large databases have caused a large-scale digital transformation of society. If the first stage of digitalization was characterized by the expansion of Internet access for millions of consumers, then the current stage is distinguished by the introduction of a wide range of digital services, products and systems into the production and management process. This process will inevitably lead to unrecognizability of many sectors of the economy: the technological order, production chains, demand and production controllability are changing. Business processes are being reorganized and modified to integrate IT infrastructure, which will increase the speed of business operations, create new information channels, and simplify the procedures for introducing and developing new products. Analysts highly appreciate the capabilities of block chain technologies as a tool to ensure speed,
transparency and security of information transfer, which directly affects the restructuring of the business model. In the context of the transition to an innovative digital economy, the importance of the intellectual component of human capital increases significantly [5-6].

Digital technologies will reduce communication time and speed up all business processes; therefore, special attention is paid to the development of human capital. Enterprises wishing to remain competitive in the market, before introducing new techniques and technologies, must restructure the methods of organization and management of the enterprise personnel, change the personnel policy, train competent personnel, and carry out the transformation of the enterprise personnel management system.

For employers in modern conditions, the so-called “soft skills” are becoming a priority: personal qualities and social skills, for example, the ability to work in a team, curiosity, initiative, critical thinking, the ability to solve complex problems, interact with different people and prioritize correctly.

Experts predict that in the next five years, developed countries will lose up to 5 million jobs due to the introduction of digital technologies and robotization, which necessitates the development of measures aimed at mitigating the impact of new technologies on the labor market.

On the other hand, in the near future, one should expect a natural increase in demand for highly qualified specialists capable of working in a rapidly changing economic environment, with knowledge in the field.

IT technologies applied in a specific industry. A high demand for highly specialized personnel is predicted. A specialist needs to have competencies in the field of new technologies, be an expert in his field, learn quickly and implement new solutions. Equally important is the development of remote work skills.

For manufacturing enterprises, it is primarily about: reducing costs thanks to information technology and robotization; increasing the flexibility of logistics support, due to the abandonment of surplus assets; elimination (full or partial) of the human factor, etc.

It should be noted that despite the fact that digitalization is one of the recognized ways to improve the efficiency of production and logistics processes, its practical implementation cannot be carried out without an integrated systematic approach that requires not only significant investments required for the institutional restructuring of the existing production structure, but the appropriate methodological support. The basis for methodological support can be a roadmap (program) for the introduction of digital technologies in the production process of an enterprise.

Let’s move on to considering the possible stages of introducing digital technologies in the production process of the enterprise. Conventionally, four stages can be distinguished: preparatory, experimental, transitional and final (Table 1).

<table>
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<th>№</th>
<th>Stage nomination</th>
<th>List of activities</th>
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<tr>
<td>1</td>
<td>Preparatory</td>
<td>Analysis of domestic and foreign experience of using digital technologies at enterprises, determination of production processes to be</td>
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<td>2</td>
<td>Experimental</td>
<td>Automated; economic justification of digitalization measures, development of elements of a methodological apparatus for assessing its results; carrying out work on training (retraining) the personnel of enterprises, justification of measures to optimize its number with taking into account the possibilities of new technologies. Experiments on the use of digital technologies at individual production sites or the enterprise as a whole; assessment of the functional and economic efficiency of using digital technologies; development of draft planning documents, contracts and instructions; calculation of the need for works (services) associated with the transition to large-scale digitalization of production; selection of contractors for the purpose of carrying out activities for the digitalization of production.</td>
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<td>3</td>
<td>Transition</td>
<td>Organization of operation of new equipment and debugging (tuning) of the software used, prompt elimination of the consequences of possible failures in synchronization between the elements of the digital production system being formed; interaction with companies involved in the digitalization process production, identification of problems, search for ways to solve them; quality control of the production enterprise functioning based on digital technologies; reduction (optimization of the number of employees) of the enterprise.</td>
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<td>4</td>
<td>Conclusive</td>
<td>Maintaining the achieved level of production functioning; monitoring of key production processes and implementation of a continuous benchmarking policy; formation of a training system (reproduction production) personnel, taking into account the</td>
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Each stage presented in the table contains a list of private events that reflect the author's understanding of specific actions on the part of the management of manufacturing enterprises to digitalize production. Particular attention should be paid to the analysis of domestic and foreign experience in the use of digital technologies, the definition of production processes to be automated, as well as the conduct of experiments on the use of digital technologies within the experimental stage. As for the possible risks of digitalization of production, they are certainly present.

The strategic accounting system presupposes a comparative analysis of competitors, suppliers, consumers, legislative changes, etc. The strategic focus of the system is associated with changes in the internal environment of the organization, helping to implement its strategy. This can be both changes in the chart of accounts and the use of new management technologies. It is customary to consider strategic management accounting as a unified information and analytical system of strategic enterprise management, which includes the following elements:

1. Strategic management reporting. The system of strategic management reporting allows solving the following tasks: providing information on the results of the activities of divisions and individual employees in the necessary analytical sections; preparation of regular reports; financial modeling, forecasting and analysis of the activities of individual divisions and the enterprise as a whole; more substantiated adoption of strategic management decisions based on reliable and timely information.

2. Tools for strategic management accounting:

1) SWOT analysis - a method of strategic planning, which consists in identifying factors of the internal and external environment of the organization and dividing them into categories. (Maysak O.S., 2013)

2) benchmarking is the process of identifying, understanding and adapting existing examples of effective company functioning in order to improve its own work. It includes two processes equally: assessment and comparison.

3) a balanced scorecard or BSC is a system for measuring the performance of the entire enterprise (strategic planning system), based on vision and strategy, which reflects the most important aspects of the business. The BSC concept supports strategic planning, implementation and further adjustment of the strategy, by combining the efforts of all divisions of the enterprise.

4) strategic analysis of costs and value chain - fixes the position of the company in terms of costs in relation to its closest competitors. The analytical tool for such analysis is the concept of the cost chain;

5) analysis of the learning curve - a graphical representation of the change in the learning rate for a certain knowledge or type of activity. As a rule, the ability to retain new information in memory is maximal after the first attempts to master this activity, then the learning rate gradually decreases, which means the need for more repetitions to assimilate the material.

6) comprehensive quality management, in the implementation of comprehensive quality management, the focus is on quality management itself, but at the same time it is necessary to develop cost management (regulation of income and prices), regulation of quantity (volumes of products produced and sold, stocks) and regulation of delivery times.
7) economic profit model - an approach to business valuation, in which not accounting profit, but economic profit is used as a criterion.

**Results**

All the consequences of digitalization of a manufacturing enterprise are difficult to predict. However, some of the possible risks are quite obvious. Let's consider the main ones:

- the costs of forming the digital infrastructure can be very significant, it is quite difficult to accurately determine the budget of the transformation being carried out (at the same time, the domestic industrialist should not rely on state support, since the decrease in budget revenues of Uzbekistan limits investment opportunities);
- the transition to digitalization of production presupposes the expansion of the degree of sectoral and inter-sectoral interaction, the proliferation of various cloud services, which in the case of some enterprises creates additional difficulties;
- during the preparatory phase, employees will resist the introduction of innovative technologies fearing (in some cases, quite justified) staff reductions;
- as the degree of digitalization of production increases, there will be a gradual removal of production personnel from making corrective decisions, a decrease in their ability to operatively influence production processes;
- digital technologies, subject to their massive introduction at enterprises, will become a key element of the organization and management of the production process, which significantly increases the need to ensure their cyber security (external influence can become a serious problem and even lead to a complete stop of production).

Strategic analysis is aimed at assessing the state of the organization at a given point in time. At this stage, the macro- and microenvironment of the organization is investigated. Let me remind you that the macro environment refers to all external factors that affect the enterprises of the industry (changes in the social, technological, political and economic spheres of society). Microenvironment is a set of internal organizational factors, namely - its resources, organizational structure, etc., as well as buyers, suppliers and competitors with whom the organization interacts directly. The data obtained during the analysis allows the management to develop options for the company's strategy, taking into account the strategic goals.

At the same time, the analysis used in strategic accounting differs significantly from the analysis of the environment in strategic management. Analyzing the environment means obtaining specific, discrete data to formulate strategies. Strategic management accounting is based on systematic, constant, continuous information support of the organization's management. It is a system of indicators with the help of which it is possible to timely adjust the strategy and monitor its implementation (using the balanced scorecard).

The second stage of strategic management accounting - strategic planning - is the development of long-term plans. At this stage, there is a distribution of material, financial, human and other resources, adaptation to the external environment through the use of competitive advantages and prevention of threats identified in the course of strategic analysis. At the exit, the organization receives a development strategy, i.e. a long-term program of action.
At the final stage of strategic management accounting, the implementation of the set goals is monitored and the transition to the decision-making stage is carried out in case of deviation of the results from the planned ones. In traditional strategic management, not enough attention is paid to the supervisory function. Strategic management accounting fills this gap. Specific quality and quantitative indicators allow you to constantly monitor the degree of achievement of the strategy, mission and goals of the organization.

Conclusions
The implementation and use of a strategic accounting system is possible only if the following requirements are met:

- continuity of analysis;
- management's awareness of the need for implementation and constant support;
- building a unified system of strategic management at the enterprise.

If successfully implemented, such a system will allow the organization to achieve a competitive advantage in the long term.

Consequently, strategic management accounting plays one of the key roles in the organization's activities, since it takes into account not only internal factors, but also external environmental factors, and therefore allows the company to more easily adapt to modern market realities.

References