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**USING THE CAPABILITIES OF DIGITAL TECHNOLOGIES IN MAKING
INVESTMENT DECISIONS**

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Abstract

This article discusses the financial, organizational, technical and innovative components of the strategy of investing in digital technologies. The work is of practical importance because it combines approaches to financial and technological support of investment activities with the development of in-depth information and computer technologies. The elements of the model are proposed from the point of view of introducing components of the digital environment, making managerial decisions in the investment process, expanding the role of the banking sector in investment processes, the introduction of new SupTech and RegTech tools will be. Development of consulting services at various stages of investment project implementation from preparation of business plans, preparation of feasibility studies and investment memoranda to evaluation of real results of project implementation.

INTRODUCTION AND THEORETICAL FOUNDATIONS

Digitalization is a priority area of economic development, gaining an advantage in the form of supporting competitive strategies through better information processing, communication with customers on a transparent basis, as well as identifying key aspects of creating consumer value¹. Investments in the digital environment, regardless of the scale of activity, since modern solutions are flexible in terms of investment attractiveness and price, and, accordingly, the required amount of investment².

In this regard, the market for investments in digital technologies is growing every year. Digitalization provides a number of clear advantages in the formation and implementation of competitive strategies, as noted earlier; it is aimed at maintaining management decision-making processes. A significant amount of information can be processed in a short period based on advanced information technologies. Companies are able to better control the internal production environment and receive information about its status online. Digital technologies help entrepreneurs and managers navigate information flows and find the necessary signals, as

¹ Isaksen A. Digital transformation of regional industries through asset modification / A. Isaksen, M. Trippl, N. Kyllingstad, J.O. Rypestøl // *Competitiveness Review: An International Business Journal*. – 2020. – Vol. 31. – № 1. – P. 130–144.

² Dong J. Q. How Firms Make Information Technology Investment Decisions: Toward a Behavioral Agency Theory / J.Q. Dong, P.P. Karhade, A. Rai, S.X. Xu // *Journal of Management Information Systems*. – 2021. – Vol. 38. – № 1. – P. 29–58. 4. Katsamakos E. Value network competition and information technology / E. Katsamakos // *Human Systems Management*. – 2014. – Vol. 33. – № 1–2. – P. 7–17.



well as make timely decisions based on their interpretation³. In addition, a number of digital technologies are aimed at directly supporting production processes by coordinating the operation of physical equipment within a single system. The main objective of the introduction of digital technologies is not only to increase the control of the internal production environment, but also to find sources for improving existing products and services, as well as ensuring effective innovation. In order to carry out investment activities in the field of digital technologies, it is necessary to form digital thinking among employees and managers. This direction includes not only the formation of individual digital competencies, but also career development, as well as process management and cross-functional interaction, which is aimed at supporting and developing a person's creative abilities, and increasing motivation to participate in the organization of computer and information technology implementation processes.

Infrastructure development is an important strategy for the transformation of business processes, since it creates certain effective conditions for the implementation of the main labor functions of employees. Finally, an important component of the investment process is the involvement of employees in innovative activities, as well as the development of new solutions specific to a particular organization, taking into account its business environment and the current financial and organizational situation. The investment strategy is a set of actions and the necessary analytical support to support the processes of investing the company's financial resources and its intellectual capital for the development of the main business processes aimed at the introduction of computer and information technologies that increase the competitiveness and efficiency of the work of production and other departments. An important component of the strategy is an investment attraction program to ensure important stages of digital business transformation.

The purpose of this article is to study the components of the strategy of investing in digitalization in modern conditions. A significant part of companies have radically changed their investment behavior in relation to digital technologies, as they have become a necessary element of the company's survival in the market in difficult conditions and further development. Digitalization is considered as an important element of the strategy of maintaining competitiveness, which is based not on the use of basic information technologies, but on the deep integration of modern applied solutions into the daily operational activities of the enterprise in order to obtain long-term effects in the form of improving the transparency of the internal environment, the quality and speed of decisions, increasing the competitiveness of products, etc.

MATERIALS& METHODS

Based on the analysis of the relevant literature on investment strategies in digital and computer technologies, the main components of the digitalization strategy related to the financial model of ensuring the investment process, the use of specific technologies and organizational approaches to infrastructure modernization and ensuring the security of data exchange in the

³ Dehning B. Information technology investments and firm value / B. Dehning, V.J. Richardson, T. Stratopoulos // Information and Management. – 2005. – Vol. 42. – № 7. – P. 989–1008.



electronic environment were identified. Thus, the components of the strategy proposed by the author include financial, organizational, technical and innovative elements, which are combined together into a logical sequential action plan for an industrial enterprise.

RESULTS & DISCUSSION

Modern trends in the development of the world economy are closely related to the increasing role of information technology and knowledge in the economic life of society. The economy is changing, becoming more innovative, and these changes are based on the use of personal computers, high-speed telecommunications and the Internet.

The essence of innovative components is the transformation of existing digital solutions on the market based on experience and strategic objectives, which together create a basis for the accumulation of new elements of intellectual capital.

To implement the investment policy in the field of socio-economic development of the republic, it is necessary to accumulate process and store large amounts of information generated from various sources. For successful work in the foreign market, enterprises need to develop digitalization strategies that will systematically collect, process and update market and analytical information. The own capabilities of enterprises, especially small businesses and private entrepreneurship, do not always allow them to perform such work independently at the required professional level (lack of information about foreign markets, lack of the company's own capabilities for collecting and processing information, conducting marketing research, etc.).

The financial components of the digitalization strategy are aimed at maintaining competitiveness through the formation of a steady cash flow from the main and auxiliary activities. This financial goal can be supported by resource and working capital management measures, the purpose of which is to increase the turnover rate of resources, as well as to determine a specific level of profitability that reflects shareholders' expectations regarding performance.

Organizational and technical components of the digitalization strategy help to determine the current level of maturity and the state of the internal environment for compliance with expectations and identify key areas of development of the digital economy.

After determining the maturity level, a set of measures is formed that will allow forming a portfolio of projects to improve the digital infrastructure and integrate the digitalization strategy into the overall development strategy.

The result of work on organizational and technical components and strategic planning for the implementation of digitalization is the development of a roadmap for the implementation of technology, which contains the main stages of the implementation of the digitalization strategy, key activities, as well as performance indicators that are characteristic of each of the projects. Innovative components of the digitalization strategy actualizes the problems of motivation and involvement of personnel in the development and effective use of digital infrastructure components.

The introduction of digital technologies in the field of managerial decision-making in the investment process is considered in the following areas.



1. As the role of the banking sector in investment processes expands, the actions and powers of regulatory authorities become much more complicated in accordance with the requirements of international standards. In this regard, the use of digital technologies has become a necessity. The rapidly increasing complexity of operations carried out by financial institutions poses a serious problem for the implementation of RBS (risk-based control). It becomes difficult to identify and assess the risks associated with the implementation of investment projects, which requires rapid identification of risks in real time. and act quickly, which requires a deeper study of the ever-increasing pool of reporting data (technically called big data because of their size and complexity). In the future, the control mechanism is to use technological advances to support and improve the quality of investment projects (SupTech and RegTech technologies for big data processing and business analytics).

The introduction of new Sirtechand RegTech tools will determine the transformation of existing investment project management processes and requires the solution of the following tasks:

to determine the needs for technological improvement according to the main goals and priorities in the development of investment process control capabilities;
identify existing constraints and barriers (for example, legal, technical, institutional, etc.) on the way to achieving the set goals and identify ways to overcome them;
to develop achievable and effective strategies in the implementation of investment projects with the indication of priorities of actions (Fig.1).

The main external factors influencing the introduction of digital technologies are:

the growth of the number of participants in financial markets;
complicating the behavior of business entities and the development of new business models;
expansion of situations requiring assessment and risk management;
improvements and changes in the institutional environment;
growing demand for financial resources and investors' expectations;
training and advanced training of personnel.

The main internal factors influencing the introduction of digital technologies are:

inconsistencies of data for risk assessment: quality, insufficient detail and redundancy of ineffective data for control purposes;
insufficient level of automation of processes and technologies of integration with other state information systems;
lack of standardization for data collection and manual data processing;
lack of a specialized data warehouse responsible for ensuring the consistency of all data needed to control investment processes;
lack of system flexibility to respond to changing business needs;
insufficient number of personnel with business (analytics) and IT technology skills to better assess investment risks.

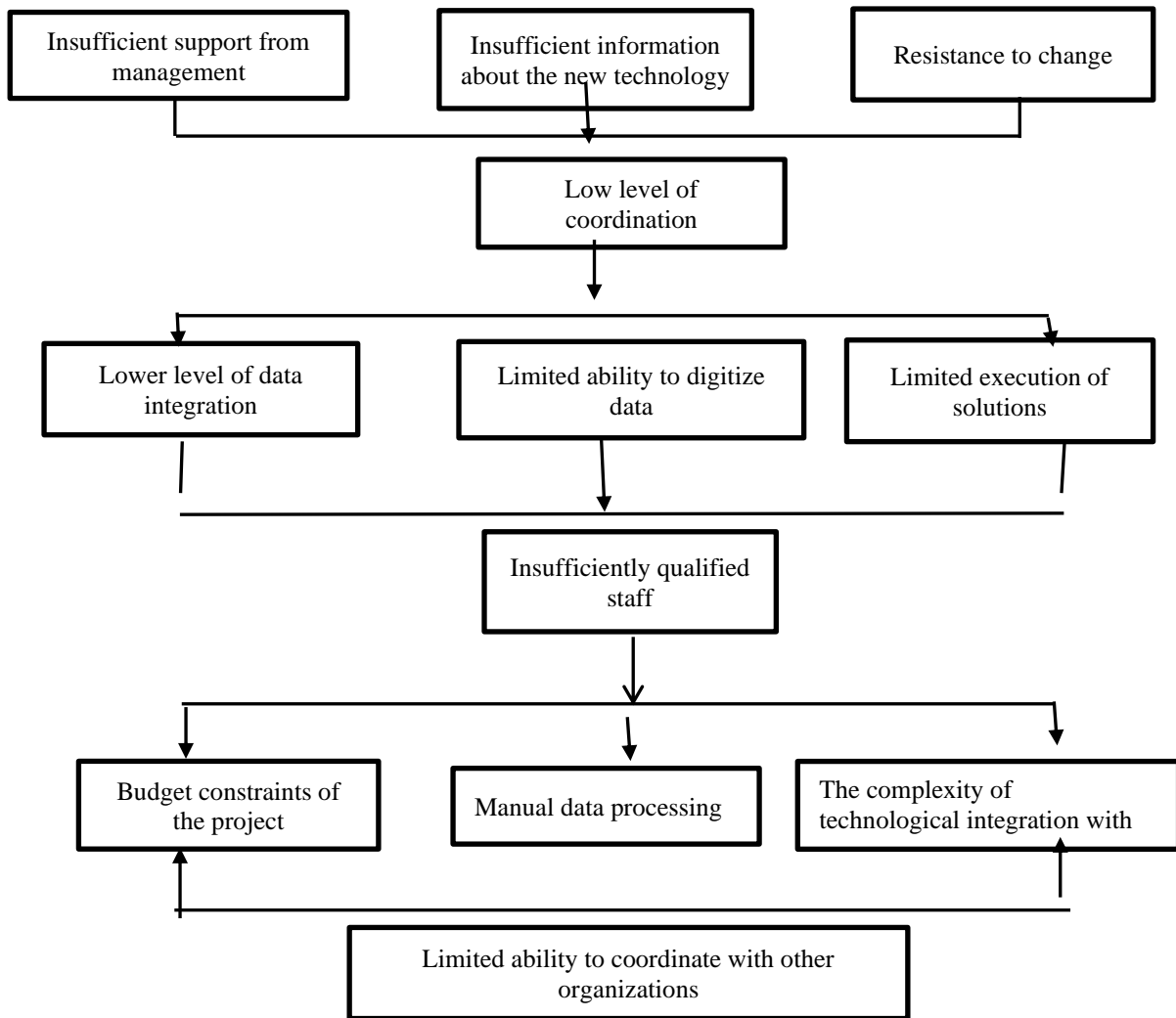


Fig.1. Barriers to the introduction of digital technologies ⁴

The main goal of the introduction of these digital technologies is to achieve a higher level of efficiency, automation and security of data collection (Fig.2).

The introduction of digital technologies by data management processes requires the solution of the following tasks:

to create a new structure of regulatory reporting and data management based on the unification and standardization of data collection and processing. Replace traditional data collection concepts and processes that are largely performed manually with automated reporting processes;

to carry out an inventory of regulatory data in order to assess current problems with the quality of collected data, detailing and aggregation of indicators and integration with existing state information systems;

to implement a new solution for creating an electronic portal for working with market

⁴Developed by the author



participants, the system will expand the possibilities of electronic document management, information exchange, data management and cooperation with investors in a digital environment;

the use of analytical tools (business intelligence tools) to better support risk identification and decision-making, to ensure the development of modeling and stress testing capabilities;

the development of the potential of digital technologies requires improvement. data management structures, project management, IT architecture management, continuous software development, scalability of IT infrastructure, skills and competencies of personnel.

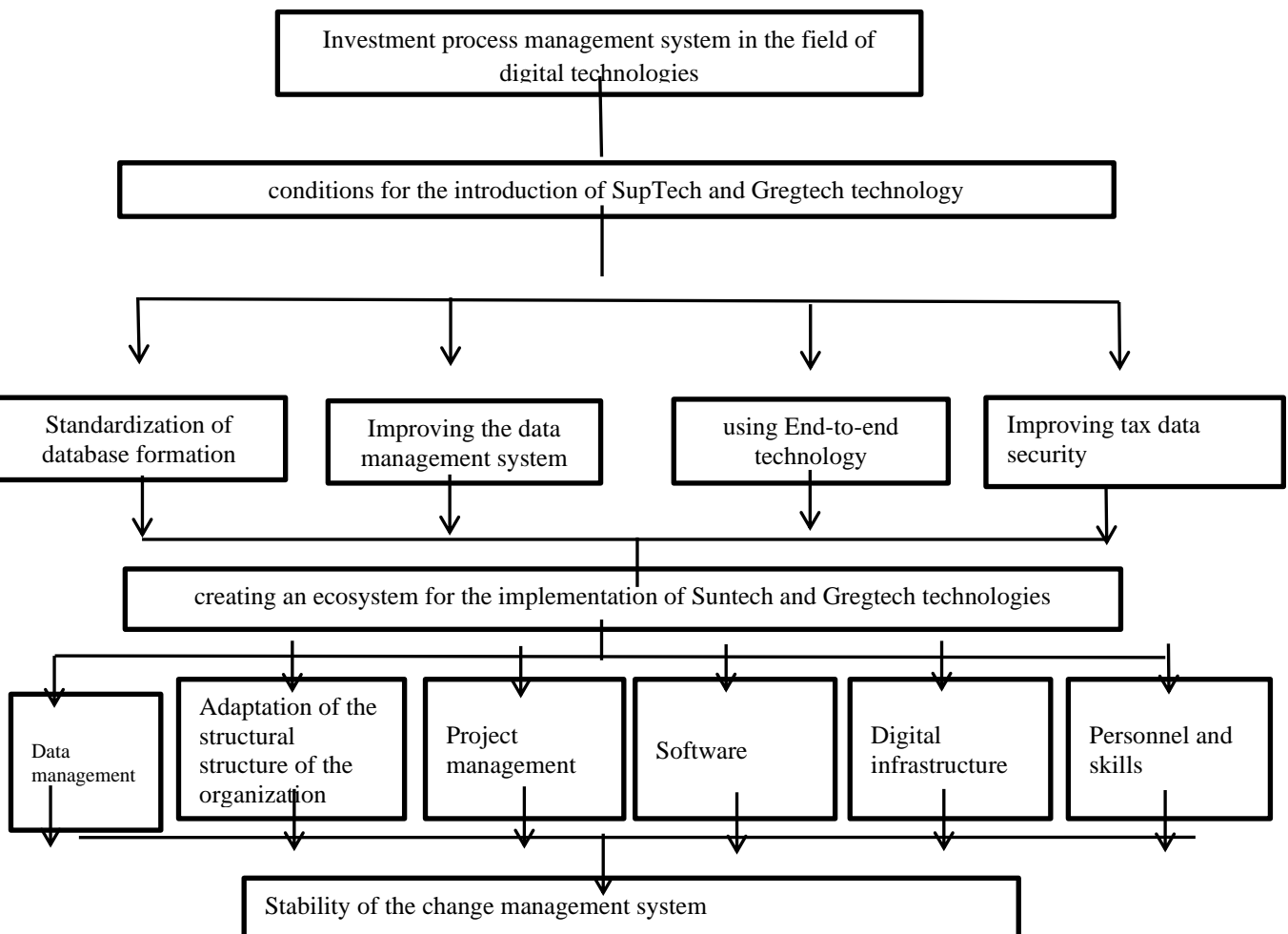


Fig. 2. Investment process management system in the field of digital technologies ⁵

The introduction of an information and analytical portal (which means a set of hardware, software, information resources, techniques that are used to automate analytical work in order to justify the adoption of effective economic decisions in the field of export) will contribute to information and analytical and consulting support for the activities of potential exporters and investors, as well as the promotion of their products to external markets. (both for traditional and for the development of new markets through diversification) markets (Fig.3).

⁵Developed by the author



Designing of information and marketing portal with the purpose of forming a comprehensive and unified database for the regions of the Republic of Uzbekistan information and consulting support for exporters and investors based on digital technologies (in Uzbek, Russian and English).

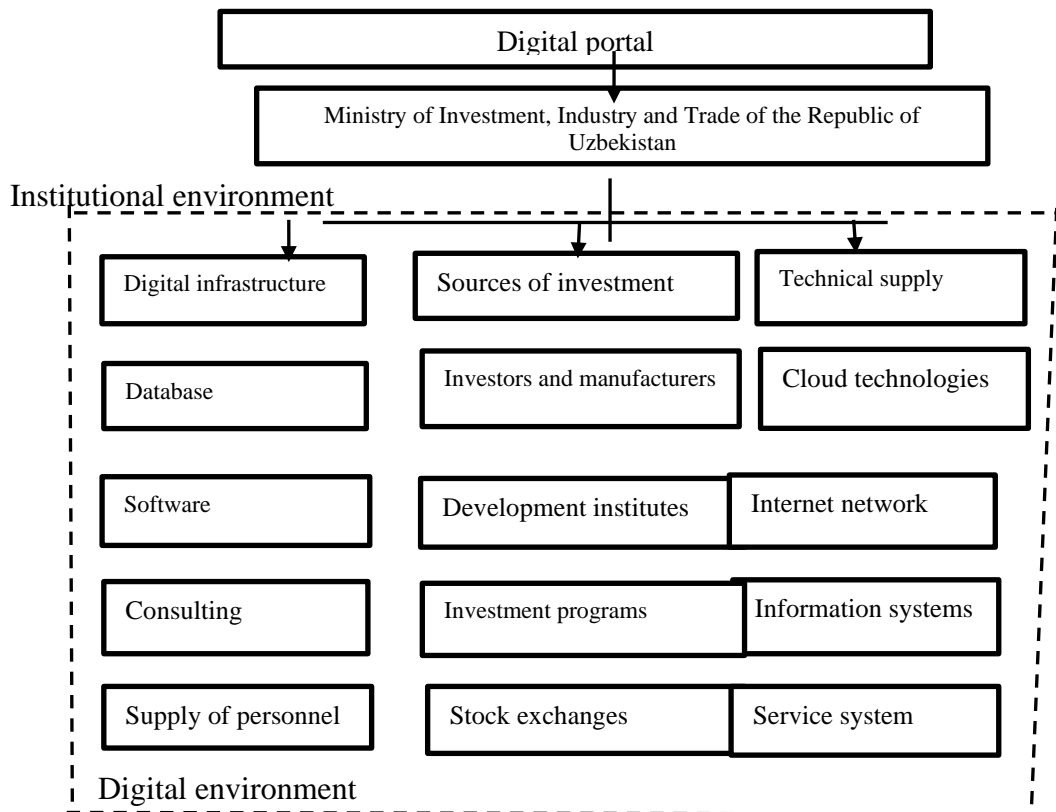


Fig.3. Portal of information and tax returns on investment processes⁶

The main tasks assigned to the IMP are:

promotion of goods and products produced in various sectors of the economy of the republic to the markets;

formation of investment passports of regions containing reference information (climatic and geographical conditions, demography, ecology, transport and logistics, etc.):

coordination of activities of regional and interregional information and marketing centers as links between producers and consumers of goods;

elimination of information barriers between producers and consumers of goods, formation and prompt provision of objective information about market conditions, potential investment projects, etc.;

ensuring equal opportunities for all suppliers and consumers of products to enter the market, promoting the development of cooperative ties between enterprises of various countries (including developed countries);

⁶Developed by the author



regular and reliable information support for commodity producers, investors, consumers and other bidders about market conditions in foreign markets, the republic, regions for certain groups of goods, changes in institutional conditions;

work on the integration of the portal with state information systems and means for authentication and verification of users, as well as for interaction with ministries and departments to work together on received appeals and on solving identified problems;

the use of modern information technologies in order to acquire knowledge and skills in the field of export, investment in business projects (through the formation of on-line courses, trainings, etc.);

information exchange between republican and interregional marketing centers and information support for market participants;

ensuring access of Uzbek exporters to foreign databases on markets and potential partners, investors, including integration into international information and marketing networks;

provides comprehensive instrumental, informational, software and technological support (increases the efficiency and quality of materials, reduces transaction costs) of expert-analytical and managerial activities of managers and specialists of the region;

development of consulting services based on uniform requirements and rules regarding the organization of export document flow (including taking into account technical requirements: certification, packaging, calibration, transportation, etc.);

development of consulting services at various stages of the implementation of an investment project to its full support (one window principle): from the preparation of business plans, preparation of feasibility studies and investment memoranda to the evaluation of the real results of the project (including online consultations);

provides regional executive authorities with project teams of specialists in the field of attracting investments with the necessary competencies and successful experience in joint project implementation.

introduction of high information and marketing technologies, development and implementation of software products and services designed to improve the efficiency of international trade.

development of consulting services based on uniform requirements and rules regarding the organization of export document management (including with the participation of foreign direct investors) IMP;

The IMP network is a technological environment that provides uniform standards, formats and rules for interaction of participants. The main function of the information and marketing portal should be the technological support of common formats and rules of interaction of participants in the IMP network.

CONCLUSIONS

The technological foundations of the design of the IMP include:

a) solving the following functional tasks:

accounting of suppliers for the entire list of products and services in accordance with the classifiers accepted in the IMP network;



constantly updated register of potential investment projects, information about participants in investment activities, etc.;

accounting of enterprises and organizations engaged in the production of goods and services, trade, transport and intermediary activities, legal support of commercial transactions;

analysis of information on the state of the markets of goods and services, marketing and market research, consulting activities;

maintaining databases of regulatory legal acts of the states of importers (exporters) of participants in foreign economic and investment activities;

organizational and methodological support of export (investment) activities and document management;

ensuring the security of electronic business, including information security.

b) the functioning of the component of the IMP software and hardware complex is based on the supporting subsystems: communication subsystem, technical support, information security subsystem, document storage and archiving subsystem.

c) project features:

the system will be constantly improved and its adjustment as external and internal conditions change (including the emergence of new information technology tools) should be a mandatory procedure;

constant information content of the system is maintained, including new institutional conditions (including changes in the investment climate) and diversification of export markets may appear;

for the convenience of users and in order to cover various aspects of foreign economic activity, the portal will consist of various blocks (manufacturers, investors, customers, contracts, training, etc.);

information resources accumulated in the system will be protected, confidentiality and integrity.

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