



## Influence of the Digital Economy on Investment Projects in the Age of Digitization

*Djuraeva Malika Beknazarovna*

*Master of the Department Valuation and Investments, Tashkent Institute of Finance*

DOI: <https://doi.org/10.55248/gengpi.5.0724.1736>

### ABSTRACT:

The article analyses modern conditions of development of financial system and branches of digital economy which play special importance in development of technical and economic feasibility of the project. This work is devoted to the study of methods and tools used in the development of a feasibility study in the digital economy. Also, features of the financial system and branches of the digital economy, which determine the factors that influence the success of projects in this context, are highlighted and recommendations are made to optimize the process of development of the feasibility study. The article is relevant and useful for professionals involved in the development and evaluation of projects in the digital economy. analyzes the current state of reducing the risks of investment projects.

**Keywords:** investment project, feasibility studies, investments, management models, goals and objectives, stages of formation and implementation of investment projects, financial systems, digitalization and IT.

### Introduction

Digitalization of the economy is a large-scale and intensive process, the significance of which is obvious not only in professional and scientific circles, but also noted at the state level. The digital economy has given rise to a new type of business, based on the interaction of people in virtual space through technological infrastructure, and has created conditions for automating most routine operations. At the same time, the concepts of “digital economy” and “digitalization of the economy” (or otherwise “digital transformation of the economy”) should be distinguished. The first represents a complete new economic environment, the second is the way to create this environment through technical and methodological transformations in all spheres of economic activity.

Currently, the market is witnessing a massive adoption of digital technologies in both the public and private sectors. At the same time, a characteristic feature of the implementation of digital projects in practice is that after completion of this process, the subject of implementation (a company or government agency) becomes highly dependent on new digital technologies. The implementation of a digital project often entails an irreversible change not only in individual business processes, but also in the entire business model of the organization [6]. It can be said from the examples below as a source and definition:

**World Bank Group, 2018a**- this is a manifestation of qualitative, revolutionary changes, consisting not only in individual digital transformations, but also in a fundamental change in the structure of the economy, in the transfer of centers for creating added value to the sphere of building digital resources and end-to-end digital processes.

**OECD, 2019b** -Using data and digital technologies to create new or change existing activities; digital transformation is a set of economic and social effects as a result of digitalization.

**ITU, 2018** -Application of innovative developments based on information and telecommunication technologies to solve various problems.

**UNCTAD, 2019**- Directions for the radical influence of digital products and services on traditional sectors of the economy.

**ITU, 2019a** -A continuous process of multimodal implementation of digital technologies that fundamentally change the processes of creation, planning, design, deployment and operation of public and private sector services, making them personalized, paperless, cashless, eliminating the requirement of physical presence, based on the consensus of the parties.

**European Commission, 2019a**- Significant changes in all sectors of the economy and society as a result of the introduction of digital technologies into all aspects of human life. (Report by the National Research University Higher School of Economics, 2021)

From the definitions it is clear that the concept of “digital transformation” is very multifaceted and can be interpreted extremely broadly. It is formed as a generalization of a fairly large variety of phenomena, and the specific meaning largely depends on the context of use of the concept. For example, the

digital transformation of an enterprise affects production, support and management processes; in economics - provides new ways of interaction between counterparties; in society - generates new communication formats to solve a whole range of problems. And within these groups, the understanding of digital transformation can vary greatly, including in light of industry specifics. In the digital economy, the financial system and economic sectors face a number of challenges and opportunities. [1]. Digitalization is changing the way market participants interact, increasing the speed and accessibility of financial transactions, and also requiring changes in regulation and data security. To develop the financial system and economic sectors in the digital economy, it is necessary to pay special attention to the following issues:

1. Digital platforms and innovation: The use of digital technologies such as blockchain, artificial intelligence, Internet of things helps improve the efficiency of financial transactions and create new products and services.
2. Cybersecurity: In the digital economy, the threat of cyber attacks and data leaks increases. Therefore, it is necessary to implement modern methods of information security and ensure the security of financial transactions.
3. Regulation and legislation: it is important to create an appropriate legal framework that would regulate new types of financial transactions, taking into account the specifics of the digital economy and protect the interests of market participants.
4. Education and training: With the digital transformation of the financial system and economic sectors, it becomes important to provide professional training for specialists who are able to work with new technologies and methods.

The “fuzzy” content of the concept “digital transformation” is further aggravated by the fact that it characterizes relatively new, largely unstudied and very dynamic phenomena. Many researchers consider digital transformation as a process of change (transformation) of established economic and social institutions in connection with the introduction of digital technologies. However, digital technologies themselves are developing so rapidly and sometimes unpredictably that it becomes extremely difficult, often almost impossible, even in general terms to foresee the consequences of their spread. Moreover, this uncertainty grows very quickly if we try to lengthen the forecasting or planning horizon for the medium and even more so long-term period. The concept of “digital transformation” itself does not contain specific instructions with a clearly defined route from some initial to a certain final state, but rather sets guidelines. Thus, the preparation of a feasibility study comes down to the most accurate data obtained from modern mathematical models of digital indicators.

The most commonly used models for managing digitalization projects. The analysis shows that today only three fundamentally different models are most intensively used - “Waterfall”, “Scrum” and “PRINCE2”.

The “Waterfall” digital project management model (also sometimes called “cascade”) is the most widely used project management methodology. It is based on the Gantt diagram. This model involves dividing a digital project into several equal components, which must successively replace each other during the implementation of the digital project itself. The basic idea is that all components within a digitalization project are technologically dependent on each other. Today, development companies offer a wide selection of project management programs such as: GanttPRO, Bitrix 24, Wrike, Asana, Active Collab, Basecamp, Trello, Hygger, Smartsheet, Monday.

#### The impact of digitalization on key aspects of project management Table 1.

Project Management Aspect	Impact of digitalization
Methodological	<ul style="list-style-type: none"> <li>– Project management in conditions of uncertainty and high dynamics of the business environment;</li> <li>– The need for constant monitoring of the market for new products and technologies;</li> <li>– High speed of response to changes in the external and internal environment, flexibility of the goals and objectives of the project during its implementation;</li> <li>– Project risks cannot be accurately assessed</li> </ul>
Organizational	<ul style="list-style-type: none"> <li>– Predominant use of medium-term and short-term planning;</li> <li>– Possibility of flexible selection of project team members (including those working remotely);</li> <li>– Improving communication and speed of information exchange;</li> <li>– Increased requirements for the preparation of project documentation</li> </ul>

Financial	<ul style="list-style-type: none"> <li>– Difficulty in preliminary assessment of the final cost of the project and the formation of the project budget;</li> <li>– The need for increased flexibility in searching and selecting the necessary resources;</li> <li>– Frequent revision of project plans and financing schemes</li> </ul>
-----------	--

## Literature analysis

In modern literature, there are many definitions of the term “digitalization”. In particular, “digitalization” is described as the process of transition of an enterprise or an entire economic sector to new models of business processes, management and production methods based on information technology. T. A. Gerasimova and N. V. Moskvitina describe this term as “a process that includes the introduction and use of innovative technologies, as well as the principles of the digital economy in the context of the socio-economic life of society, accompanied by absolute automation, robotization and the introduction of artificial intelligence” and as “the creation and application of modern systems, technologies and tools in order to increase the efficiency of management decisions and services offered” [2].

Digitalization is also considered as the transfer into the electronic space of various categories, objects and processes, such as supply and demand, document flow, various management models, goods, services, etc. Digitalization The use of “digitalization and digitalization” has not bypassed the personal finances of the population and financial institutions of society. Carrying out a policy to introduce modern technologies into many areas of society and increase the level of financial literacy of the country's residents, on the one hand, lays the foundation for the stable development of the Russian economy as a whole, on the other hand, determines the ability and ability to achieve personal financial success, increases the possibility of an individual's well-being .

E-business is an innovative activity of enterprises, which is aimed at making a profit, carried out on its own behalf on the Internet through the use of modern information and communication technologies. As indicated in the introduction to the “Digital” economy / A.V. Keshelava V.G. Budanov, V.Yu. Rummyantsev and others; under general ed. A.V. Keshelava; Ch. "digital." cons. I.A. Zimnenko. —VNII Geosystems, 2017. — 28 p. (On the threshold of the “digital future.” Book one).

The intensive development of solutions based on artificial intelligence and neurotechnologies has led to an increasing demand for them from the state and business, including an explosive growth in venture capital investments in AI-based fintech startups. The term “FinTech” refers to technology-based financial innovations that create new business models, applications, processes or products with corresponding material impacts on financial markets and institutions and on the delivery of financial services. The impact of AI technologies on the transformation of the financial sector discussed in many works. Deutsche Bank researchers in their report explore the process of transforming the traditional banking system into a digital ecosystem under the influence of new technologies. [3].

During A. Kozarkiewicz's research conducted in the spring of 2019 using the computer-assisted personal interview method, a simple research instrument containing one open-ended question was used to collect material for further analysis. The sample of this study Electronic scientific journal “Age of Quality” Online scientific journal “Age of Quality” No. 2 (2023) ISSN 2500-1841 <http://www.agequal.ru> [info@agequal.ru](mailto:info@agequal.ru) was an evaluation (quota) sample, so how the study was addressed to a specific group of respondents and thus the method of selecting respondents was a derivative of the snowball approach. It was decided to collect research material until 100 responses were received. After analyzing the responses and selecting the texts, it was decided to take into account the statements of 88 respondents; 12 responses were rejected because they contained too general arguments or denied the possibility of answering the question posed. A brief review of the texts and themes that emerged in the respondents' opinions revealed that some of them were more about the transformation of enterprises implementing projects, some of the works touched on the digital transformation of projects, and in some cases respondents focused exclusively on projects, project teams, tools and project management processes. To summarize, the importance of IT tools and the growing popularity of agile project management should be emphasized. IT systems and project management applications can significantly impact all of the above characteristics, allowing project managers to focus on goals rather than day-to-day operations, reducing planning and control time, reducing decision making, providing better access to resources and the ability to reduce costs.<sup>1</sup>

The papers discuss various types of business models for fintech projects. The article is devoted to the study of trends in the formation of the global fintech market. The work is devoted to the study of risk management in the fintech sector. The authors emphasize that for the sustainable development of fintech projects, it is necessary to minimize their possible negative impacts on consumers and investors. The paper<sup>8</sup> also notes that the business models of fintech startups are not always consistent with the need for stability in the financial sector; in particular, innovations in payments can affect the stability of the infrastructure of financial systems.

ILink to cite this article: Ponachugin A.V., Sokolov V.A. The influence of digital transformation on project management // Electronic scientific journal “Century of Quality”. 2023. No. 2. pp. 114-129. Access mode: <http://www.agequal.ru/pdf/2023/223008.pdf> (free access). Cap. from the screen. Language Russian, English

## Analysis and results

The stage of the feasibility study of an investment project (hereinafter referred to as the feasibility study) represents a critical phase of the life cycle of the implementation of an investment project using capital investments. At this stage, the investor decides to implement the project and sets the main parameters, including technical and financial-economic aspects, as well as investment efficiency indicators. Thus, the three components of digital budgeting play a key role in the financial model in the digital economy.

Digital data, digital processes and digital space are the three pillars on which digital budgeting is based, which in turn means:

1. Digital data. All budget data of the organization are transferred to digital format, and decisions on budget management are made only on their basis.

Data-driven management is an approach to management that was first discussed in the late 1990s. Unlike decisions based on managerial intuition and expert experience, the data-driven approach puts data and its analysis at the forefront. This is its advantage: intuitive decisions are subjective and may not correspond to the realities of the market, but data is objective, and decisions made on their basis are likely to be correct and beneficial.

For effective data-driven management, it is critical that the data is correct and presented in the required volume. In this sense, budgeting is a safe candidate for applying this approach: there are no facts and indicators that are impossible or difficult to quantify and objectively measure, such as customer satisfaction in the case of marketing management. All facts related to planning, control, expenditure and budget accounting can be recorded in numbers and serve as the basis for analysis and optimization decisions.

2. Digital processes. All budget processes of the organization are fully automated, reducing the time and labor costs for drawing up and approving budgets and payments.

The main expectations from the digitalization of processes are to increase their efficiency and reduce associated costs. This is the opinion of 77% of participants in a KPMG study on the use of digital technologies in Russian companies.

In budgeting, the transition to fully digital processes is achieved when data is processed in automated ways at all stages of budgeting. Eliminating “gaps” in the digital budgeting circuit allows you to achieve many useful effects: achieve transparency in the organization of budget processes and speed up their execution, strengthen budget discipline, etc. Using digital tools, you can instantly trace the origin of any figure in the budget, automatically check the compliance of each payment with the budget, monitor compliance with budget regulations. By eliminating manual operations, the terms of the budget campaign are minimized, the approval of payments is accelerated, and plan-to-fact reporting is quickly issued in any necessary analytics. Previously hidden opportunities for optimizing budget processes are revealed: simplifying budget document flow routes, eliminating duplication of responsibilities, etc.

3. Digital space. Information systems included in the budgeting circuit operate in a single digital space, enhancing all digital effects. [4].

The task of a single information space is to enhance digital effects by establishing end-to-end digital budgeting processes. To achieve this, all the organization's information systems used in budget processes are integrated for automatic processing and exchange of data. As a result, budget processes are conducted in a unified information environment that supports the “seamless” exchange of the budgeting system with accounting, payment, HR and other modules that transmit or receive data from it, and provides multi-user access to a single digital data space.

Considering foreign experience and approach to investment activities in the form of capital investments, adopted, for example, by the USA, in Western countries, as well as other countries, it should be said about the methodological documents developed by the International Association for the Development of Cost Engineering (AACE International). The International Association for the Advancement of Cost Engineering is a non-profit organization headquartered in Calgary, Alberta, Canada and the world's largest community of professionals in the field of cost engineering, and the documents issued by the association are highly competent recommendations, methods and approaches for organizing work, including the formation of technical -economic justification of the investment project.

AACE International has developed International Recommended Practice No. 10S-90 “COST ENGINEERING TERMINOLOGY” [17] (rev. September 30, 2021) (hereinafter referred to as IRP No. 10S-90) – International Recommended Practice No. 10S-90 “Technical and Economic Terminology” – current edition dated 09/30/2021. By its legal nature, IRP No. 10S-90 complies with domestic technical regulations, establishing technical standards.

In the course of this research, the author prepared a selection of IRP No. terms. 10S-90, related to the issue of feasibility study of an investment project. [5].

### Selected terms IRP No. 10S-90 table 2

No.	No. Pages IRP No. 10S-90	Term	Meaning
1	19	Business Case	Economic justification. Determination of project or other investment justifications for the purpose of making management decisions. Depending on the criteria for making a management decision, as a rule, it includes a description of the goals, planned results, required time and costs, basic technical solutions, including those on safety, quality, and other characteristics for their

			compliance of the investment project under consideration with the requirements of the goals of the planned business. May include information about possible risks of implementing an investment project, competitive impacts, resource requirements, influence of the organization, key performance indicators (especially profitability) and critical factors for the successful implementation of an investment project
2	27	Concept Phase	Conceptual stage. The first stage (phase) of a project in which the need is considered, alternatives are evaluated, project goals and objectives are established, and an investor is identified
3	41	Definition Phase	Definition stage. Early stage of the project life cycle, at which the amount of required investment is determined
	58	Front End	initial stage
	90	Planning Phase	Planning stage  In IRP No. 10S-90 are listed as synonyms  term Definition Phase, without definition
4	44	Design & Development phase	Design and development stage. Stage of the project life cycle, which includes the development of detailed technical, economic and organizational solutions with the possibility of their optimization through modeling
5	44	Design Development	Project development stage. The process of defining and testing technical solutions to meet the requirements of conceptual design is carried out at a new level of detail (compared to conceptual design), but not as deep as in the detailed design stage. Depending on the size and characteristics of the project, may be a separate stage of the project life cycle

\*Source: International Recommended Practice No. 10S-90 "COST ENGINEERING TERMINOLOGY". URL: <https://www.aace.org> (access date: 07/27/2022).

## Conclusions and offers

In leading countries, digital transformation is seen as the forefront of a more general digitalization trend in relation to those industries that have already reached a high level of digital maturity. The proliferation of new business models based on digital technologies and online platforms is just the tip of the iceberg. This is preceded by a long stage of formation of information and telecommunications infrastructure, accumulation of human resources, adaptation of regulation, etc.; the introduction of electronic

document flow, creation of digital twins, formation of a data market, as well as:

1. The change in the place and role of technology in the conditions of the emergence of a new type of economy is due to the systemic nature and acceleration of technological changes, as well as the adaptation of technologies to individual consumer preferences.
2. The basic components of the digital economy, developing through its digitalization, currently include infrastructure, electronic business transactions and e-commerce. Digitalization is a significant factor in technological evolution, allowing manufacturers to overcome territorial restrictions, reduce transaction costs of decision-making and transactions, develop new business models based on network effects, and involve consumers in the process of creating goods.
3. The universalization of auxiliary, service functions beyond the boundaries of the enterprise implementing the main production process leads to the spread of service technologies. The servization of the economy is currently manifested in the "scattering" of large companies into services using digital information and computer technologies, as well as in the emergence of new virtual, electronic business models.
4. The intellectualization of labor in the context of the development of digital technologies leads to the formation of a large number of enterprises involved in the production of high-tech electronics goods, software, communication tools, as well as the provision of educational, consulting and other services.
5. The essence of service automation is to exclude humans from the process of providing them and replace their efforts with the actions of digital devices. The technical opportunity for this is provided in the Internet of Things (IoT), which is currently most widespread in the transport and banking sectors, as well as in the areas of healthcare, environmental protection, tourism and hospitality.

6. The main problems of automating services based on the Internet of Things concept are related to the difficulties of combining various technical solutions, the need to ensure security in terms of leakage of confidential information, as well as the risk of imposing any services on the consumer. The efforts of the state in order to mitigate these problems should be directed towards standardization in the field of use of personal data, as well as ensuring information and digital literacy of the population.

7. The Industrial Internet of Things provides manufacturers of goods and services with the necessary infrastructure for connecting equipment and data based on the “machine-machine” interaction, eliminating the risks of the “human factor”, and the “machine-human” type, which is a kind of system for supporting human decision-making .

8. The servitization of the economy is increasing through subscription and as-a-service models, enabling new use cases for products in new consumer segments.

The authors see directions for further research in studying the specifics of the interdependent development of digital technologies and the service sector in its various sectors and segments in order to develop practical recommendations in the field of increasing the competitiveness of organizations and enterprises, protecting the rights of consumers in the conditions of the formation of a new type of economy.

#### List of used literature

---

1. Digital transformation of industries: starting conditions and priorities: report. By XXII April. international scientific conf. on Problems of Economic and Social Development, Moscow, April 13–30. 2021 / ; National research University "Higher School of Economics". - M.: Publishing House of the Higher School of Economics, 2021. - 239, [1] p. — ISBN 978-5-7598-2510-4.
2. Shermamatova, I. (2024). Digitalization of the insurance sector in the Republic of Uzbekistan. YASHIL IQTISODIYOT VA TARAQQIYOT, 1(4). Retrieved from <https://yashiliqtisodiyot-taraqqiyot.uz/journal/index.php/GED/article/view/1944>.
3. Fattakhova, M. (2023). The need for asset and liability management modern banks of Uzbekistan. YASHIL IQTISODIYOT VA TARAQQIYOT, 1(7). Retrieved from <https://yashil-iqtisodiyot-taraqqiyot.uz/journal/index.php/GED/article/view/1198>.
4. Amiridi Y. (2024) Three pillars of digitalization of budgeting (<https://iso.ru/ru/press-center/publications/03531-Tri-kita-cifrovizacii-byudzhetrovaniya.phtml>).
5. Guzhev D.A. Domestic and foreign standards of technical and economic justification of an investment project in the form of capital investments // Economics, entrepreneurship and law. – 2022. – Volume 12. – No. 8. – P. 2261-2278. – doi: 10.18334/epp.12.8.115214. <https://elibrary.ru/item.asp?id=49379646>.
6. Kuznetsov N.V., Lizyaeva V.V. MANAGEMENT OF DIGITIZATION PROJECTS: METHODOLOGICAL, ORGANIZATIONAL AND FINANCIAL ASPECTS // Fundamental Research. – 2020. – No. 2. – P. 32-37; URL: <https://fundamental-research.ru/ru/article/view?id=42681> (access date: 07/08/2024).