

This study investigates processes that improve the financial mechanism for stimulating innovation and investment activity of tourism enterprises in the process of digitalization. The task addressed is to resolve an issue related to the insufficient level of financial mechanism adaptation to current digital transformation processes, which affect the competitiveness of enterprises, the efficiency of use of investment resources, as well as the effectiveness of innovative activity.

The current state of digitalization process financing has been analyzed by investigating the dynamics of changes in global spending on digital technologies, as well as the volume of investments in artificial intelligence technologies. Venture companies have been identified as the largest investors in the structure of investment in artificial intelligence technologies. The existence of a close relationship between the size of the artificial intelligence market and the income of leading online travel agencies has been proven; their interdependence has been established on the basis of regression models.

A structure of an improved financial mechanism for stimulating innovation and investment activity has been proposed, which includes an integrated combination of digital financial instruments, modern methods of state support, and the necessary regulatory and legal support for the digitalization process. Scenarios for the development of innovative and investment activity of tourism enterprises until 2030 with predicted economic and digital efficiency criteria have been proposed.

The results are practically important for tourism and other activity sectors to enable financial support for innovative and investment development strategies in the digitalization process

Keywords: innovative and investment activity, tourism, financial mechanism, digitalization of business models, artificial intelligence

UDC 330.322:330.341.1:004.9:658

DOI: 10.15587/1729-4061.2026.369530

IMPROVING FINANCIAL MECHANISM TO STIMULATE ENTERPRISE INNOVATION AND INVESTMENT ACTIVITY IN THE PROCESS OF BUSINESS MANAGEMENT MODEL DIGITALIZATION

Serghiy Radynskyy

Corresponding author

Candidate of Economic Sciences, Associate Professor

Department of Economics and Finance

Ternopil National Technical University named after Ivan Pulyu

Ruska str., 56, Ternopil, Ukraine, 46001

E-mail: srv2011@ukr.net

ORCID: <https://orcid.org/0000-0002-5457-0143>

Zoryana Lobodina

Doctor of Economic Sciences, Professor

S. I. Yuriy Department of Finance*

ORCID: <https://orcid.org/0000-0002-8536-1440>

Vadym Ratynskyy

Candidate of Economic Sciences, Associate Professor

Department of Innovation Activity and Services Management

Ternopil Ivan Pulyu National Technical University

Ruska str., 56, Ternopil, Ukraine, 46001

ORCID: <https://orcid.org/0000-0001-9283-6371>

Halyna Pohrishchuk

Doctor of Economics Sciences, Professor

Department of Finance, Banking and Insurance

Vinnitsia Education and Research Institute of Economics*

ORCID: <https://orcid.org/0000-0001-6410-0594>

Natalia Dobizha

Doctor of Economics Sciences, Professor

Department of Finance, Banking and Insurance

Vinnitsia Education and Research Institute of Economics*

ORCID: <https://orcid.org/0000-0002-8277-7977>

Tatiana Chaika

Candidate of Economic Sciences, Associate Professor**

ORCID: <https://orcid.org/0000-0002-7622-3193>

Nataliia Poberezhna

Candidate of Economic Sciences, Associate Professor**

ORCID: <https://orcid.org/0000-0001-8186-2216>

Oleh Onofriichuk

Candidate of Economic Sciences, Associate Professor

Department of Economics and Finance***

ORCID: <https://orcid.org/0009-0008-3458-7926>

Liliya Kondratska

Candidate of Economic Sciences, Associate Professor

Department of International Tourism and Hotel Business*

ORCID: <https://orcid.org/0000-0002-8429-8953>

Vitalii Levytskyi

Doctor of Historical Sciences, Associate Professor

Department of History, Theory of State and Law and Philosophy***

ORCID: <https://orcid.org/0000-0001-6096-5443>

*West Ukrainian National University

Lvivska str., 11, Ternopil, Ukraine, 46009

**Department of Tourism and Hotel and Restaurant Business

National Technical University «Kharkiv Polytechnic Institute»

Kyrychova str., 2, Kharkiv, Ukraine, 61002

***Academician Stepan Demyanchuk International University of Economics and Humanities

Stepan Demyanchuk str., 4, Rivne, Ukraine, 33000

Received 26.05.2026

Received in revised form 06.08.2026

Accepted 14.08.2026

Published 28.08.2026

How to Cite: Radynskyy, S., Lobodina, Z., Ratynskyy, V., Pohrishchuk, H., Dobizha, N., Chaika, T., Poberezhna, N., Onofriichuk, O., Kondratska, L., Levytskyi, V. (2026). Improving financial mechanism to stimulate enterprise innovation and investment activity in the process of business management model digitalization. *Eastern-European Journal of Enterprise Technologies*, 4 (13 (142)), 59–68. <https://doi.org/10.15587/1729-4061.2026.369530>

1. Introduction

Transformation processes associated with the digitalization of business models require business entities to imple-

ment effective financial mechanisms, the so-called drivers of innovation and investment activity. The spread of digital technologies, in particular artificial intelligence, big data, blockchain, cloud environments, digital finance, has led

to the emergence of new tools and methods of innovation and investment activity. In turn, approaches to attracting, distributing, and using investment resources have changed. Traditional lending is being replaced by venture investment funds. As a result, financial mechanisms should perform not only a securing but a stimulating function as well. In other words, investment support for innovation activity should be harmoniously complemented by the desire of enterprises to implement digital technologies in business processes to increase competitiveness under dynamic conditions.

These processes are of particular importance for enterprises in the tourism sector. This is explained by the fact that the tourism sector was one of the first to integrate digital technologies into the processes of communication with customers, introducing online booking services and using tools for personalizing tourist services. The digitalization of business models for the management of tourism enterprises has created additional opportunities for the activation of innovative and investment activities. At the same time, the existing financial mechanisms for stimulating innovative and investment activities of business entities in the context of digitalization require improvement of tools, methods, as well as regulatory and legal support. That is, there is a need to combine traditional financial instruments and methods with innovative financial solutions, such as venture capital, crowdfunding, digital vouchers, etc.

Despite numerous studies that prove the positive impact of digitalization on the innovation and investment activity of enterprises, little attention has been paid to the issues of transforming financial mechanisms that would encourage the implementation of digital technologies in the business model of management.

Thus, there is a need to scientifically justify directions for improving the financial mechanism to stimulate the innovation and investment activity of enterprises in the digitalization process of business models of management. In turn, this will ensure more efficient use of financial resources, significantly increase the investment attractiveness of enterprises, and create the prerequisites for strategic innovative development as well. Therefore, it is a relevant task to design the structure of an improved financial mechanism for stimulating the innovation and investment activity of enterprises in the tourism sector in the digitalization process under conditions of limited resources and uncertainty in the environment.

2. Literature review and problem statement

The task to devise an optimal mechanism for managing the strategy of innovative activity, taking into account external and internal factors, was addressed in work [1]. The results of the research indicate that the mechanism for managing the strategy of innovative activity is the main tool for increasing its efficiency. Its role in restoring the innovative development of enterprises, as well as significantly improving financial indicators, was shown. However, the issues of identifying the main driving forces of innovative activity remain unresolved. A likely reason is difficulties associated with the inability to determine unified drivers of innovative activity for different business entities. An option for overcoming the difficulties is to study digitalization as the main prerequisite for business innovations, which provides companies with new opportunities for innovation and increasing value. This is the approach

used in [2], which proves that the implementation of digital technologies, in particular cloud computing, big data, and artificial intelligence, makes it possible to optimize business processes and improve the result. The study analyzed the impact of digitalization on the efficiency of internal business processes and established the relationship of the chain of digital capabilities – innovations in the company's business model. In addition, the authors emphasize that to increase the efficiency of innovation activity at the government level, stimulating measures should be taken. In particular, related to the development of digital skills, the formation of a favorable regulatory environment, gaining access to innovation financing, and the creation of business partnerships for the implementation of digital technologies.

A similar opinion is shared by the authors of study [3], which considers possible approaches to improving enterprise management mechanisms using innovative technologies. The work proposes a management model in the context of improving individual business processes of the enterprise's functioning to ensure better results from the implementation of innovative products. Recommendations are also provided for government authorities on the implementation of a policy to increase the efficiency of innovation activity. However, in [1–3], the authors focus on a wide range of issues of stimulating innovation and investment activity.

All this gives grounds to argue that it is advisable to note a study [4], which examines the complex relationship between corporate finance, digital transformation, and the sustainability of the industrial supply chain. Digital transformation plays a crucial role in increasing the sustainability of the supply chain, and investments in research and development, in turn, act as a connecting factor between corporate finance and the sustainability of the supply chain. A similar idea is also outlined in work [5], which examines the role of digitalization as a key trend in the development of financial management. The authors analyzed the impact of digital technologies on the financial processes of enterprises, in particular on cash flow management, cost optimization, accounting automation and financial forecasting. The main factors stimulating digital transformation were identified, including the integration of cloud technologies, the use of artificial intelligence, and the implementation of blockchain solutions in financial activities. The prospects for the development of digitalization in financial management in the context of global economic trends and regulatory changes were considered. It is shown that the active use of digital financial solutions contributes to faster adaptation of enterprises to changing market conditions. In addition, interaction with customers and suppliers is improved, and more flexible financial models are constructed, ensuring long-term stability and development of enterprises in the digital economy. However, issues related to the elimination of barriers to digitalization remain unresolved. A likely reason is difficulties associated with high initial costs and limited financing. It is also worth noting that the study focuses on small businesses, indicating the inexpediency of extending its results to other business entities.

The above gives grounds to argue that it is advisable to analyze study [6] that addresses the impact of digital finance on the digital transformation of enterprises. In this case, the authors not only help clarify the factors influencing digital transformation but elucidate the functional role of digital finance in the development of the digital economy as well. Based on this, a mechanism is proposed through which dig-

ital finance affects the digital transformation of enterprises in terms of financial constraints and financing channels. Improving enterprise financing is an important mechanism through which digital finance promotes the digital transformation of firms.

But the issues related to determining the sources of investment in innovative activities remained unresolved. The reasons may be related to the use of a generalized approach to considering the financial support of digital transformation of enterprises. An option for overcoming the difficulties is to detail the sources of investment in digital innovations. This is the approach used in work [7], which investigated the key aspects of venture investments. The authors proposed a structured list of ideas and perceptions of innovation management by venture capital managers, which takes into account the potential risks of artificial intelligence and identifies business opportunities. It is worth noting that artificial intelligence is considered as the main digital tool in the study. A logical continuation is paper [8], whose authors reveal the impact of the implementation of artificial intelligence on the innovations of digital enterprises, as well as [9], which considers the impact of investments in artificial intelligence and the accumulation of data factors on the effectiveness of the digital transformation of enterprises.

The above works contain convincing evidence that investments in artificial intelligence significantly improve the efficiency of digital transformation of enterprises. However, analysis of financial mechanisms for stimulating investments in artificial intelligence reveals a greater effect in those industries and types of activity that are characterized by intense digital competition. The tourism sector has a high level of digital competition, whose enterprises are actively implementing digital technologies into existing business management models.

Thus, it is advisable to note study [10], whose authors introduce the concept of digital intelligence transformation and delve into the mechanism by which it affects the innovative performance of enterprises in the tourism industry. The results of the study demonstrate that digital intelligence transformation ultimately contributes to the innovative performance of tourism enterprises. At the same time, the decisive mediating role between digital intelligence transformation and the innovative performance of tourism enterprises is mainly played by investments in fixed assets. The results of the study demonstrate the heterogeneity of the impact of digital intelligence transformation on the innovation performance of tourism enterprises, which leads to certain risks that are not considered in the study. It is shown that the level of digitalization of enterprises has gradually become an important source of information for financial markets that assess credit risk.

In this regard, study [11] is of interest, which considers the impact of digital transformation on the credit ratings of tourism companies and the analysis of the financial mechanism by which digital assets are assessed. The results of the study indicate a significant positive relationship between digital transformation and credit ratings of tourism enterprises. Analysis of financial mechanisms reveals that the assessment of digital assets plays a partial mediating role in the process by which digital transformation affects credit ratings. The results of the study help understand the mechanism of credit formation in tourism enterprises in the context of digitalization. The series of studies [1–11] considers the micro-level of the formation of financial mechanisms for the in-

novation and investment activities of enterprises. It is worth noting that any enterprise is an open system that actively interacts with macroenvironmental factors. Accordingly, it is important to also study the level of the national economy.

Work [12] considers investments as a tool for solving problems of economic development of the national economy and substantiates the need to design a financial mechanism for the country's economic growth at the transitional stage of development. As a supporting subsystem, the authors propose an organizational scheme for economic growth by executive authorities. One of the most important roles in this mechanism belongs to the Department of Investments. This is the so-called primary link for launching the digitalization process within the national economy.

Our review of the literature [1–12] shows that most studies consider only certain aspects of the digitalization of financial activities of enterprises, in particular its impact on innovative activity, or certain sources of investment. In this regard, there is a need to conduct research aimed at comprehensive improvement of the financial mechanism for stimulating innovative and investment activity of enterprises in the digitalization process of business models of management using the tourism sector as an example. It is advisable to demonstrate how, under the influence of digitalization and innovative development of enterprises in the structure of an improved financial mechanism, conventional tools and methods are replaced by digital financial instruments and alternative sources of financing.

3. The aim and objectives of the study

The purpose of our work is to determine the impact of business models of management on the financial mechanism for stimulating the innovative and investment activity of enterprises in the tourism sector. This will make it possible to increase the investment attractiveness of enterprises through the digital transformation of internal business processes of management, ensuring an increase in financial results.

To achieve this aim, the following objectives were accomplished:

- to investigate the current state of financing costs for the processes of digitization of enterprises and investment in artificial intelligence technologies;
- to investigate the impact of digitization of business models of management on the financial performance of enterprises in the tourism sector;
- to design the structure of the financial mechanism for stimulating the innovative and investment activity of enterprises in the tourism sector under the influence of digitalization;
- to forecast the effect of improving the financial mechanism for stimulating the innovative and investment activity of enterprises in the tourism sector.

4. The study materials and methods

The object of our study is the processes of improving the financial mechanism for stimulating innovation and investment activity of enterprises in the tourism sector in the digitalization process. The study hypothesizes a close relationship between the digitalization of business models of management and the improvement of the financial mech-

anism for stimulating innovation and investment activity of enterprises. In this regard, an assumption is adopted regarding the preservation of the accelerated pace of integration and adaptation of digital tools into the management and decision-making system in the near future. We adopt a simplification regarding the linearity of the effect, that is, the direct impact of digitalization on the financial result from stimulating innovation and investment activity of enterprises.

The current state of financing costs for the processes of digitalization of enterprises was studied by the method of comparative analysis. In addition, for greater visualization, a graphical method was used. A statistical method was applied to analyze the dynamics of changes in costs for digital technologies, in particular, chain and base growth rates were calculated. The distribution of investments in artificial intelligence in the world in 2023–2025 by type of investor was examined using the structural analysis method. The correlation-regression analysis method was employed to explore the impact of digitalization of business management models on the financial performance of tourism enterprises. The sources of experimental data are open statistical data on the level of income at leading online travel agencies in 2019–2025, as well as the size of the artificial intelligence market. The structure of the improved financial mechanism for stimulating the innovative and investment activity of tourism enterprises under the influence of digitalization was devised using the structural-logical and causal methods. The effect of improving the financial mechanism for stimulating the innovative and investment activity of enterprises by 2030 was predicted by applying the scenario method and the strategic foresight forecasting method. The characteristics, as well as analytical forecasting of the economic and digital effects of pessimistic, realistic, and optimistic scenarios involved the Desk Research method.

5. Results of investigating the financial mechanism for stimulating innovation and investment activity of enterprises in the digitalization process

5.1. Examining the current state of financing costs for the processes of digitalization of enterprises and artificial intelligence

Digital transformation, which has covered enterprises of all industries without exception, has led to the need to increase the amount of financing for innovative technologies. Processes related to the use of artificial intelligence, automation of the management system, and transfer of information data to cloud environments require significant costs for their implementation. Expenditures on digital technologies in the world in 2012–2025 by segments are shown in Fig. 1.

Total global spending on digital technologies according to 2025 amounted to USD 5555.32 billion. According to experts, further growth of this indicator is expected at an accelerated pace. The largest amount of spending by year was directed to such segments of digital technologies as IT services and

communication services, in particular, in 2025 their amount was USD 1717.59 and 1303.65 billion, respectively. This is explained by the fact that these segments include various services and tools, which are the basis of business models of enterprise management. For example, setting up a unified virtual connection between employees and customers significantly increases the productivity of business functions, and, as a result, improves the financial results of enterprises. At the same time, it is worth noting that, despite the largest share of IT services and communication services, their growth rates are significantly inferior to such segments as data center systems and devices. The chain and base growth rates of spending on digital technologies in 2013–2025 by segment and overall are given in Tables 1, 2.

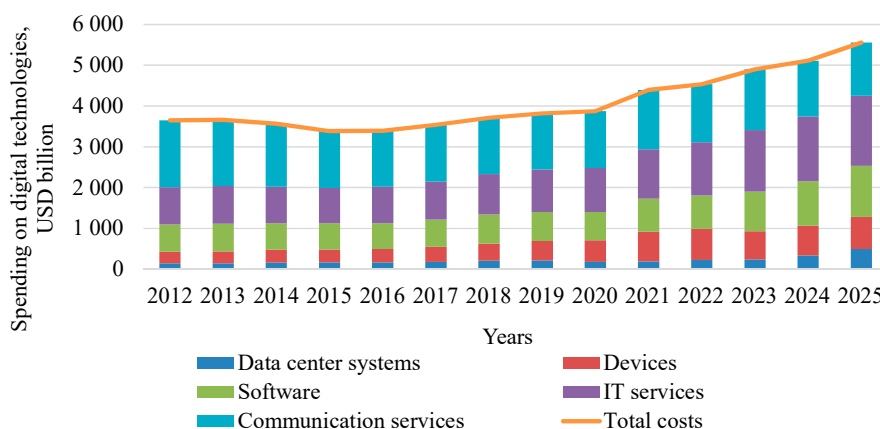


Fig. 1. Global spending on digital technologies in 2012–2025, USD billion

Note: compiled based on [13]

Table 1

Chain growth rates of spending on digital technologies in 2013–2025, %

Year	Data center systems	Devices	Software	IT services	Communication services	Total costs
2013	100	105	100	102	99	100
2014	119	103	96	97	95	97
2015	103	100	100	97	90	95
2016	99	105	98	103	99	100
2017	106	113	106	104	101	104
2018	116	114	107	107	99	105
2019	102	114	100	105	99	103
2020	83	111	98	103	102	101
2021	106	138	116	113	105	114
2022	120	105	100	108	98	103
2023	104	90	120	115	105	108
2024	139	106	112	106	92	104
2025	151	107	114	108	95	109

Note: compiled based on data from [13].

The average chain growth rate of total digital technology spending over the period under review was 103%. At the same time, the highest average growth rate was recorded for data center systems, which was 111%. It is worth noting that spending in this segment grew rapidly in 2024 and 2025.

The data in Table 2 show that the largest growth in 2025 compared to the base year 2013 was in data center systems, which amounted to 354%, that is, the costs for this segment increased by more than 3.5 times. This is determined by the

fact that data centers, which create opportunities for using cloud environments and digital platforms, allow for remote administration by accumulating, storing, and processing data. The second place in terms of growth rates is occupied by devices (277%), the third is IT services (190%). Expenditures on communication services during the studied period decreased by more than 20%.

Table 2

Baseline growth rates of spending on digital technologies in 2013–2025, %

Year	Data center systems	Devices	Software	IT services	Communication services	Total costs
2013	100	105	100	102	99	100
2014	119	109	96	99	94	98
2015	122	109	96	96	85	93
2016	121	114	93	99	84	93
2017	129	129	98	103	85	97
2018	150	147	105	110	84	102
2019	154	167	105	115	84	105
2020	128	186	103	118	85	106
2021	135	257	119	133	89	121
2022	162	269	120	144	87	124
2023	169	243	144	166	91	134
2024	235	258	161	175	84	140
2025	354	277	185	190	79	152

Note: compiled based on data from [13].

Total investments in digital transformation in 2025 amounted to USD 2580 billion, which is 46.4% of global spending on digital technologies and, at the same time, is due to the need to implement and integrate digital technologies for a radical restructuring of business management processes. At the same time, the priority areas of digital transformation are investing resources in cloud technologies and artificial intelligence. In this regard, it is advisable to analyze the dynamics of the global market for generative artificial intelligence (Fig. 2).

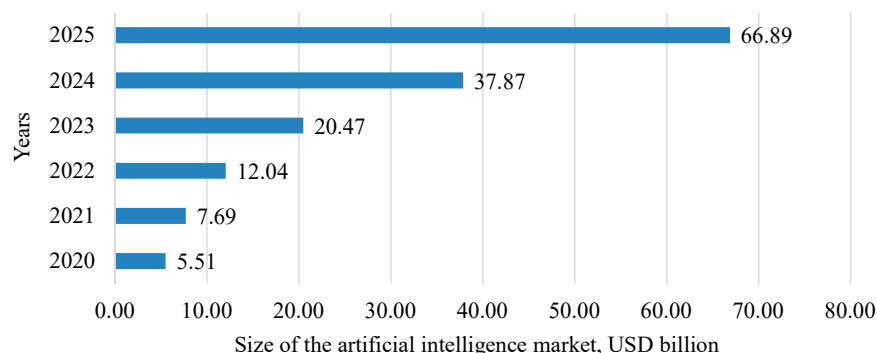


Fig. 2. Size of the global generative artificial intelligence market in 2020–2025, USD billion

Note: compiled based on [14]

The global market for generative artificial intelligence during the study period increased more than 10 times – from USD 5.51 billion in 2020 to USD 66.89 billion in 2025. According to experts, the growth trend will continue in the coming years. Table 3 gives data on the distribution of investments in artificial intelligence in the world in 2023–2025 by type of investor.

Table 3

Distribution of investments in artificial intelligence in the world in 2023–2025 by type of investor, %

Types of investors	Quarterly data									
	2023				2024				2025	
	I	II	III	IV	I	II	III	IV	I	II
Private equity	4	3	5	6	3	4	5	5	5	5
Incubator / Accelerator	12	5	8	5	12	8	11	7	8	7
Asset / Investment management	7	8	8	8	8	8	7	7	8	7
Corporation	9	11	10	11	9	8	10	8	9	10
CVC	9	11	9	10	9	9	8	9	9	8
Business angels	10	11	9	10	12	12	11	12	11	13
VC	32	33	32	32	33	34	31	35	35	32
Others	17	18	19	18	14	17	17	17	15	18
Total	100	100	100	100	100	100	100	100	100	100

Note: compiled based on data from [13, 14].

It is worth noting that venture capitalists account for a third of AI investment (from 31 to 35% over the study periods).

Analysis reveals an accelerated pace of digitalization on a global scale. It is worth noting that in each industry the dynamics of investment costs for the implementation of digital technologies have different growth rates. Thus, further research will be aimed at identifying the impact of digitalization on the efficiency of tourism enterprises.

5.2. Studying the impact of digitalization of management business models on the financial performance of tourism enterprises

The digitalization of management business models in the current situation directly depends on the level of integration of artificial intelligence technologies into management business processes. From 2013 to 2022, global investments in the development of artificial intelligence amounted to USD 934.2 billion, which is 15 times the size of the artificial intelligence market as of 2025. The largest amount of investment in artificial intelligence, USD 276.1 billion, was given in 2021, on the eve of the launch of OpenAI ChatGPT tools (USA). That led to a revolutionary breakthrough in almost all areas of activity, accelerating the development of e-commerce. For example, online sales in the global tourism market in 2025 amounted to almost USD 990 billion, which exceeded 70% of the total revenue of the tourism sector.

To determine the impact of digitalization of business management models on the financial performance of enterprises, data on the revenues of leading online travel agencies in 2019–2025 were used (Fig. 3).

Global revenues of leading online travel agencies in 2019–2025 tended to grow, except for 2020, which is explained by a decrease in demand for travel services due to the coronavirus pandemic. During the study period, the highest revenues were received by the travel agency Booking Holdings, which in 2025 reached USD 26,917 million. Expedia Group and Airbnb are in second and third place, receiving revenues of USD 14,733 and USD 12,241 million in 2025, respectively.

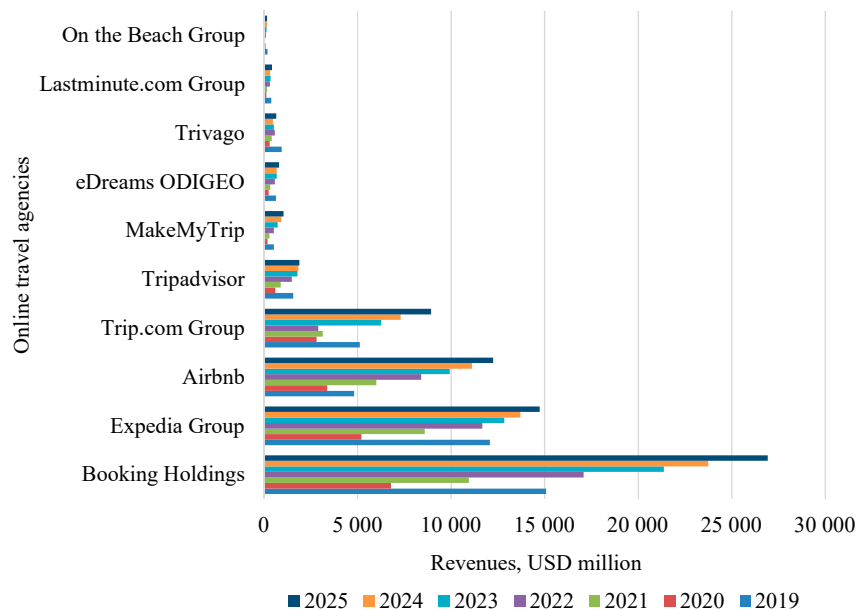


Fig. 3. Revenues of leading online travel agencies in 2019–2025, USD million
Note: compiled based on [15]

Table 4 gives the calculated correlation coefficients and equations of dependence of revenues of leading online travel agencies on the size of the artificial intelligence market. The feasibility of the sample is explained by the fact that the total revenues of the ten leading online travel agencies in 2025 amounted to more than 70% of the total revenues of the tourism industry. In addition, leading online travel agencies are considered flagships of digitalization, in particular the use of artificial intelligence technologies. To calculate the correlation coefficients, the CORREL statistical function in Microsoft Excel (USA) was used. In order to most clearly reflect the impact of the size of the artificial intelligence market on the revenues of leading online travel agencies, it seems appropriate to use paired linear regression.

Since all the correlation coefficients calculated in Table 4 have values greater than 0.7, this indicates a strong relationship between the revenues of online travel agencies and the size of the artificial intelligence market [16]. This may also mean that at the current stage, the improvement of the financial mechanism for stimulating innovation and investment activity of enterprises occurs primarily through the digitalization of business management models, which confirms the hypothesis put forward.

5. 3. Designing the structure of a financial mechanism for stimulating the innovative and investment activity of enterprises under the influence of digitalization

The financial mechanism for stimulating the innovative and investment activity of enterprises includes an integrated combination of tools, methods of provision, as well as regulatory and legal acts, as a prerequisite for attracting the necessary investment resources [17]. Digitalization of business models of management significantly transforms existing financial mechanisms, putting forward new requirements for sources of financing and state support (Fig. 4).

It is worth noting that in the digitalization process of business models for managing tourism enterprises, the emphasis of innovative and investment activity is shifting, in particular, the attracted finances are directed towards the growth of digital assets. In addition, the improved financial mechanism involves the attraction of digital financial instruments, unlike conventional loans. It is advisable to determine the effect of the proposed model of the financial mechanism through economic and digital criteria, implementing the scenario forecasting procedure.

Table 4

Correlation coefficients and equations of dependence of revenues of leading online travel agencies on the size of the artificial intelligence market according to data on 2019–2025

Online travel agencies	Correlation coefficient (r_{xy}) of revenue and AI market size	Equation of dependence of income (y) on the size of the artificial intelligence market (x)
Booking Holdings	0.8582	$y = 4092.1x + 3488.5$
Expedia Group	0.7759	$y = 1832x + 4709.1$
Airbnb	0.8361	$y = 1747.5x + 2388.5$
Trip.com Group	0.9337	$y = 1326.6x + 582.13$
Tripadvisor	0.7398	$y = 272.29x + 465.67$
MakeMyTrip	0.8976	$y = 181.94x - 16.8$
eDreams ODIGEO	0.8088	$y = 113.23x + 157.87$
Trivago	0.6970	$y = 53.171x + 305.07$
Lastminute.com Group	0.8002	$y = 57.314x + 84.067$
On the Beach Group	0.7852	$y = 21.657x + 41.533$

Note: calculated by authors.

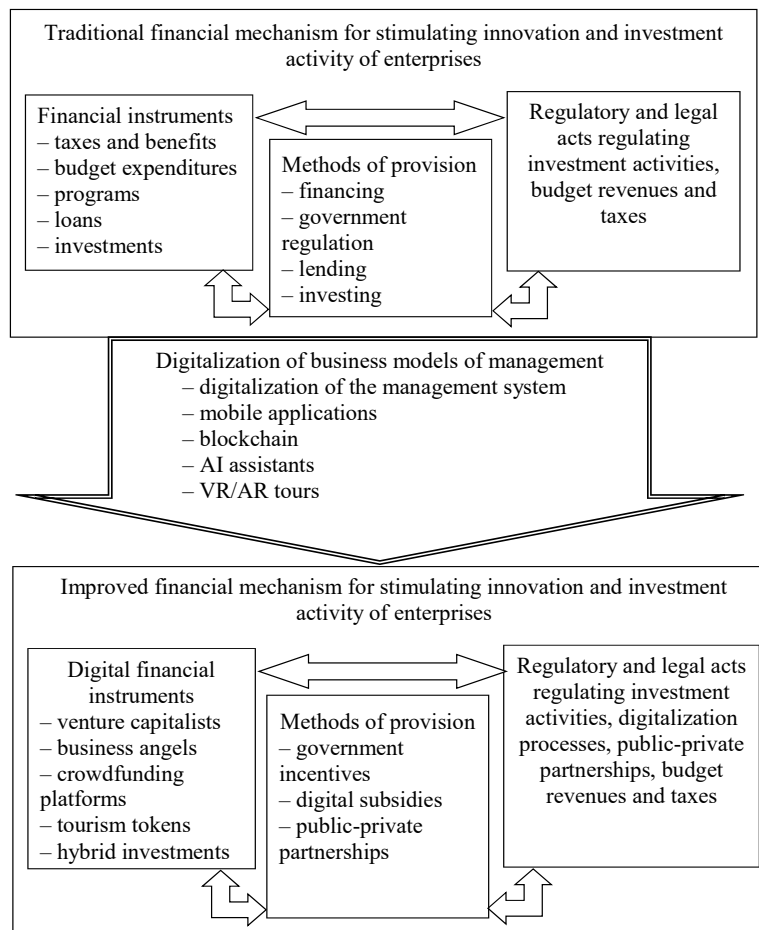


Fig. 4. Transformation of the financial mechanism to activate innovation and investment activities of tourism enterprises in the digitalization process

Note: compiled based on data from [17, 18]

5. 4. Forecasting the effect of improving the financial mechanism for stimulating innovation and investment activity of enterprises

Based on a study of the state of financing costs for the processes of enterprise digitalization, as well as the impact of digitalization of business models of management on the financial performance of enterprises in the tourism sector, Table 5 gives a scenario forecast of innovation and investment activity.

Accordingly, by shifting the emphasis from conventional financial instruments to alternative digital ones, tourism enterprises create prerequisites for accelerated growth in efficiency indicators. By combining economic and digital criteria, it becomes possible to provide a balanced forecast of the effect of the proposed financial mechanism to activate the innovation and investment activities of tourism enterprises in the digitalization process.

Table 5

Scenarios of innovation and investment activity of tourism enterprises in Ukraine for the process of business management models digitalization by 2030

Scenario	Scenario characteristics	Economic criteria	Digital criteria
Pessimistic (inertial)	There is a traditional financial mechanism. Tourism enterprises invest their own finances or attract classic lending. Digitalization at enterprises is not systematic, in particular, it can be a software or website update	Income may decrease due to inflation or other factors	Zero level
Realistic	An improved financial mechanism is launched. Tourism enterprises are actively attracting digital vouchers, and if necessary, are actively looking for alternative financing. The stage of comprehensive digitalization is beginning, including the introduction of mobile applications, AI assistants, and VR/AR excursions	Revenues increase by 10–20% while expenses decrease. This leads to an increase in operating profit and profitability	The share of online sales is increasing, reaching 50–60%
Optimistic	The improved financial mechanism is fully integrated. Tourism enterprises are actively attracting venture capital. There is a full-scale implementation of artificial intelligence tools in the management system, in particular customer service	Profits increase by 30–40%. Digital investments pay off quickly	The share of online sales is more than 80%. The maximum value of the digital maturity index of the business model management, which attracts the attention of venture investors

Note: compiled based on data from [19, 20].

6. Discussion of results based on investigating the financial mechanism for stimulating the innovative and investment activity of enterprises in the digitalization process

Our results of investigating the financial mechanism for stimulating the innovative and investment activity of enterprises demonstrate that the digitalization of business models of management is the main driving force of its transformational development. Data from the analysis of global trends in financing digital technologies (Fig. 1) show the accelerated growth rates of investments in digital transformation, primarily in data centers, cloud technologies, and artificial intelligence (Tables 1, 2). Such trends are due to the growing role of digital assets as the basis for the formation of competitive advantages of enterprises. Thanks to digital assets, a high level of automation of business processes is ensured, productivity is significantly increased, and the speed of making managerial decisions is accelerated. Therefore, the results given in Tables 1 and 2 prove the fact that investment priorities are reoriented from conventional material resources to digital technologies.

Based on the results regarding the calculated correlation coefficient, a close correlation was established between the volumes of the world market of artificial intelligence and the revenues of the leading online travel agencies (Table 4). Accordingly, it can be argued that digitalization has a positive effect on the financial performance of tourism enterprises. It should be noted that the results are consistent with the conclusions in scientific studies on the digital transformation of business models [1–12]. Most of them prove the fact that increasing the efficiency of management of investment resources and intensifying the innovative activity of enterprises depend on the intensity of the use of digital technologies. At the same time, the approach proposed in our work somewhat expands existing scientific provisions. In particular, we evaluate the digital transformation in combination with the financial mechanism for stimulating innovation and investment activities. In addition, the specific features of tourism enterprises are taken into account. However, unlike most studies, which consider digitalization as a technological or organizational process, we characterize it as a component of the financial mechanism of enterprises, which enables their innovative development.

The key scientific advantage of our research is the development of an improved financial mechanism for stimulating innovative investment activity of enterprises (Fig. 4). In contrast to existing approaches, the updated structure of the financial mechanism allows for the coordination of digital financial instruments, modern forms of state support, public-private partnership mechanisms, and legal support for digital transformation. As a result, prerequisites are created for building a unified management system for innovation and investment activities. A distinctive feature of the proposed mechanism in comparison with conventional financing models is the active use of venture capital. Its varieties include business angel investments, digital vouchers, crowdfunding platforms, and other alternative sources of financing. As a result, opportunities for attracting investments by business entities are expanding.

The practical significance of the proposed approach is demonstrated by the results of forecasting scenarios for the development of innovative and investment activity of enter-

prises in the tourism sector of Ukraine until 2030 (Table 5). It is worth noting that the use of the scenario approach makes it possible to conduct a comprehensive assessment of the effectiveness of the financial mechanism, distinguishing economic and digital development criteria. This will lead to the adoption of more informed management decisions regarding further guidelines for innovative and investment activity of enterprises in the context of digitalization.

The limitations of the study arise, first of all, from the overly simplified representation of the transformation of the financial mechanism for activating innovative and investment activity of enterprises in the digitalization process, shown in Fig. 4. The financial mechanism is proposed for the conditions of the tourism sector; therefore, its use for enterprises of other types of activity may require adaptation to the specifics of a particular industry. In addition, the level of reliability of the predicted scenarios depends to a greater extent on the stability of macroeconomic conditions, the pace of digitalization of the economy, as well as the policy of state support in the field of digital innovations. Also, the results of our research will be correct only if up-to-date statistical data is used and existing trends in the development of digital technologies, financial markets, and innovation and investment activity of enterprises are preserved. As a result, the proposed financial mechanism may require periodic updating taking into account changes in the regulatory environment, as well as the transformational development of digital financial instruments. And this may lead to a significant shift in the emphasis and scope of research.

At the same time, the study has a number of shortcomings. First, the work lacks empirical testing of the proposed financial mechanism using a wide sample of enterprises in different fields of activity, which calls into question the possibility of proving its universality. Second, the model does not take into account the behavioral aspects of investment decision-making by top management of enterprises, the level of development of digital culture, as well as the influence of other institutional factors. Third, our study does not include comparative modeling of the effectiveness of various digital financial instruments based on econometric and/or simulation models. To eliminate the identified shortcomings, it is advisable to expand the empirical base of the study, apply other analytical methods, in particular multi-criteria assessment, panel analysis, and, as an option, conduct international comparative studies.

Further research may involve construction of economic and mathematical models for assessing the effectiveness of digital financial instruments, the formation of platforms that combine different areas. Among them are sources of financing for digital innovations, research into ways to use artificial intelligence, and digital assets for financial support of innovative and investment activities of enterprises. A promising direction is to devise a methodology for assessing the digital maturity of business management models as the main factor in the investment attractiveness of enterprises. However, certain difficulties may arise on the way to implementing the identified directions. They may include the lack of representative data, the rapid change of digital technologies, the complexity of modeling nonlinear relationships between the indicators under study, as well as different methodological approaches to assessing digital transformation in different areas of activity.

7. Conclusions

1. The results of our study prove that the digitalization of business models of management is one of the key factors in improving the financial mechanism for stimulating the innovative and investment activity of enterprises. It has been established that the growth of spending on digital technologies on a global scale, the accelerated development of the market for generative artificial intelligence, as well as the increase in the size of digital investments, create prerequisites for the digital transformation of the financial support of enterprises. Analysis of the current state of financing for digitalization processes has revealed that the most dynamic segments include data centers, information technologies, and digital services. At the same time, venture capital is the main source of financing for artificial intelligence technologies. This necessitates the transformation of the financial mechanism of enterprises through the introduction of digital financial instruments and methods.

2. A tight connection between the development of the artificial intelligence market and the income of leading online travel agencies has been proven on the basis of statistical correlation-regression analysis. The dependence between the income level of leading online travel agencies and the size of the artificial intelligence market has been established. A direct close connection between the studied indicators has been determined, that is, with the increase in the artificial intelligence market, the income of online travel agencies increases significantly. The positive impact of digitalization of management business models on the innovation and investment activity of tourism enterprises has been substantiated.

3. A structure of the financial mechanism for stimulating the innovative and investment activity of enterprises has been proposed, which harmoniously combines digital financial instruments, modern methods of state support, and regulatory and legal support for investment under the conditions of digitalization. It is established that, unlike the conventional one, the improved financial mechanism provides for the active use of alternative investment sources, which, in turn, increases the investment attractiveness of enterprises and the efficiency of implementing innovations.

4. The predicted scenarios for the development of innovative and investment activity of enterprises in the tourism sector of Ukraine until 2030 have been characterized. A comprehensive assessment of the results of digital transformation is proposed, taking into account economic and digital criteria. It has been established that under the condition of implementing the optimistic scenario, there would be a significant increase in profitability, the payback period of digital investments could be reduced, and online sales would increase. As a result, the level of digital maturity of business management models will increase, thereby enabling strategic competitive development of enterprises in the context of digitalization.

Conflicts of interest

The authors declare that they have no conflicts of interest in relation to the current study, including financial, personal, authorship, or any other, that could affect the study and the results reported in this paper.

Funding

The study was conducted without financial support.

Data availability

The data will be provided upon reasonable request.

Use of artificial intelligence

The authors confirm that they did not use artificial intelligence technologies when creating the current work.

Author contributions

Serghiy Radynskyy: Conceptualization, Methodology, Formal analysis, Investigation, Resources – original draft, Writing – Project administration, Funding acquisition; **Zoriana Lobodina:** Methodology, Validation, Formal analysis, Data Curation, Writing – original draft, Writing – review & editing, Visualization, Supervision; **Vadym Ratynskiy:** Software, Validation, Investigation, Resources, Data Curation – original draft, Writing – review & editing, Funding acquisition; **Halyna Pohrishchuk:** Methodology, Formal analysis, Resources, Writing – original draft, Writing – review & editing, Visualization; **Nataliia Dobizha:** Methodology, Software, Investigation, Resources – original draft, Writing – review & editing; **Tatiana Chaika:** Methodology, Software, Investigation, Resources – original draft, Writing – review & editing; **Nataliia Poberezhna:** Conceptualization, Validation, Investigation, Writing – original draft, Writing – review & editing, Funding acquisition; **Oleh Onofriichuk:** Methodology, Validation, Formal analysis – original draft, Writing –Supervision, Project administration; **Liliya Kondratska:** Conceptualization, Methodology, Software – original draft, Writing – review & editing, Visualization, Funding acquisition; **Vitaliy Levytskyi:** Conceptualization, Methodology, Data Curation, Writing – original draft, Writing – review & editing.

All authors have read and agreed to the published version of the article and are jointly responsible for the reliability, accuracy, and integrity of the data and research results presented in the article.

References

1. Cherep, O., Cherep, A., Ohrenych, Y., Helman, V., Gorbunova, A. (2024). Improvement of the management mechanism of the strategy of innovative activities of enterprises. *Financial and Credit Activity Problems of Theory and Practice*, 1 (54), 471–484. <https://doi.org/10.55643/fcaptop.1.54.2024.4295>
2. Wang, Z., Lin, S., Chen, Y., Lyulyov, O., Pimonenko, T. (2023). Digitalization Effect on Business Performance: Role of Business Model Innovation. *Sustainability*, 15 (11), 9020. <https://doi.org/10.3390/su15119020>
3. Kanashayev, D., Yessirkepova, A., Baineyeva, P., Alzhanova, A., Tursyn, A. (2025). Organisational-economic mechanism for increasing the innovative activity of carpet industry enterprises in the digitalisation of technological processes. *World Development Perspectives*, 37, 100654. <https://doi.org/10.1016/j.wdp.2024.100654>

4. Song, Y., Zhu, M., Wang, Y. (2025). Corporate financialization, digital transformation, and industrial supply chain resilience: Mechanisms based on R&D investment and financial regulation. *International Review of Financial Analysis*, 102, 104119. <https://doi.org/10.1016/j.irfa.2025.104119>
5. Khalatur, S., Masiuk, I., Kravchenko, M., Kurbatska, L., Sirko, A. (2025). Digitalisation as a modern trend in the development of financial management in small business. *Financial and Credit Activity Problems of Theory and Practice*, 3 (62), 370–382. <https://doi.org/10.55643/fcaptp.3.62.2025.4758>
6. Li, S., Xie, N. (2025). The impact of digital finance on firms' digital Transformation: Mechanism analysis based on enterprise financing. *International Review of Economics & Finance*, 101, 104223. <https://doi.org/10.1016/j.iref.2025.104223>
7. Salgado-Criado, J., Mataix-Aldeanueva, C., Nardini, S., López-Pablos, C., Balestrini, M., Rosales-Torres, C. S. (2024). How should we govern digital innovation? A venture capital perspective. *Technological Forecasting and Social Change*, 200, 123198. <https://doi.org/10.1016/j.techfore.2023.123198>
8. Fu, Y., Ni, J., Fang, M. (2025). The impact of artificial intelligence on digital enterprise innovation. *Journal of Strategy & Innovation*, 36 (1), 200538. <https://doi.org/10.1016/j.jsinno.2025.200538>
9. Bai, L., Cui, D. (2026). Artificial intelligence investment, data factor accumulation, and enterprise digital transformation performance. *Finance Research Letters*, 92, 109573. <https://doi.org/10.1016/j.frl.2026.109573>
10. Li, Y., Meng, X., Cheng, D. (2026). Digital intelligence transformation and innovation output of cultural and tourism enterprises. *Finance Research Letters*, 106, 110262. <https://doi.org/10.1016/j.frl.2026.110262>
11. Huang, Y., Peng, X. (2026). How digital transformation reshapes the credit ratings of tourism enterprises: the mechanism of digital asset valuation. *Finance Research Letters*, 107, 110264. <https://doi.org/10.1016/j.frl.2026.110264>
12. Veselá, N., Hampel, D., Yahelska, K., Krasko, V. (2022). Preconditions for the formation of the investment policy of Ukraine as a key set of measures to ensure economic development. *Journal of Eastern European and Central Asian Research (JEECAR)*, 9 (2), 319–332. <https://doi.org/10.15549/jeecar.v9i2.691>
13. Technology & Telecommunications. Statista. Available at: <https://www.statista.com/markets/418/technology-telecommunications/>
14. Armstrong, M. (2023). How Much Are Companies Investing in AI? Statista. Available at: https://www.statista.com/chart/31314/global-corporate-investment-in-artificial-intelligence/?srsltid=AfmBOob6Qdz-ElqxeeY6MVmlTbigzzA2_L-5VXOZYuilUsmcvg2iGa
15. Travel, Tourism & Hospitality. Statista. Available at: <https://www.statista.com/markets/420/travel-tourism-hospitality/>
16. Salomao, A. (2024). Koreliatsiia Pirsona: Rozuminnia matematyky, shcho stoit za vzaiemozvyazkamy. Available at: <https://mindthegraph.com/blog/uk/pearson-correlation/>
17. Koval, S., Vitko, A. (2025). Financial mechanism of investment growthin Ukraine. *Efektivna ekonomika*, 1. <http://doi.org/10.32702/2307-2105.2025.1.65>
18. Radynskyy, S., Ratynskiy, V., Lobodina, Z., Shpylyk, S., Pohrishchuk, H., Dobizha, N. et al. (2024). Devising investment strategies as a source of financial support to the development of territorial communities in the era of digitalization. *Eastern-European Journal of Enterprise Technologies*, 6 (13 (132)), 38–47. <https://doi.org/10.15587/1729-4061.2024.316235>
19. Kasian, O. (2023). Analysis of factors in managing digital entrepreneurship development in tourism in Ukraine: challenges and opportunities. *Technology Audit and Production Reserves*, 4 (4 (72)), 12–19. <https://doi.org/10.15587/2706-5448.2023.286471>
20. Holovnia, O., Leontiev, I. (2025). Current priorities of digital transformation in the tourism and recreation industry. *Economy and Society*, 72. <https://doi.org/10.32782/2524-0072/2025-72-100>