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Investment in IT as a Priority Area of Economic Development in Ukraine

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Abstract. In modern economic realities, information technologies are considered the main resource of technological and socio-economic development of the country, because they are used in all spheres of society and the state, and directly affect the overall national situation. Therefore, the study and analysis of the conditions for their attraction are relevant both in Ukraine and around the world. The purpose of this study is to identify the features of attracting investment in information technologies and search for methods to improve the investment environment for this industry. For the furtherance of this goal, the following methods were used: analysis and synthesis, induction and deduction, comparison, scientific abstraction, and modelling. Within the framework of this study, an interpretation of the concepts of "investment" and "information technologies" are provided and their role and functions at the macro and micro economic levels are highlighted; the main aspects of financing and attracting money in the field of IT are considered; the main problems and prospects of investing in this area in Ukraine are identified; the dynamics of attracting investment in information technologies are analysed; methods for improving the investment environment in the field of IT are proposed. The study also analysed the financial sources of attracting investment, listed the advantages and disadvantages of each type of financing, considered the dynamics and structure of innovation at industrial enterprises of Ukraine in 2019, and established the relationship between the volume of attracted monetary investments and the introduction of innovations. In the course of the study, methods for evaluating the effectiveness of investments in the IT field were also considered, the essence, advantages and disadvantages of each of the methods were identified. The practical significance of the work lies in the fact that the results of the study can be used to develop a plan and methods for improving the investment climate in the industry, based on the analysis of its strengths and weaknesses

Keywords: economic development, information products, investment projects, public and private investments, venture capital investments

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Introduction

Information technologies in the 21st century play an important role in all aspects of human activity, and their introduction in all areas: economics, law, medicine, communications, etc., is becoming a new condition for human existence in the global information society. Further development of information technologies is possible only if they are sufficiently funded. Therefore, the leading states actively invest in this area, which in turn leads to an increase in the level of economic development and its competitiveness at the macro level. The development of IT is also a lever for the emergence of new forms of integration into the global economic space, a gap in the levels of financial and economic development between countries in the world, and strengthening the state of competitiveness from micro to macro levels of the state.

Today, IT investment is a promising area of capital investment, as it is constantly developing and its popularity and demand among the population continue to grow. Potential investors with the goal of generating income are interested in placing their own free capital in the IT field. It is generally accepted that the maximum effect of investing in IT technologies is manifested in such economic areas as pricing and sales, logistics, inventory and reserve management, optimisation of production processes such as cost reduction and profit maximisation, growth of labour productivity, and so on.

The issue of attracting investment in the field of information technology has formed the basis of scientific research for many foreign and Ukrainian scientists. Thus, A.V. Katrenko and O.V. Pasternak studied the systemic aspects and characteristics of investing in the IT industry, the state of the IT market in Ukraine and the main priorities of its development and proposed financial methods for evaluating investments in general [1]. A.G. Lyzanets and S.V. Nesterov studied the impact of IT on the development of the labour market, analysed the general features and conditions of the virtual labour market in Ukraine and offered their own recommendations for the legal regulation of such a market [2]. The object of study by D. Dobiya, K.M. Klimchak, N. Roztotsky and H.R. Weistroffer was the reaction of the stock market on the announcement of investments in IT, in particular – in Poland, these scientists analysed the relationship between the reaction of investors and shares of IT companies offered to them by the stock exchange [3].

Of particular interest is the paper by E.V. Chmyreva "Attractiveness of investment projects in the field of information technology", in which the author considers how IT affects business and offers an adequate methodology for evaluating investments in IT projects [4]. B.L. Santos, K. Pefers and D.K. Mauer identified the impact of IT investment on company performance and market response to innovation announcements [5]. Among other world scientists who have studied this issue of IT, the studies by E.F. Fama, L. Fischer, M.S. Jensen, R. Roll [6], V.I. Averchenkov [7], I.P. Malik [8], V. Davidov [9], S.S. Yurchenko [10], A.L. Ryzhko, N.M. Lobanova, N.A. Ryzhko, Ye.O. Kuchynska [11] can be emphasised.

All of the above scientists have achieved significant results in the study of information technologies and their impact on the economic situation of the country, they have proposed important methods for assessing the effectiveness of investment in the field of IT, developed a significant theoretical and practical base for studying the venture investment process. Scientific research by foreign scientists is the basis for the theoretical teachings of Ukrainian researchers, but it is important that when studying IT investment in Ukraine, it is the economic, political, social and legal status of the state that should be taken into account. However, despite a number of developments on this issue, there are still unsolvable tasks, among which the following can be highlighted: the main problems of investing in IT in Ukraine, the reasons for the unsatisfactory investment climate in this area and methods for improving it, the accuracy of calculations of the return on such investments. Analysis of the available literature shows that scientific developments on this issue require updating and systematisation of methods for assessing investment attractiveness, identifying weaknesses and strengths of the country's information sphere. The existence of a number of unresolved aspects was the main reason for studying the topic.

The impact of IT on the life of a person and society as a whole is difficult to overestimate. As noted earlier, now no field of human activity is complete without the use of IT products, and therefore investing capital in the development of such products would have a positive impact on all sectors of the Ukrainian economy. For more effective attraction of funds to IT, the state should create all the necessary conditions for this: regulatory support, investment climate and environment, a system of state standards, grants, subsidies, support startups, finance scientific, technical and innovative activities, and so on.

The *purpose of this study* is to identify the features of attracting investment in IT and search for methods to improve the investment environment for this industry. For the furtherance of this goal, it is necessary to solve the following *tasks*: a theoretical definition of the essence of the concepts of "investment", "venture investment" and "information technology"; determine the role and importance of investing capital in the IT field and the main aspects of investing in IT; suggest methods to improve the investment climate in this industry; analyse several Ukrainian investment projects related to the IT, problems and prospects associated with them; an overview of indicators and dynamics of IT investment over the past few years in Ukraine.

Materials and Methods

The subject of a comprehensive study is the IT investment, and the objects are investments (in particular, venture), information technologies, IT projects and products, the investment climate and environment. To achieve the goal and solve the outlined problems, this study is based on a two-way analysis of the subject matter. On the one hand, the study includes an analysis of previous publications and literature devoted to this issue. On the other hand, to provide

more detailed and up-to-date coverage of the selected topic, the latest available statistics were analysed. The main stages of the study are: collecting the necessary theoretical base, summarising the main aspects and achieving the tasks that form the research goal, putting forward own proposals, summarising and summing up the results.

The tasks set in this paper were solved using a complex of specific and general scientific methods of cognition. Thus, the following methods were used: analysis and synthesis, induction and deduction, comparison, scientific abstraction, and modelling.

The *analysis method* was chosen to reveal the essence of investments, their classification and theoretical substantiation, in particular – for venture investments, and the *method of synthesis* – to combine aspects of investments in IT to study their role in the economic development of the country.

Induction as a method of transition from knowledge of individual facts to knowledge of general information was used in this study to find optimal solutions to improve the investment environment of the industry and to analyse the weaknesses and strengths of IT investment in Ukraine. The *deduction method* as a transition from general patterns to individual facts was used when evaluating the prospects of investment projects.

The *comparative method* is appropriate in the case of interpretation of theoretical concepts, it allows evaluating the definition of scientific concepts by different researchers, find out the patterns and differences between the opinions of scientists and have a broader understanding of the subject under study. Summarisation of conclusions was carried out using the method of *scientific abstraction*.

Modelling methods were used to assess the dynamics of attracted investments to take a more detailed look at their changes over time. This method includes the construction of tables, graphs, and formulas, which indicates a visual interpretation of the results obtained and statistical data. Calculations and construction of models, analysis of statistical data, graphical representation of the results obtained were performed using MS Excel.

The set of materials for writing the article turned out to be quite wide, it included scientific developments of foreign and Ukrainian scientists, papers, books, periodicals, state websites with statistical data (State Statistics Service), and online platforms for investors. The main criteria for evaluating the literature on which the authors relied were: relevance, content, informative content, expediency, compliance with the topic and truthfulness. A *system approach* to the selection of scientific sources for the paper, the definition of the subject and purpose of study, a clear definition of goals and justification of conclusions allowed covering as many aspects of the issue under study as possible.

Results and Discussion

To determine the role of IT investment in economic development, it is necessary to define the concepts of "investment" and "information technology". According to the law of Ukraine "On investment activity" [12], investments are all types of property and intellectual values invested in objects of entrepreneurial and other types of activities, as a result of which profit(income) is generated and/or a social and environmental effect is achieved. According to the specified law, such values can be: funds, targeted bank deposits, shares and other securities (except bills of exchange); movable and immovable property; intellectual property rights; a set of technical, technological and commercial types of knowledge, issued in the form of technical documentation, skills and production experience necessary for the organisation of a particular type of production, but not patented ("know-how"); rights to use land, water, resources, buildings and structures, and other values [12].

A separate type of investment is considered to be "venture capital investments", which is advisable to mention in the context of investments in it. The term "venture" can be interpreted as "risk". Thus, venture capital investments are risky investments in developing companies. The concept of "venture capital investment" is somewhat different in Europe and the United States. American scientists interpret this concept only as an investment in "high" technologies, while in Europe this concept is somewhat broader and includes investments in both IT and objects with a low degree of novelty, but which have a high chance of commercial success [13]. Next, the study considers the meaning of the concept of "information technologies" from the standpoint of several researchers, which will allow for a more accurate formulation of its meaning (Table 1).

Table 1. Interpretation of the concept of "information technologies" by various scientists

Names of scientists	Approaches to the definition
Yu.Yu. Gromov, I.V. Didrich, O.G. Ivanov M.A. Ivanovsky, V.G. Odnodolko	Information technology – a complex system that covers a diverse range of prob-lems, phenomena, and approaches, the specifics of which consist in the intellectual nature of work, the variety of the range of products/services produced is small compared to industrial volumes of products and services of the same name [14]
V.V. Bespalov	Information technology – a broad class of disciplines and areas of activity related to data management and processing technologies, as well as data creation, in par-ticular using computer technologies. Recently, this term is increasingly understood as computer technologies [15]
P.G. Ragulin	Information technology – a set of methods and techniques for obtaining, pro-cessing, and presenting information aimed at changing its state, form, and content, which is carried out in the interests of users. The purpose of IT is to use information for its analysis by a person and make decisions based on it with the performance of certain actions [16]
N.G. Serebryakova, O.L. Sapun, R.I. Furunzhiev	The essence of "information technologies" is formed by two concepts: "technology" and "information". The term "technology" is a set of methods, processes, and materials used in any field of activity, as well as a description of typical methods of technical production using modern methods and tools. The concept of "information" is evidence of something, depending on the forms of their representation [17]

Source: compiled by the authors based on [14-17]

Based on the definition of the concepts of "investment" and "information technology", this study provides a definition of the concept of "IT investment". Thus, IT investment is a type of investment of tangible and intangible values in the development of special systems and complexes for receiving, processing, and presenting information for the purpose of its further analysis and making economic decisions. IT investments can be classified as venture investments, since most of them are risky, but have a high degree of profit in the future. As an economic category, investment performs a number of important functions, without which the development of the economy would be impossible. Speaking about the importance of investments, it is worth dividing their role and impact at two levels – at the macro and micro levels (Fig. 1). Thus, investment is a driving force for economic development and a means of increasing the country's productive potential.

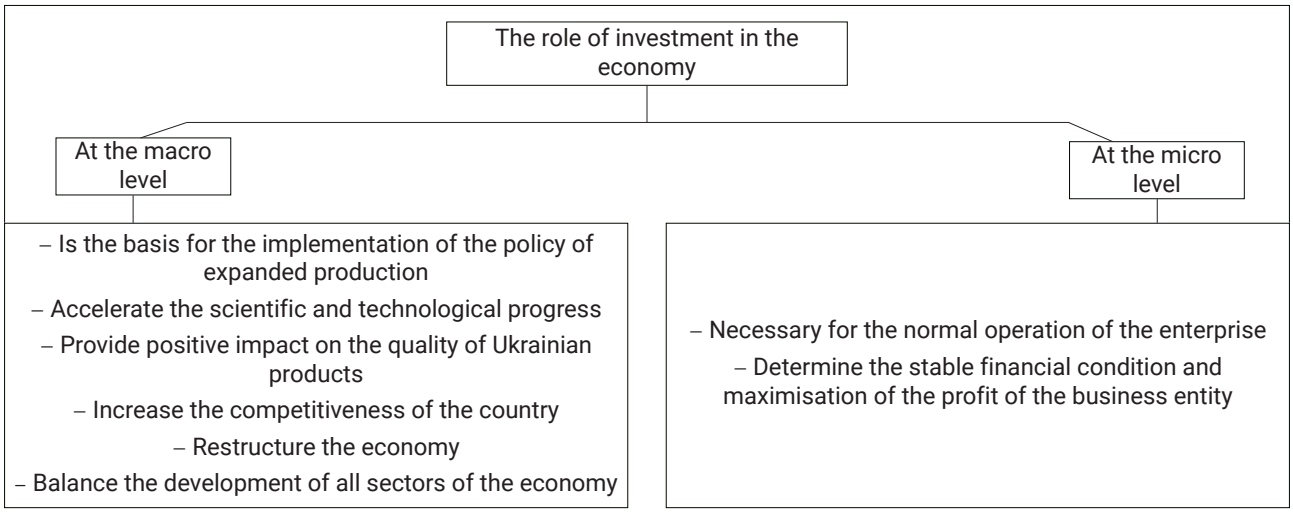

Figure 1. The role of investment in the economy at different levels
Source: compiled by the authors based on studies by I.M. Vorobyova and A.M. Ponomarev [18]

Therefore, taking into account the role of investment in the economy, it can be noted that IT investment is quite an important lever for regulating the economy, is a priority direction for achieving its development and financial stability. The development of the IT field would have a positive impact on the economic side of the country's activities, including on the related areas: legal, social, scientific, etc. Investments in IT are characterised by certain aspects and rules, among which the following can be distinguished:

– decisions about investing in the IT sector are made based on considerations of financial benefits, as well as in other areas of business;

– development of IT should take place based on the needs of the enterprise in terms of managing the organisation. It should also be taken into account that the needs of an organisation should never be determined only by the need to introduce modern information technologies;

– employees of the IT department should have a good knowledge of business needs;

– the consequence of investment in it is the availability of modern information products that create real competitive advantages in the competition for qualified personnel and resources [19];

– it is known that assessment of the investment attractiveness of IT projects is more difficult than assessment of projects in other industries. Furthermore, the cost of assessment of investment attractiveness can significantly exceed the planned costs of the project itself;

– this type of investment is rather risky and intuitive [20].

Currently, the main types of investments in it in Ukraine are: loans, investors' own funds, seed capital (SC), venture investment, and stockholder capital [1]. Table 2 shows the main advantages and disadvantages for each type of investment.

Table 2. Comparative characteristics of investment financing

Type of investment	Advantages	Disadvantages
Own funds	No need to pay interest; fairly high speed of receipt and freedom in decision-making	Small amount of investment; lack of external expertise and consulting support
Loans	The owner does not share the property (as-sets) with the investor	Need to pay interest; lack of material guarantees; bureaucracy
Seed financing	Operational activities are managed by inves-tors with significant experience; develop-ment of an operational plan for entering the market	The project is accompanied only at the launch stage
Venture capital investment	Provision of funds for a long period of time; material collateral is not required, the possi-bility of joint investment	Control of investors in decision-making; availability of intellectual property rights and a completed business plan
Stockholder capital	Significant amount of financial capital; strengthening the company's reputation	Long process of receiving funds; the need to publish "internal" information

Source: compiled by the authors based on study by A.V. Katrenko and O.V. Pasternak [1]

Next, the study analyses the indicators of attracting investment in IT in dynamics over the past few years (Table 3); the structure of innovation introduction and sources of funding for innovative activities of industrial enterprises.

Analysing the data obtained in the IT field, during the study period, the volume of capital investments in professional, scientific and technical activities had a positive tendency to increase (Fig. 2). Thus, in 2019, the largest share in the volume of IT investment was occupied by the following industries: communication systems, activities in the fields of law and accounting, architecture and engineering, technical testing and research. Investment in information and telecommunications has a less positive growth value, the "peak" year for this area was 2018, but the volume of investment decreased the following year.

Table 3. Volume of capital investments in the IT sector in Ukraine, in mln. UAH

Sphere	2014	2015	2016	2017	2018	2019
Information and telecommunications, of which:	8175.1	22975.0	15651.2	18395.2	29884.9	21063.4
– publishing, radio broadcasting, television	1840.8	2304.3	2820.9	3567.8	4744.6	5766.4
– communication systems (telecommunication)	5664.0	19536.4	10705.4	12776.8	21317.8	11734.4
– computer programming and provision of other information services	670.3	1134.3	2124.9	2050.6	3822.5	3562.6
Professional, scientific and technical activities, of which:	2921.5	4065.2	6579.4	7965.3	10798.2	11912.4
– activities in the fields of law and accounting, architecture and engineering, technical testing and research	2314.8	3244.4	4965.6	5562.1	7751.7	8301.6
– research and development	375.4	518.2	758.3	1110.2	1511.4	2057.6
– other professional, scientific and technical activities	231.3	302.6	855.5	1293.0	1535.2	1553.2

Source: data from the State Statistics Service of Ukraine [21]

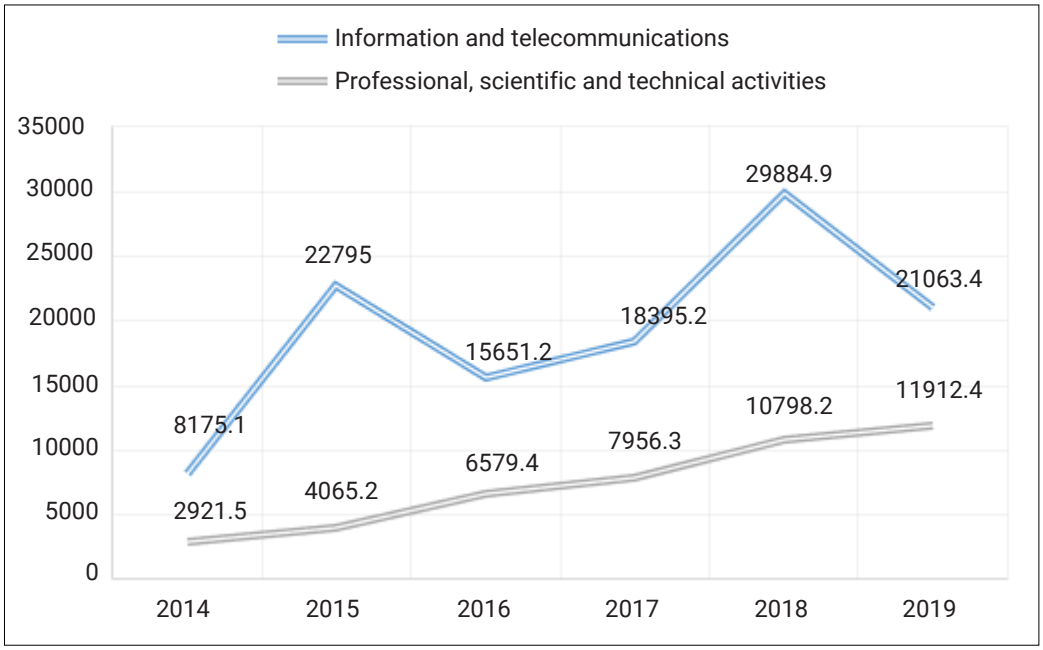

Figure 2. Dynamics of attracting investment in the IT sector in 2014-2015, in mln. UAH
Source: compiled by the authors based on the data from the State Statistics Service of Ukraine [21]

The dynamics show a gradual but steady increase in professional, scientific and technical activities, despite higher indicators of information and communication systems, which are accompanied by instability of dynamics. Next, the study considers the structure of innovation implementation at industrial enterprises in recent years (Fig. 3).

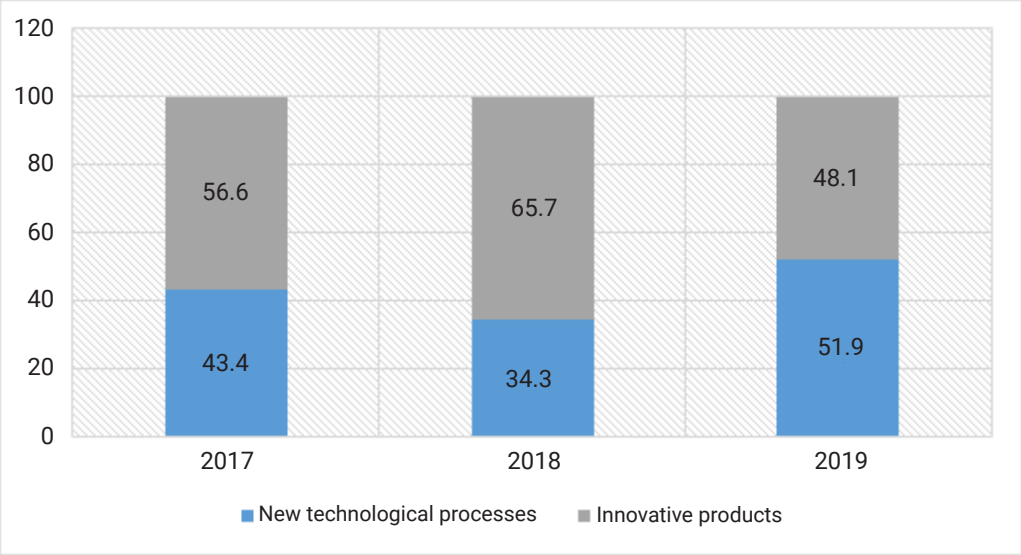

Figure 3. Structure of innovation at industrial enterprises of Ukraine
Source: compiled by the authors based on the data from the State Statistics Service of Ukraine [21]

According to the State Statistics Service, the introduction of innovations at industrial enterprises took place in two directions – the introduction of new technological processes (significantly improved low-waste resource-saving technological processes) and the second – the introduction of innovative products (goods/services) and new types of machinery and equipment. Structural analysis revealed that in 2017, a large share of innovations was occupied by innovative products, and in 2019 – by new technological processes.

Furthermore, according to the State Statistics Service on the total volume of IT investment and the introduction of IT technologies at enterprises in the period from 2017-2019, the authors calculated the correlation coefficient to establish the relationship between these indicators. Thus, using MS Excel, the correlation coefficient was calculated – 0.94, which indicates a strong direct relationship between the two indicators under consideration. And this once again confirms the thesis that IT investments do not indirectly affect the quality of products, the financial condition of the enterprise in general and competitiveness in particular. Regarding the sources of funding for IT activities of Ukrainian enterprises, it was found that the largest share (88%) is occupied by enterprises' own funds (Fig. 4).

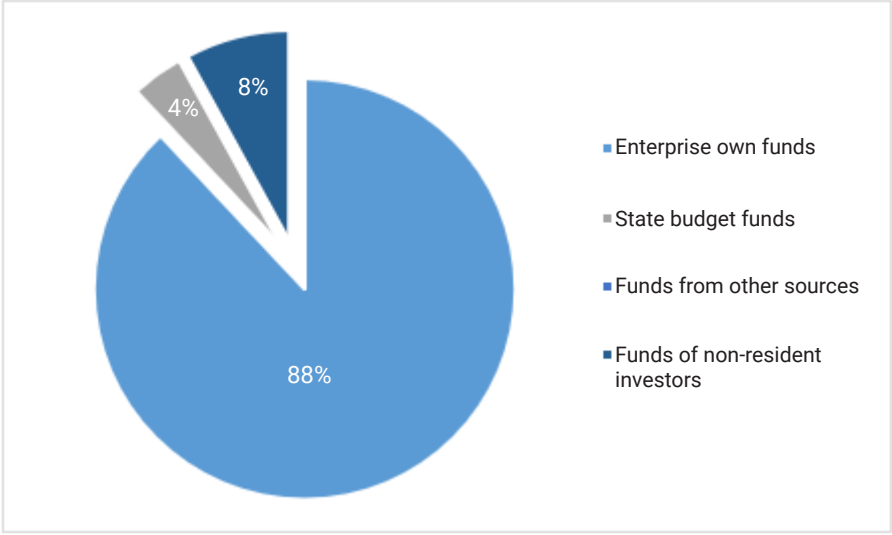

Figure 4. Sources of funding for IT activities of industrial enterprises in 2019
Source: compiled by the authors based on the data from the State Statistics Service of Ukraine [21]

Notably, a special feature of specialists in IT industry in Ukraine is their young age (about 22-30 years). Thus, support for the IT field can be considered not only as an economic prerogative, but also as a strategy to support the labour force and prevent its outflow abroad. The most popular positions in IT companies in Ukraine are: software engineers, senior and junior engineers, software testers, project managers, and HR specialists [22].

Despite these positive trends in the introduction of IT investments in Ukraine, there are a number of unresolved

issues and problems regarding their attraction, namely:

– lack of desire among investors to invest in IT projects that are at the development stage (so-called start-up) until they "start earning money on their own". Accordingly, this allows for the conclusion about the underdevelopment of venture capital in Ukraine, which is a factor in accelerating the development and scaling of business around the world. Of particular note is the problem of financial information disclosure, the lack of a transparent start-up ecosystem, which negatively affects the investment climate in Ukraine;

– imperfect legislation in the field of investment in venture projects;

– high level of corruption in the country;

– low level of preparedness of the business environment for changes;

– the complexity of risk assessment and intangible benefits for this type of investment and the high level of material costs for assessment and its complexity [20].

The Ukrainian market of IT services is at the stage of active development and is increasing its share in all economic processes with the help of the latest information support and new equipment that expands access to the Internet. For the sustainable development of the modern information industry in Ukraine, it is necessary to: increase in the level of qualification among IT specialists and customer companies; provide a more adaptive approach to the choice of information technologies, taking into account future development; provide transparency in the economic environment due to the development of IT, which contributes to investment attractiveness [23]. Currently, the most common methods for evaluating IT investments are net present value, Internal rate of return, payback, and information economics. A detailed overview of the essence of each of these methods is provided in Table 4.

Table 4. Overview of methods for evaluating IT investments

Method name	Abbreviation	The essence of the method	Disadvantages of the method
Net Present Value	NPV	Determines the most effective IT investment option – selects one of the possible investment alternatives without the need to directly assess the economic effect of each of them. The result of the calculation is a positive or negative NPV value for the investment project in question. If the value is negative, the project is unambiguously rejected, but a positive value does not mean that the project should necessarily be accepted	Assuming the same level for all investment options
Internal Rate of Return	IRR	Allows one to determine the interest rate, rather than the absolute value, which is then compared with the payback rate, which already takes into account the risks of the project. If the calculated payback exceeds the risk-based payback, then the investment can be considered justified, but if not, the project is rejected. IRR allows for more accurate comparison of project options, especially if the projects differ significantly from each other	Relative complexity of calculations, as well as the inability to identify conflicting conditions, which would not allow getting the result or it may be negative
Information Economics	IE	Involves directing resources in the sector where they will bring the greatest benefit. The idea is to force the information service and business managers to set priorities and provide objective conclusions about the strategic value of individual projects for business to further direct investment in the most important areas for business. The result is a relative rating of each investment project in the portfolio	Relatively low reliability of the results obtained
Payback	–	Allows calculating the period during which the initial investment should pay off, and this indicator is considered the main one	It does not take into account the division of payback into long- and short-term, that is, the future value of money. As a result a separate application of the method may give a wrong idea of the true effect of the investment

Source: compiled by the authors based on study by A.V. Katrenko and O.V. Pasternak [1]

The IT industry is quite promising, it ranks the third in Ukraine among export-oriented industries, second only to farmers and metallurgists. 12 Ukrainian IT companies were included in the Global Outsourcing 100 rating of the best outsourcing service providers. This shows that the Ukrainian IT market is competitive and has opportunities

for further development. Simultaneously, according to experts from the consulting company "PricewaterhouseCoopers", the IT services industry in Ukraine would grow in any case [23].

According to State of European Tech analysts, 184,700 software developers worked in Ukraine in 2018. There are three times more such specialists in Ukraine than in Belarus – 54,200 people, but less than in Poland – 279,800 people and in Germany – almost 851,000. Notably, Ukraine has entered the top 10 European countries in terms of the number of software developers. In total, there are 4 thousand IT companies in Ukraine. Most offices of IT companies are located in Kyiv city, Kyivska, Kharkivska, Lvivska, Dnipropetrovska, and Odeska Oblasts. Most Ukrainian IT companies implement a business model of software development commissioned by foreign clients, in which all intellectual rights are the property of the customer (outsourcing development). This is primarily conditioned by the low effectiveness of Ukrainian legislation on intellectual property protection, and therefore the low attractiveness of the Ukrainian market and the use of mainly imported software in Ukraine [23].

As part of the investment, the current, promising and most necessary areas are: the creation of online lending and insurance platforms, the creation of new business models, the introduction of aggregator platforms, the development of cybersecurity software, the development of digital identification/verification and biometrics, the use of artificial intelligence and marketplaces.

Next, the study considers several investments in 2020 in the field of IT. Among them is the American-Ukrainian project "Very good security" (VGS), for which the total investment amounted to 60 mln. USD. This project specialises in cybersecurity. Visa is a partner of this project, so VGS customers will be able to issue bank cards without having to see their numbers and check their personal data without having to store their passport and individual tax data. VGS is currently working on a technology that allows companies to use important and sensitive information data without the risk of loss and responsibility for its storage. Another interesting project is a Ukrainian English language school for children, with a total investment of 5 mln. USD. The money is planned to be used for further introduction of AI in the educational process and the launch of group classes to reduce the cost of one lesson. In 2020, a mobile application with a virtual teacher was launched, which conducts additional classes and communicates with students [24].

The total amount of funding raised on the Liki 24 platform in 2020 was 6 mln. USD. This project combines offers from thousands of Ukrainian pharmacies and facilitates the process of finding medicines for customers. The company has developed its own software that successfully integrates with the ERP systems of pharmacies, analysing prices and availability of medicines, as well as developing optimal routes for couriers. The service was launched at the end of 2017 and now has more than 5,000 pharmacies. According to the latest data, this project is planned to be distributed on the territory of EU countries [24].

Rentberry – Ukrainian real estate startup that is currently available in more than 40 countries, in the United States, Europe, and Asia. During the whole time, the project raised 13 million USD in investment funds [24]. The Rentberry itself is a platform for long-term rental housing. All processes: inspection of the apartment, signing contracts and monthly payment of rent take place online. The feature of the project is that the site allows one to suggest own price for an apartment, literally turning the rental process into an auction.

Also quite interesting is the Ukrainian project of IT specialists called Raccoon. Recovery – Ukrainian rehabilitation platform that allows building the entire process of medical rehabilitation at a distance – without waiting for weeks for free dates from specialists and the need to visit a rehabilitation centre several times a week. This project cooperates with insurance and rehabilitation institutions and during its existence 900 thousand EUR were invested in it. This project has demonstrated its convenience, especially during an outbreak of coronavirus infection [24].

Every year, the number of interesting projects increases, because the need of enterprises and society for innovation and IT increases. Thus, investment in IT technologies is a fairly broad concept, because information technologies are used in all sectors: economics, education, science, medicine, insurance, and so on. The conducted study allows formulating several options to increase the investment attractiveness and investment climate of the IT field:

1. Develop the infrastructure that would ensure the emergence of new technologically innovative enterprises in the scientific and technical sphere of Ukraine and the development of existing fast-growing technologically innovative enterprises that can become a potential object of direct venture investment.

2. Pay attention to the lack of domestic capital in the venture industry of Ukraine as one of the factors of the attractiveness of the country for foreign investors.

3. Develop the stock market, as it is an important tool for the free exit of venture funds from invested enterprises.

4. Provide sufficient and high-quality information about investment conditions to business entities.

5. Train personnel capable of professionally managing venture funds.

Conclusions

Thus, this study analysed the features of attracting investment in IT and described methods of positive impact on the investment climate of this field in Ukraine. A theoretical definition of the concepts of "investment", "venture investment" and "information technology" was given; the role of investment in the field of IT and the main aspects of such investment was determined; methods for improving the investment climate in this industry were

proposed; Ukrainian investment IT projects, problems and prospects associated with them were analysed; indicators of the dynamics of investment in IT over the past few years in Ukraine were considered.

The analysis showed that the IT field is developing rapidly, confirmed the prospects and positive dynamics of attracted investments in IT, Ukrainian IT specialists were recognised as one of the best in the world. In recent years, there have been positive developments in the IT field, but along with the development of IT in Ukraine, a number of unresolved issues related to them remain. Investment in IT is a promising line for the development of the modern economy, since today all the leading countries of the world are focused on the use of new "smart" technologies in all spheres of human activity. Modern technologies make life easier, increase the country's competitiveness, positively affect the production and quality of manufactured products, and, in the end, no modern business can be imagined without using the latest technologies. Therefore, it is important to create the necessary conditions for attracting investment in the IT sector.

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Інвестиції в інформаційні технології як пріоритетний напрям розвитку економіки України

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Анотація. У сучасних економічних реаліях інформаційні технології вважаються основним ресурсом технологічного та соціально-економічного розвитку країни, адже вони використовуються в усіх сферах діяльності суспільства та держави та прямо впливають на загальне національне становище, тому вивчення та аналіз умов їх залучення є актуальними як в Україні, так і в усьому світі. Відповідно до цього, метою цього дослідження є виявлення особливостей залучення інвестицій в інформаційні технології та пошук методів покращення інвестиційного середовища для даної галузі. Для досягнення поставленої мети авторами було використано такі наукові методи, як аналіз та синтез, індукція та дедукція, метод порівняння, наукову абстракцію та методи моделювання. У даній статті надано трактування понять «інвестиції» та «інформаційні технології» та виділено їх роль і функції на макро- та мікроекономічному рівнях, розглянуто основні аспекти фінансування та залучення грошових коштів у сферу інформаційних технологій, визначено основні проблеми та перспективи інвестування в цю сферу в Україні, проаналізовано динаміку залучення інвестицій в інформаційні технології та запропоновано методи покращення інвестиційного середовища в галузі ІТ. Також авторами було проаналізовано фінансові джерела залучення інвестицій, перелічено переваги та недоліки кожного з видів фінансування, проведено аналіз динаміки та структури провадження інновацій на промислових підприємствах України за 2019 р. та встановлено взаємозв'язок між обсягом залучених грошових вкладень та впровадженням інновацій. У ході дослідження також було розглянуто методи оцінки ефективності інвестицій в ІТ-сферу, виявлено суть, переваги та недоліки кожного з методів. Практична цінність роботи полягає в тому, що за результатами дослідження можна керуватися під час розробки плану та методів з покращення інвестиційного клімату в галузі, опираючись на проведений аналіз його сильних та слабких сторін

Ключові слова: економічний розвиток, інформаційні продукти, інвестиційні проекти, державні та приватні інвестиції, венчурні інвестиції