## INVESTMENT COOPERATION THROUGH DIGITAL DEVELOPMENT

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Abstract. The article analyses new investment opportunities created by digitalization for the development of cooperation between public and private sector. The influence of modern digital transformations of the world economic system on the directions and volumes of investment flows is investigated. The possibilities that create digital technologies in terms of attracting investment and realization of investment projects are analyzed. The increasing concentration of global investment models, which leads to the "digital gap" in global investments, is emphasized. The dynamics and directions of investments to the development of financial technologies are analyzed. The article outlines the role of the state in the context of the formation of a conducive to the development of the digital economy institutional environment. The author identified obstacles to the formation of a digital development model and underline difficulties in the process of digitalization of the state sector of the economy. The importance of using modern digital technologies in overcoming information asymmetry, increasing transparency of decision-making processes by state institutions and in the context of attracting investments is emphasized. Open information data bases are analysed as a mechanism for ensuring transparency of decision-making process by government institutions, which helps to improve the investment climate. It is noted that digital channels create opportunities for the establishment of cooperation between state-owned companies and private investors, while financial mechanisms allow the incorporation of private capital into investment projects. The importance of introducing an appropriate state investment policy considering avoidance of the negative impact of investment activity on the socio-economic life in the country is emphasized. The importance of the investment component in the implementation of digital development strategy under the scheme of "govern-

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ment-to-government", "government-to-business", and "government-to-society" is emphasized. In order to improve the coordination of institutional transformations of the investment component of digital development in Ukraine, it is proposed to create a specialized coordinating institution – the Council for the implementation of the investment component of the digital development strategy. In order to improve digital transformation of investment policy it is proposed to create the Innovation Platform for attracting productive investments, which will combine the foundations of the Crowdfunding platforms and Blockchain technologies and will work in accordance with the main principles of Sustainable Development.

## **1. Introduction**

Nowadays rapid development and implementation of digital technologies radically changes certain economic processes. New financial instruments that arise as a result of the development of digital financial technologies create great opportunities for investors in the context of risk reduction and profitability growth. Digitalization creates unprecedented opportunities for the separation of the value chain and outsourcing services that go beyond the regulated administrative support. The role of the digital economy in investment processes is significant in the context of simplifying investment processes, and transaction costs reduction. The necessary for investment projects infrastructure is improved thanks to the use of the latest advanced digital technologies. The active development of digital platforms helps to reduce transaction costs and, at the same time, simplifies cross-border communications, enabling businesses to freely communicate with customers and suppliers in any country. Platforms promote the involvement of small companies in the international economic activity, so the minimum threshold size of the company required for global development is reduced nowadays if not generally disappeared. As a result, the benefits of globalization are not only used by large multinational corporations, as it used to be, but also by representatives of small and medium-sized businesses, which greatly enhances competition, stimulates investment in R&D, and promotes the rapid implementation of innovative sustainable development [1, p. 11].

Current economic conditions favor investment in technology, as emerging markets increase their demand for technology to stimulate economic growth, and developed markets are looking for new ways to reduce costs and stimulate innovation. Experts agree that the 21st century is a period of domination of the digital economy, when the industry is undergoing a digital transformation. The balance of power is also changing, the digital divide between developing countries and developed economies diminishes. Indeed, leading companies located in developing countries invest heavily in technology, often outperforming their partners in developed markets. Such technological companies are becoming extremely competitive in foreign markets (especially relevant for Asian countries), and in combination with aggressive marketing strategies, leave behind companies from developed countries.

The digital economy has a huge impact on the dynamics of investment flows, while investment is critical important for digital development. Investments in digital technologies contribute to rapid economic development. However, at the same time, the active development of the digital economy leads to fundamentally new challenges, against which we still haven't protective policy at national and supranational levels, and no protection instruments have been prescribed. The main challenge for Ukrainian government in the context of the formation of an investment policy of new generation is the development of such postulates and implementation of special tools that would correspond to the current digital development of the world economy.

#### 2. Investment challenges of digital transformation

Digitalization of the world economy leads to structural changes in the international financial markets, which, in turn, requires the adaptation of investment policy to new conditions and challenges. Investment policy cannot remain invariant in the globalized dynamic world economic system. The United Nations Conference on Trade and Development (UNC-TAD) experts note that today's rapidly changing digital environment creates new challenges for the system of state regulation of investment activity. Therefore, it is necessary to review the main principles of investment policy taking into account the current strategic and systemic challenges. Current Strategic challenges include preventing "overshooting" of reform, we can use the term overheated when the number of innovations negatively affects their quality, which results in the general strategy getting vague features. Multitasking in solving strategic challenges leads to the emergence of Systemic Challenges that arise due to gaps, duplications and fragmentation, which at the same time creates significant problems of coherence between the goals and instruments of the implementation of state investment policy. Coordination task (Coordination challenges) of investment agreements and projects require the identification of priority areas for reform, the search for the relevant partners, and ensuring coherence between efforts aimed at implementing reforms at different levels of investment policy formation [2, p. 13].

The digital transformations of the world economy stimulate, if not abrogation, that means the full abolition of out-dated norms, but at least derogation, that is, the partial abolition of existing regulatory investment rules; or obrogation, which involves making partial, minor changes to the current law; and subrogation – adding new amendments to existing laws that comply with the requirements of the digital economy.

Modern trends in the development of the digital economy are threatening the reduction of investment in the real sector. An example can be the active spread of cryptocurrencies that are not subject to government regulation, and, as experts admit, are often used in corruption schemes and money laundering. Leading world economists, such as Nobel laureates Joseph Stiglitz, Paul Krugman, the chairman and CEO of JPMorgan Chase Jamie Dimon, the founder of hedge fund Bridgewater Associates Ray Dalio, the chairman and CEO of BlackRock Larry Fink, openly opposed the cryptocurrencies in the press, describing them as a huge financial scam, "a soap bubble" and a major threat to potential investors around the world. The development and rapid spread of cryptocurrencies has led to the shift of huge amounts of capital from the real economy to the "virtual" one. Those funds that could be invested in modernization, expansion of production and development of innovation with increase in production capacity, actually go for the purchase of digital codes. Instead of investing in capital, investors invest in expectations. According to Coinmarketcap, the total market capitalization of crypto currencies was over 466 billion of USD on December 12, 2017; Bitcoin market capitalization - more than 285 billion USD. On December 14, 2017, total market capitalization reached 511 billion USD. On March 8, 2018, after significant fluctuations in the markets, the capitalization of cryptocurrencies amounted to over 398 billion USD, while Bitcoin's capitalization is over 166 billion USD. Such a dynamics only underlines the high riskiness of investments in these assets [3]. In fact, this is a waste of investment potential, a waste of public utility. Previously, such threats to world financial stability were created by financial derivatives markets, but there has never

been such a rapid increase in the value of a particular asset and the rapid flow of capital from the real sector to the digital finance sector.

At the same time, the development of the digital economy creates significant prospects for overcoming the existing threats to global financial stability, which have an impact on the stability of public finances despite the insignificant level of integration of Ukraine's financial system into the global financial space.

UNCTAD offers the following components of the digital economy architecture: digital content. Internet platforms, the IT sector, telecommunications, digital solutions and e-commerce, that work closely together to develop and promote world economic digitalization processes [2, p. 181]. Current trends show that not only developed countries but also countries with emerging economies and developing countries, actively use digital technologies in areas such as e-commerce, agriculture, banking, etc [4, p. 23]. At the same time, analytical studies conducted by World Bank Group experts show that 42% of the world's population still do not have access to the formal financial system [5, p. 2]. This figure opens further prospects for the development of the digital economy, since access to the necessary financial services can be provided by modern technologies. Modern digital technologies are capable of solving such an urgent problem for Ukraine to provide banking services in areas with a low population, where maintenance of bank offices is unprofitable. This tendency changes the nature of investments that are directed not to capital assets such as buildings, computer equipment for workplaces to provide banking services in affiliates etc., but to the development of digital finance.

At the UNCTAD conference in Geneva held on June 7, 2017, it was noted that digital multinational enterprises, such as Internet platforms and firms engaged in e-commerce and digital information content, grow much faster than other multinationals. It is no longer possible to ignore the processes of digitalization of the world economy. During the period from 2010 to 2015 the number of high-tech corporations that use digital technologies in the UNCTAD top-100 largest corporations has more than been doubled. Over the relevant period, assets of these transnational corporations (TNCs) increased by 65%, and their operating income increased by 30%. At the same time, the role of digital multinational corporations for the development of the global economy, including Internet platforms, e-commerce companies and digital content firms, is growing, creating indirect, but productive, incentives for digital development [2, p. 13]. The average market capitalization of technological megacorporations is almost three times higher than that of other TNCs. At the end of 2015, 10 technological TNCs accounted for more than 26 percent of the total market capitalization of the UNCTAD top-100 TNCs. The United States technological MNEs from the UNCTAD top-100 in 2015 gained 62% of the total foreign earnings unremitted, which is almost three times higher than the share of other corporations from USA. At the same time, the concentration of global investment models is growing, as more than 60 of the 100 largest digital TNCs, according to UNCTAD, are companies from the United States of America, followed by the United Kingdom, Northern Ireland and Germany. Concentration is most pronounced among Internet platforms: 10 of the 11 largest digital multinational companies are based in the United States. And only 4 of the 100 largest digital companies are based in developing countries [2, p. 176-188].

Influence of technological innovations on the development of various sectors of the economy is uneven. Figure 1 depicts 10 industries that are most affected by digital technology.

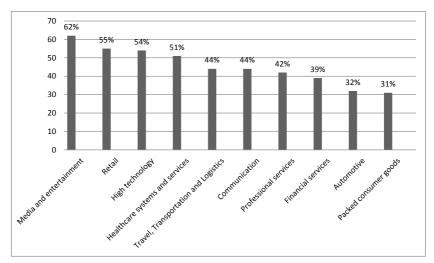


Fig. 1. The list of most-influenced by the development of digital technologies industries

Source: [6]

Digital economy is a key factor for growth and development, as it can enhance competitiveness in all sectors, creating new opportunities for business and entrepreneurship, creating opportunities for access to foreign markets and participation in the global e-value chains [7, p. 13]. The use of modern digital technologies transforms the international operations of TNCs. Companies that are active-users of digital financial products can operate globally without significant physical investments in foreign markets, which has a significant impact on host countries. The analyses of statistical data confirm this statement, demonstrating the reduction for 11 percent up to 1 trillion USD of FDI outflow, mainly due to a drop in investment of European TNCs. In addition, if we analyze the 100 largest digital TNCs, only 13% of their affiliates are located in developing and transition countries; for comparison, for non-digital TNCs, this figure reaches a mark of 30% [2, p. 3]. High-tech corporations use a fundamentally different model of internationalization of their business, which has a significant impact on the direction and volume of investment. To enter external markets, such entities need to invest less in real assets and hire fewer employees. This reduces the economic impact on host countries in terms of physical investment and job creation. Such companies work almost completely in a virtual environment and characterized by limited physical connections to their markets. Tangible foreign assets in foreign markets are often confined to corporate offices and data centers. Purely digital TNCs, for example, Internet platforms or digital solution providers, show the biggest gap between foreign assets and foreign sales, a slightly smaller gap exists in digital TNCs operating on the basis of mixed models (digital content, e-commerce). The average share of foreign assets in digital companies among the top-100 UNCTAD corporations in 2015 is 41%, while external sales account for 73%. For the rest of TNCs, these figures are respectively 65% and 64%, reflecting a certain balance between the invested resources and the profit received abroad. Only about 50% of the subsidiaries of digital multinational corporations are foreign affiliates, compared with almost 80% for other TNCs [2, p. 178-188]. New technologies have significantly accelerated business activity and influenced the speed of investment decisions. Companies are actively reorganizing to integrate into the digital economy, refusing from hierarchical decision-making system and moving to implementation of network structure that is market-driven in nature. The development strategies of traditional companies at an early stage were oriented on internal markets; instead modern start-up

companies, especially from emerging markets, operate globally from the moment they were established, thanks to the large-scale digitalization of business activity [7, p. 3, 28-29].

According to UNCTAD, in 2017, the most attractive for investment is the IT sector, service sector and high-tech industries. [2, p. 22]. Global investment in companies operating in the sector of digital financial technologies (FinTech) are rapidly increasing over the past five years (2012-2017), only during 3 years from 2012 to 2015 their volume increased more than tenfold [8, p. 92-93]. In the 2nd quarter of 2017, the total investment in FinTech companies reached 8.4 billion of USD, and for the whole 2016 the amount of invested capital reached 23.5 billion of USD [9, p. 32, 44]. The analyses of geographical distribution shows that 40% of investments came from North America, 29% from Europe, and the Asia-Pacific region accounted for 28% in 2016. In figure 2 it is possible to see the regions that are leaders in investments in the sphere of financial technologies in 2016.

The analysis of statistics over the 5 years from 2010 to 2014 during the period of active development of the financial technology sector shows

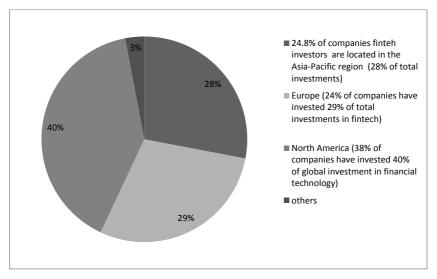
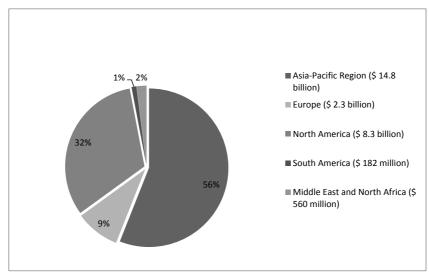


Fig. 2. Regional distribution of investors in financial technology in 2016

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Source : [5, p. 45-46]
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that North America accounted for 64.3% of total investments in financial technologies, Europe – 19.7%, the Middle East – 1.8 %, Asian countries – 13.3%, Latin America – 0.3%, Africa – 0.7% [9, p. 103].

Figure 3 reflected regions which were the recipients of investment in the sector of financial technologies in 2016.



# Fig. 3. Regional distribution of recipients of investment in financial technology in 2016

Source: [5, p. 45-46]

Modern financial technologies are capable of generating innovative tools for attracting financial resources, which is especially relevant for Ukraine in the context of finding alternative sources of funding. At the same time, a barrier to the development of financial technologies in Ukraine is the lack of private investment capital and venture capital, which is the basis for the growth of Finteh in advanced economies. Investments in the development of financial technologies are considered as the basis of the digitalization of economic activity.

# 3. The impact of digital infrastructure on investment

Finteh as defined by the Financial Stability Board, is a technology-based financial innovation that can lead to the creation of new business models,

applications, processes or products that have a significant impact on financial markets and organizations, as well as for the provision of financial services and investment activities. Thus, it is a new industry, where modern technologies are used to improve the quality of financial services, which simplifies financial activity in general [8, p. 91-93].

Financial technologies cover an extremely wide range of tools and spheres that include: Cryptocurrency, E-money, Big Data Analytics, Consumer Finance, Banking Tech, E-banking, Enterprise Finance, Investment Tech, Remittance, Mobile Payments, Digital Wallets, Crowdfunding, InsurTech, Software for Institutional Investor, Robo-advisors, Cloud Computing, Supply-chain Management, Customer Relationship Management, Enterprise Resource Planning, E-sales, Online courses etc. [4, p. 30; 5, p. 33, 40; 9, p. 98]. All these technologies facilitate automation of operations in the field of insurance, banking, risk management, etc. Recently, significant innovations have been made to help financial institutions operate with large databases, which leads to cost reductions and can significantly improve operational efficiency. All these measures contribute to the innovative development of the back office of the company. Digital technologies help to improve the data analytics that is widely used by investors in making investment decisions under rapid changes on global markets. By 2020, the total amount of digital information is expected to increase from 3.2 to 40 zettabytes. According to Moore's law, global data doubles every two years, while the cost of data storage decreases at about the same speed. In the sphere of infrastructure development of large databases actively involved more than 250 companies, whose total investments during the last 5 years (2012-2017) have reached 4.9 billion of USD. Among the most active investors are Data Collective, Accel, NEA, Intel Capita. More than 480 companies involved in the area of analysis of large databases have invested 5.78 billion of USD during 5 years (2012-2017). The most significant investors were In-Q-Tel, Accel Partners, Andreessen Horowitz, NEA, Intel [5, p. 23-28].

An important positive aspect of using modern financial technologies is the wide opportunity to increase transparency of operations, reduce corruption and lower risks. According to OECD experts, the use of Blockchain technology allows operations to be carried out without any trusted party, neglecting technical barriers and neutralizing political problems. In addition to supporting the exchange of information, this technology

allows to keep cost-sharing protocols, legal contracts, etc. in public registries, which cannot be falsified and can be freely verified by interested parties. The combination of transparent transactions, rigid rules and ongoing oversight which are the characteristic for Blockchain based system, create opportunities for carrying transactions through the system without even involving a trusted authority or intermediary operator. The problems facing the implementation of this potential are the presence of certain regulatory obstacles. In particular, the question arises as to enforce the law in the absence of any intermediary and subsequently to bring legal liability for violations caused by non-fulfillment of contacts supported by systems based on Blockchain [4, p. 13].

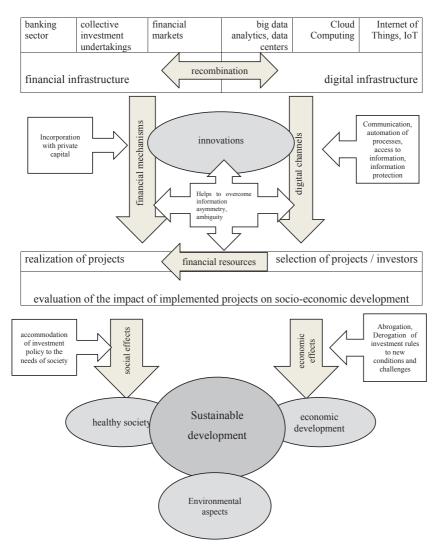
In order to improve digital transformation of investment policy it is proposed to create the Innovation Platform for attracting productive investments, which will combine the foundations of the Crowdfunding platforms and Blockchain technologies and will work in accordance with the main principles of Sustainable Development. Improving public financial management system in terms of investment it is necessary to implement innovative mechanisms of the simplest and fastest ways to invest (the cryptocurrency experience), but in real projects, not digital codes that really create added value and generate public utility. Based on Blockchain technologies the platform working fully transparently will provide real opportunities for all investors to invest in real projects, even without the involvement of institutional intermediaries. Each investor will be able to make an online investment receiving not digital code and expectations, but a certain part of the company's profit. In addition to purely financial aspects, the proposed mechanism will carry out general social utility functions, since the emphasis will be on projects that are consistent with the ideas of sustainable development, which will enable to invest in a waste recycling plant, or wind power plants, etc. The functions of the state in implementing such an innovative project are significant. By launching the platform, the state acts as the guarantor of the reliability of the proposed mechanism.

The practical implementation of the digital transformation of investment policy requires the creation of appropriate institutional conditions that will allow taking advantage from the benefits of digital development. The advantages of digital development, which have a significant impact on investment activities, include the emergence of new financial instruments and channels of financial services, the growth of transaction speed, reducing of transaction costs, information asymmetry overcoming, etc. In this context, it is important to ensure the gradual transformation of the system of investment management regulation to the requirements of the digital economy; and to promote the development of an appropriate infrastructure covering important for investing the digital and financial segments.

The mechanism of interaction of some institutional infrastructure elements of the digital economy's investment segment is shown at Figure 4 with accent on public investments. The investment management system in the public sector covers both investment attraction and management of investment projects. The digital infrastructure has a significant impact on the process of investment projects selection in public sector or the choice of potential investors for state-owned enterprises (SOEs), depending on the requirements of state investment strategy to be implemented. Digital channels allow the rapid involvement of a wide range of independent experts to overcome ambiguity in selecting investment projects or potential investors. Open platforms will increase the transparency of the decision-making system, which will increase the confidence of investors and society. Digital communication channels create possibilities for fast connection between participants of investment processes, Data Centers contribute to overcoming information asymmetry. All these factors contribute to reducing the corruption component in the decision-making process and during the implementation of investment projects, as well as significantly improve the investment climate.

The scheme reflects the recombination of the financial and digital infrastructure of the investment segment of the digital economy. Financial infrastructure has a significant impact on the practical realization of selected investment projects through a financial mechanism. Digital channels provide opportunities for cooperation between SOEs and private investors, while financial mechanisms allow implementing the incorporation of private capital into investment projects.

Therefore, financial and digital infrastructure segments operate as a single coherent mechanism through recombination of their elements, creating a favorable environment for responsible investment. We consider public investment as "responsible" investments in the context of implementation of the strategy of sustainable economic growth. The category "sustainable economic growth" is the progress of the economic system, which allows maintaining a certain level and quality of life of the popu-



# Fig. 4. Mechanism of interaction of elements of the institutional infrastructure of the investment segment of the digital economy

Source: developed by the author

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lation in the long-term, where qualitative and quantitative characteristics are provided on the basis of the balance of environmental safety of production and economic efficiency. It should be noted that the pursuit of the ideas of sustainable economic growth implies an organic combination of sociologization, commercialization and environmentalization of investment activity. Mechanism of interaction of elements of the institutional infrastructure of the investment segment of the digital economy allows realizing this strategy in the long-run.

Creation of new development models aimed at stimulating investment, based on the innovative technological solutions is a prerequisite for sustainable economic growth, in order to move to the economy of the 6th waves of innovation.

## 4. State support of the investment digital development

The challenges faced by governments in developing the digital economy are, first of all, the lack of knowledge about the peculiarities of the practical implementation of the digital development strategy. This problem exists due to the lack of the necessary skills needed for work with modern digital technologies. The latest research of digital strategies of 35 OECD member countries shows, that the development of the state digital strategy is assigned to a ministry or official body that are not able to provide professional solution due to the lack of necessary specialists who are knowledgeable in digital technologies [4, p. 37]. The practical implementation of the digital development strategy requires the presence of highly skilled professionals in the field of digital technologies.

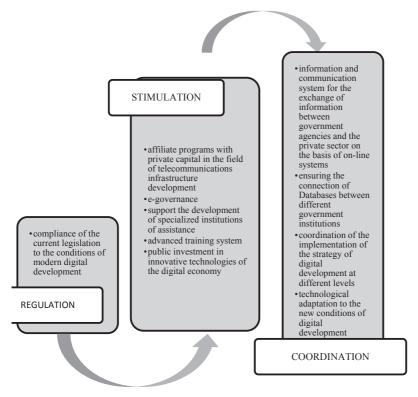
Another serious problem of implementing institutional changes in the investment component of the digital development strategy is the lack of effective system for coordinating its implementation at all levels – governments, industries, regions, enterprises, etc. It should be noted that the problem of coordinating digital development is also typical for developed countries. Non-professional ministries deal with digital development issues in the 15 of the 35 OECD countries for which analysis was conducted; only 8 countries have set up a specialized government institution to develop and implement an appropriate strategy; in 6 countries several ministries and government agencies are directly concerned with the development of a digital strategy, without effective coordination of actions. Only four countries – Austria, Luxembourg, Mexico and the Slovak Republic – have

been appointed high-level officials from the Presidential Administration, the Office of the Prime Minister or profile ministries, which coordinates all activities aimed at implementing the national digital development strategy. However, it should be noted that almost all sample countries actively involve private sector and specialized government agencies in developing a national digital strategy [4, p. 37]. Therefore, for the effective implementation of the state digital development strategy, it is extremely important to ensure reliable coordination of the work of various departments and institutions. In Ukraine, these functions are performed by the State Agency for E-Governance of Ukraine; the provisions of its activity were approved by the Resolution of the Cabinet of Ministers of Ukraine No. 492 dated October 1, 2014. According to the approved regulations, the Agency is a central executive body whose activities are coordinated by the Cabinet of Ministers of Ukraine and which implements state policy in the fields of informatization. e-government, the formation and use of national electronic information resources, and the development of the information society [10]. The Agency pays great attention to the challenges of promoting digital technologies in the public sector, modernizing of public services (e-services, e-identification, open data) and modernizing of public administration (electronic interactions of registries, electronic documents, e-governance by basic industries). The Cabinet of Ministers coordinates the activity of the Agency, however, the Regulation does not clearly specify the officials responsible for such activities. Therefore, the problem of coordinating the work of state institutions of different levels in the context of implementing the strategy of digital development is typical for Ukraine and requires further elaboration.

The Agency also participates in the organization of training and prepares proposals for improving the system of training and retraining of experts in the field of informatization and e-governance. In order to improve the implementation of this function, it is important to involve representatives of the Ministry of Social Policy and the Ministry of Education and Science, as well as leading experts in the field of digital technologies, into the work of the Agency. Such cooperation can allow the development of a permanent system of professional development of employees of state institutions and state companies involved in the practical implementation of the strategy of digital development, and also create preconditions for the adaptation of certain points of the strategy to the existing socio-economic realities. The system will require the development of appropriate training techniques, the creation of several training programs focused on various sectors of the economy, with emphasis on mastering various digital technologies, as well as the formation of clear schedules for retraining.

For the development of the digital economy, it is necessary to attract significant amounts of investment resources. In this context it is relevant to create a specialized coordinating institution - the Council for the implementation of the investment component of the digital development strategy, which will include representatives of the Ministry of Economic Development and Trade of Ukraine and the Ministry of Finance, as well as specialists in the field of IT and advanced digital technologies for joint coordination and implementation of the strategy. The creation of separate departments that deal with digital development in the above-mentioned ministries will complicate the process of coordinating joint efforts. At the same time, joint work of specialists on one platform would allow quick identification of priority sectors for financing (Ministry of Economic Development and Trade), implement effective financing mechanisms and choose effective instruments (Ministry of Finance), and involve to the process private investors and international donors if required. Such cooperation would significantly contribute to the rapid and effective implementation of investment projects.

In terms of lack of financial resources, it is important to promote the development of infrastructure conducive to attracting private capital. In order to stimulate investment activity in the context of the transition to the innovative digital development model, it is proposed to introduce state support for the development of specialized institutions for promoting investment to digital conversion. The successful examples of such institutional reforms are the development of specialized institutions such as incubators and accelerators. Due to the government support the access to finance in the early stages of development can be facilitated for new companies, so in this context it is important to create appropriate state-supported platforms that, through state guarantees, will foster the attraction of private investors' capital to innovative projects. The project selection principle will be based on a detailed analysis of the social utility, on the possible benefits in the field of digital technologies, which can simplify the system of data storage and processing for government institutions, which can promote the introduction of electronic document circulation, the development of online licensing systems, and allow to develop investment programs based on crowdfunding financing in the public sector. The factors that influence the formation of the digital and financial infrastructure necessary for the successful implementation of the state strategy of digital development are shown in Fig. 5



# **Fig. 5. The main forms of state support for institutional transformations of the investment component of digital development** *Source: developed by author*

The main forms of government support for institutional transformations of the investment component of digital development are combined according to the functional component – regulation, stimulation, coordination – and are closely linked. The development of affiliate programs with private capital in the field of telecommunications and infrastructure will be based on a transparent information and communication system for

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exchanging information between government institutions and the private sector. The active development of e-government services will contribute to ensuring open access to data through on-line information portals and on-line windows. That will serve as a basis for reducing information asymmetry by connecting Databases between different government institutions that enhance the ability to process and analyse even greater amounts of data aggregated by different institutional units. That will also allow creation of an effective system for coordinating the implementation of the digital development strategy at different levels. Technological adaptation to the new conditions of digital development involves a high level of education of the society in the field of digital innovations, and therefore requires the introduction and coordination of a permanent system of advanced training, as well as constant correction of adaptive training programs to new technologies. Compliance of the current legislation with the conditions of modern digital development will ensure clear and transparent business rules, protection of investors' rights; also it will create preconditions for access to regional and international markets, for improvement of the investment climate and promotion of the development of venture investment.

### 6. Conclusions

The role of the digital economy in investment processes is significant due to the use of modern digital technologies which helps to reduce transaction costs, to simplify the investment process because of the improvement of the necessary for realization of investment projects infrastructure. The practical implementation of the digital transformation of investment policy requires the creation of appropriate institutional conditions that will allow enjoying the benefits of digital development. The financial and digital segments of the digital economy's infrastructure operate as a single coherent mechanism based on the recombination of their elements, creating a favorable environment for investment activity. The introduction of an electronic document flow system between government institutions is seen as a mechanism to ensure that information asymmetries are overcome, which positively affects the quality of administrative services for investors. Digital infrastructure has a significant impact on the process of selection of investment projects and potential investors in public sector; also it contributes to overcoming the ambiguity of the decision-making process through mechanisms that allow the rapid involvement of a wide range of independent experts.

Digitalization creates new investment opportunities for the development of cooperation between public and private sector. In order to improve the coordination of institutional transformations of the investment component of digital development in Ukraine, it is proposed to create a specialized coordinating institution – the Council for the implementation of the investment component of the digital development strategy. In order to improve digital transformation of investment policy it is proposed to create the Innovation Platform for attracting productive investments, which will combine the foundations of the Crowdfunding platforms and Blockchain technologies and will work in accordance with the main principles of Sustainable Development.

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