

Volume 1, Issue 1, 2019

ISSN 2522-1043

Central Asian Journal of
Social Sciences
and **Humanities**



Al-Farabi Kazakh National University

Central Asian Journal of Social Sciences and Humanities is a peer-reviewed academic journal covering all branches of social and humanitarian areas: historical; philological; philosophical, social, psychological, educational and legal sciences.

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Proprietor of the Edition: Al-Farabi Kazakh National University

Editor-in-chief : K.I. Baizakova

Certificate № 15155-Ж Registered on March 12th, 2015 in the Ministry of Cultural and Information of the Republic of Kazakhstan.



Computer page makeup and cover designer: A. Kaliyeva

IB № 12673

Signed to publishing 19.03.2019. Format 60x84 1/8. Offset paper.
Digital printing. Volume printer's sheet. Edition: 300. Order No 1513.
Publishing house «Kazakh University»

www.read.kz Telephone: +7 (727) 3773330, fax: +7 (727) 3773344

Al-Farabi Kazakh National University
KazNU, 71 Al-Farabi, 050040, Almaty

Printed in the printing office of the Publishing house «Kazakh University».

I • ECONOMICS

UDC 82.15.17

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Ecosystem of Technological Business: Methods of Analysis and Development Factors

The study covers a challenge of innovative entrepreneurship as a key institutional factor for developing the appropriate ecosystem. The purpose of the paper is to formulate fundamental theoretical and practical provisions of a research, which largely focus on the concept of technological entrepreneurship ecosystem. Such factors as a transfer of technologies to ensure a stable model of an innovation and business ecosystem in conditions of a high level of risk and uncertainty in external environment become important internationally. The study provides formulation of the concept of economic ecosystem, basic principles and factors of its functioning. The main findings of the study are due to the fact that the sources of the innovation-entrepreneurial ecosystem's growth are not only the internal potential of the managerial system, but also external factors of development. External factors include a proactive innovation policy at the regional level with support of science-intensive manufactures, interregional and inter-sectoral economic relations and the ecosystem's ability to get integrated into the international economic space.

Key words: innovative ventures, innovations, innovative ecosystem, sustainable development system, transfer of technologies, adaptive institutional environment, ecosystem of technological entrepreneurship, industrial technological park, innovative corridor, game theory, optimal resource allocation, system compromise.

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Технологиялық бизнес экосистемі: талдау және даму факторлары

Мақалада тиісті экожүйені дамытудағы негізгі институционалдық фактор ретінде инновациялық кәсіпкерлік мәселесі қарастырылады. Мақаланың мақсаты экожүйенің технологиялық кәсіпкерлік тұжырымдамасына көп көңіл бөлінетін іргелі теориялық және практикалық ғылыми ережелерді қалыптастыру болып табы-

лады. Халықаралық деңгейде тәуекелдердің жоғары деңгейі және сыртқы ортадағы белгісіздік жағдайында инновацияның тұрақты моделін және бизнес экожүйесін қамтамасыз ету үшін технологиялар трансферті сияқты факторларға айналады. Мақала «экономикалық экожүйенің» тұжырымдамасын, оның негізгі қағидаттарын және оның жұмыс істеу факторларын тұжырымдайды. Зерттеудің негізгі нәтижелері инновациялық-кәсіпкерлік экожүйелердің өсу көздері басқару жүйесінің ішкі әлеуеті ғана емес, сондай-ақ дамудың сыртқы факторлары болып табылады. Сыртқы факторлар білім беруді қажет ететін салаларды, өңіраралық және салааралық экономикалық байланыстарды және экожүйенің халықаралық экономикалық кеңістікке қосылу мүмкіндігін қолдауымен аймақтық деңгейде белсенді инновациялық саясатты қамтиды.

Түйін сөздер: инновациялық кәсіпкерлік, инновация, инновациялық экожүйе, орнықты даму тұжырымдамасы, технологиялар трансферті, адаптивті институционалдық орта, технологиялық кәсіпкерлік экожүйесі, индустриялық технологиялар паркі, инновациялық дәліз, ойын теориялары, ресурстардың оңтайлы бөлінуі, жүйенің ымыралығы.

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Экосистема технологического бизнеса: методы анализа и факторы развития

В статье рассматривается проблема инновационного предпринимательства как ключевого институционального фактора развития соответствующей экосистемы. Цель статьи – сформулировать фундаментальные теоретические и практические положения исследования, которые в значительной степени акцентируют внимание на концепции технологического предпринимательства экосистемы. Такие факторы, как трансфер технологий для обеспечения стабильной модели инноваций и бизнес-экосистемы в условиях высокого уровня риска и неопределенности во внешней среде, приобретают международное значение. В статье сформулированы понятие «экономическая экосистема», ее основополагающие принципы и факторы ее функционирования. Основные выводы исследования связаны с тем, что источниками роста инновационно-предпринимательской экосистемы являются не только внутренний потенциал системы управления, но и внешние факторы развития. К внешним факторам относятся активная инновационная политика на региональном уровне с поддержкой наукоемких производств, межрегиональные и межсекторальные экономические отношения и способность экосистемы интегрироваться в международное экономическое пространство.

Ключевые слова: инновационное предпринимательство, инновации, инновационная экосистема, концепция устойчивого развития, трансфер технологий, адаптивная институциональная среда, экосистема технологического предпринимательства, индустриальный технологический парк, инновационный коридор, теория игр, оптимальное распределение ресурсов, системный компромисс.

Introduction. Competitive economy of the twenty first century is first of all economy of high technologies. They include biomedical technologies, power engineering technologies, information and communication technologies and software that have been building up their share in the gross domestic product (GDP) for the past 15-20 years. Companies in these areas demonstrate high growth rates, dynamic development and have an increased degree of investment appeal (Kuftyryov I.G., 2013). In present-day conditions, sustainability level of development of any social and economic system is determined by its ability to generate and absorb different types of innovations. In this connection, challenges of

formation and efficient operation of innovation and business ecosystems which are complex models of relations between subjects involved in the process of creation and implementation of innovations and technologies within which specific institutional environment is formed to facilitate stimulation of innovative processes gain grounds.

Literature review. Theoretical and methodological approaches in innovative ecosystems are presented by Dubina I.N., Kozhevina O.V., Chub A.A., Carayannis E.G., Barth T.D., Campbell D.F.J. and others (Dubina et al., 2016, Carayannis, 2012). Thus, for instance, Carayannis E.G., Barth T.D., Campbell D.F.J. (Carayannis et al., 2012)

fairly believe that business ecosystem incorporates knowledge factors and innovative structures based on a combination of stocks and flows of human, social and financial capitals. Further Dubina I.N., Kozhevina O.V., Chub A.A. (Dubina et al., 2016) went into the questions of economic and legal aspects of the technological entrepreneurship ecosystems, including the regional level as well in their studies. Problems of the innovation ecosystems' development of technological entrepreneurship at the international level are studied by such expert researchers as Kuftryov I.G., Perednya S.S., Carayannis E., Campbell D. (Kuftryov, Perednya, 2013, Carayannis et al., 2012.).

Extensive review of practical questions (in particular, game and experimental methods) for development and improvement of innovative policy is offered by Ranga M. and Etzkowitz H. (Ranga & Etzkowitz, 2013). Many experts dedicated their studies to theoretical research of forming and developing a dimensional model of the innovation and entrepreneurship ecosystem and formal methods of such economic and methodological areas as game theories, optimal resource allocation, designing and conducting managerial games (Algazin 1999, 2009; Park, 2014; Nambisan & Baron, 2012; Twiss B., 1992).

The above-mentioned authors have investigated a role of institutional factors of innovative ventures within development of ecosystems where the key role belongs to such parties as university – business – industry – state.

Prospects and opportunities to use the theory of the innovation and business ecosystems as a conceptual framework to form sources of sustainable development have not been sufficiently studied and this determines relevance of research in this area of theoretical and practical knowledge.

Material and Methods. The main descriptive part of the research is linked to existence of multi-criterion tasks where as a basis for simulation of a development process is taken a theoretical concept of a triple innovative spiral that describes interaction of such parties as science, state, and business operating within innovative activities. Experimental types of activities also include formal methods as game theory, optimal resource allocation, designing and conduct of business management games.

As one of the first conceptual models of ecosystems of technological entrepreneurship (ETE), one can consider a concept of the so-called triple innovation spiral (Triple Helix) that describes interaction of academia, government, and business within the innovation activities (Etzkowitz &

Leydesdorff, 1998). According to this model, the underlying foundation is multilevel and nonlinear interaction of academia (universities), industry (enterprises) and state (government). This concept reflects a dominant side in the industrial economy – 'industry – state', enhanced role of universities and triple interaction in the spiral triad 'academia – industry – government'. It should be noted that in the concept of 'triple spiral' universities prove themselves not only as knowledge generators in classical understanding but also as innovation initiators (Ranga & Etzkowitz, 2013; Etzkowitz & Leydesdorff, 1998).

Authors of the concept of the entrepreneurship innovation ecosystem underline multilevel network interaction' and 'mixed organization'. Later, the concept of the triple spiral was expanded due to inclusion of civil society with such elements as mass media, cultural norms and values (Carayannis et al., 2012). Argument to the addition of the fourth spiral was a statement that innovative ecosystem of technological entrepreneurship is influenced by culture and values of the society as well methods of formation and translation of public opinion by mass media. As a fifth spiral, scholars have also added natural environment, which affects the ecosystem (Carayannis et al., 2012). These developments have led to the concept of N-component innovative spiral (Park, 2013).

Experimental factors should include Tobin's q as well which is defined as a ratio of market price of a company to a replacement price of its tangible assets. Gap between these parameters is explained by availability to the company of intangible assets (patents, licenses, know-how, software products) which increase its market capitalization. For high-tech companies referred to knowledge-based economy value of this coefficient can significantly exceed one, while for companies in 'traditional' sectors (machine-building industry, oil extraction and oil processing, metallurgy) it as a rule stays within one (Kuftryov & Perednya, 2013).

The global practice also shows that economic agents are often not large companies, but instead they are representatives of small and medium-sized businesses possessing necessary intellectual (human) capital such as their employees, valuable intangible assets and also progressive and flexible marketing policy secured by high readiness for innovations and adaptation.

Leading question in analysis of innovation and business ecosystems is a question how its principal participants (universities-industry-government) can interact with each other for efficient production and

sale of new ideas through a multi-stage, constructive dialogue in order to achieve a system compromise of their interests, objectives and strategies and amid risks and uncertainty in the socio-economic environment. Answer to this question leads us to theoretical studies of formation and development of an innovation business ecosystem, in particular theory of games, optimal resource allocation, designing and conduct of business management games.

One of key moments in the ETE as a biological ecosystem is to ensure its stable balanced condition. In this context, some experts (Dubina, 2010; Dubina et al., 2016) believe it is worthwhile to resort to theoretical and methodological principles of game theory that is defined as a logical-mathematical theory of development of strategic decisions in conditions of competition, risk and uncertainty, theory of optimal and efficient rational behavior, theory of conflict resolution and searching for compromises.

Application of the game theory suggests that each player (decision maker) strives to achieve his/her own objective (for instance, maximization of profit, market share or social welfare) but along with this he takes into consideration how another player can and will act. In particular, during analysis, simulation of the ETE it is possible to use such fundamental principles of the game theory as allocentrism (McCarthy & Stadler, 2000) and Nash equilibrium (Wang, 2018).

Allocentrism marks strive of a person to put himself in the other person's shoes in order to gain a great insight into their causes and interests; this is first focusing attention and actions on other persons. Nash equilibrium is a strategic situation (configuration of strategies of players) when neither of the players is interested to withdraw, i.e. in such situation not a single player is motivated to modify a selected strategy. John Nash who was awarded a Nobel Prize in Economic Sciences in 1993 proved mathematically that any game with a finite quantity of players and finite quantity of strategies has an equilibrium with predetermined properties. From a practical point of view, this means that if we have information about motivations and other behavior determinants of players, we can define their optimal (best) strategies from viewpoint of Nash's equilibrium configuration (Dubina & Carayannis, 2014).

One among new and promising concepts of decision making that rest on the game theory is a system compromise principle. Compromise in the widest sense means an agreement based on mutual

concessions that settles some conflict and to some extent satisfies all the parties. Notion and principle of system compromise were for the first time formulated (mathematically) in studies of Algazin G.I. and other scholars (Algazin, 1999; Algazin 2009; Wu et al., 2014).

Application of this principle is directed at multi-criteria solution of problems of inter-level conflicts in socioeconomic systems participants of which have at their possession incomplete and asymmetric information about sets of selection of solutions.

Distinctive feature of the approach, in contrast to the classical principles of game theory, is that along with sets of local strategic variables controlled by individual system participants, shared variables are taken into account, and none of the participants has a full right to an independent choice. Along with that, participants are asymmetrically informed about sets of shared variables and, in general, none of them has complete information in his/her possession.

Such approach calls for transfer and exchange of information at all levels of the system, expansion of multivariate cooperation and co-coordination of all participants, optimization of distribution and redistribution of their powers, resolution of both intra-level and intra-system contradictions. Based on such an approach, complex conflicts are considered when their resolution requires considerable efforts and expenses, changes in strategic paradigms and modes of operation.

Foreign scholars believe (Dubina et al., 2016) that ecosystem of innovative entrepreneurship is a system, which makes relevant application of the system compromise principle for analysis, simulation and designing of its effective operation.

As part of system compromise, a basic formal game-theoretic model of interaction between main actors of the ecosystem has been developed. It is based on the concept of triple innovation spiral with an additional inclusion of investors and direct consumers of innovations.

A relevant business game 'From Laboratory to Market' has been also developed for training, simulation and analysis of ways and possibilities of interaction between the ETE subjects through multi-level communication to achieve a systemic compromise in conditions of risk and uncertainty of the socio-economic environment.

Main objectives of creation and conduct of the game 'From Laboratory to Market':

- 1) Creation of a game-based training platform to understand actions of main participants of an innovation process (government, universities, business, investors, innovation consumers) who can

and should cooperate in order to reach a compromise through an effective dialogue in an entrepreneurial and innovative environment, involving risks and uncertainty;

2) Development of a tool for simulation of a decision-making process of major interested players in conditions of risk and uncertainty by analyzing possible strategies and developing new combinations of strategic decisions in the process of interaction of game participants with a view to determine optimal or suboptimal strategies of universities to promote and implement their research projects;

3) Preparation of a platform for interaction of real participants in the innovation process and development of tactics and strategies for their actions.

Participants of the business game:

- The state (project proponent, investor) – 1 group;
- Universities (project proponent, academicians and developers of technologies) – 2-4 groups;
- Entrepreneurs (groundbreakers implementing developments) – 2-4 groups;
- Investors – 2-4 groups;
- Innovation consumers (innovation consumers, investor) – 1 group.

There is a pool of innovative projects (requiring R&D, large-scale circulation and commercialization) distinguished by expected costs and profitability. Each group of participants has certain resources. The group may dispose of some portion of resources independently, another portion – subject to an agreement and in coordination with some other participants. Each group can interact with other groups. Results of such interaction determine a choice of projects and success of their implementation.

There are concurrently both cooperation and competition in this game. Goal of each group is to choose the best solution in order to satisfy their own interests, but taking into account needs and motivations of other players (game-theoretic principle of allocentrism) (Dubina et al., 2016).

With the help of this game, it is possible to analyze behavior of all the main participants of the ETE process with different sets of input data and conditions. In the end, we get a large number of possible situations and it is possible to predict results of these or those decisions of the players.

It should be noted that this game was developed at the University of Martin Luther (Halle, Germany) as part of DAAD's academic mobility program and was tested in student groups at Altai State University (Russia). The pilot game with participation of representative players was arranged and conducted

with the support of IREX at the facilities of Bauman Moscow State Technical University and Moscow School of Management Skolkovo in May 2015.

The developed game can be used as an effective tool of allocentrism for better understanding of causes, interests, possible strategies and ways of interaction between participants and achievement of the system compromise.

Results and Discussion. Many scholars claim that the concepts as 'innovation ecosystem' (IES), 'ecosystem of technological entrepreneurship' (ETE), and 'innovation and business ecosystems' (IBES) are a modern 'hybrid' or 'mix' of relevant concepts from areas of such sciences as economics and biology. In addition to the main participants (actors) of such ecosystems (government, universities, and research centers, enterprises and entrepreneurs, innovation managers, investors, consumers of innovations, etc.) this concept includes a set of conditions that ensure their interaction (Dubina et al., 2016).

The mentioned notions (ETE, IES and IBES) are increasingly entering the modern scientific turnover. For example, international research database EBSCO Research has indexed 152 research articles using these terms, Web of Science – 156 articles, Scopus – 2,089 publications (2015). Given a total number of publications related to innovations and innovation development, currently these databases contain hundreds of thousands of such publications.

It is often claimed that the mentioned notions have no unanimous interpretation thus far.

It is probably true to say that, an innovation and business ecosystem is a multi-layered, multi-modal and multilateral system encompassing mutually complementary and mutually reinforcing innovation institutions and knowledge clusters that are based on human and intellectual capital formed under the influence of social capital and supported by financial capital. Its subsystems consist of 'building blocks', i.e. associations of innovative network structures and knowledge clusters. These blocks are grouped into knowledge factors and innovative structures based on a combination of stocks and flows of human, social, intellectual and financial capital (Carayannis et al., 2012.).

Strategic task of public policy must be promotion of formation of an innovation ecosystem, i.e. supportive environment that contributes to the transformation of ideas into business and without which the innovation technological entrepreneurship can not fully exist. The prefix 'eco-' in this definition is used with the meaning that not every economic system is an ecosystem. An economic ecosystem (by some analogy with a biological ecosystem) is a

self-organizing, self-regulating and self-developing economic system, built not only on formal links between its participants being the environment of their 'natural' stay. In other words, an ecosystem is not so much a configuration of the system itself, but a way of its functioning (Kuftryyov & Perednya, 2013).

From our point of view, one should not set against each other concepts of 'system' and 'ecosystem' in terms of their formal features, since from the point of view of their structure, they are similar, and they possess a similar set of interacting elements. Criteria for distinction in this case are precisely dynamic characteristics, namely self-organization, self-regulation, capability of self-development and the most important qualitative characteristic – an entrepreneur as a main element of the system.

In this sense, for example, a special economic zone (SEZ) cannot be defined as an ecosystem since it enjoys a special business treatment provided by the government. In the absence of a direct initiative from the government or in case of abolition of 'greenhouse' business conditions for its residents, the very concept of the SEZ will lose any economic sense. Business incubators and technological park are not, in our opinion, ecosystems as well because they themselves do not form closed reproduction cycles but may be part of an economic ecosystem. Thus, if the economic system is self-organizing, self-regulating and capable of self-development, then there is every reason to consider it as an ecosystem

(Kuftryyov & Perednya, 2013). Foreign scholars maintain that application of the concept of innovation and business ecosystems to the level of territory (region, country) is possible through appropriate formulation of an innovation and business ecosystem as a spatial ecosystem (at the level of a country, region, enterprise, etc.). The spatial ecosystem should be defined as a complex open dynamic system within which a specific institutional environment of an adaptive type is formed taking into consideration strategic objectives of this system and contributing to activate the process of expanded reproduction of three factors as innovation (1), technology (2), and human capital (3) (Dubina & Carayannis 2014).

We will understand institutional environment (Figure 1) of an adaptive type as a set of institutions, organizations and their interrelations arranged in a certain manner that form an institutional space of innovation and business ecosystem due to influence of processes of internal integration of economic agents, exogenous factors. Incentive systems and regulatory mechanisms ensure the leveling of functional as well as informational disunity of ecosystem elements. The ecosystem is oriented towards sustainable development through the formation of incentives for the integration of organizations that are part of the research and business subsystems. It is also necessary to stimulate the innovation activities of economic actors in the ecosystem (Fig. 1):

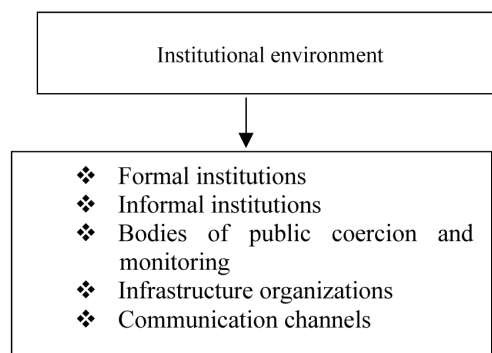


Figure 1. The institutional environment of the innovative entrepreneurship ecosystem

According to the Figure 1, it is offered to include into the institutional environment the following set:

- Formal institutions (legal norms) regulating both innovative and entrepreneurial activities;
- Informal institutions existing in the form of moral and ethical standards of behavior of citizens and business culture;

- Authorities of public coercion and monitoring provided by a judicial system, power structures and public organizations;
- Infrastructure organizations (venture companies, investment funds, etc.);
- Communication channels being real or virtual communication lines and institutional

networks via which information flows between elements of a spatial IBES (Chub A.A., 2015). According to another source (Dubina &

Carayannis, 2014) institutional environment or participants of ecosystems is interpreted as economic agents (Fig. 2):

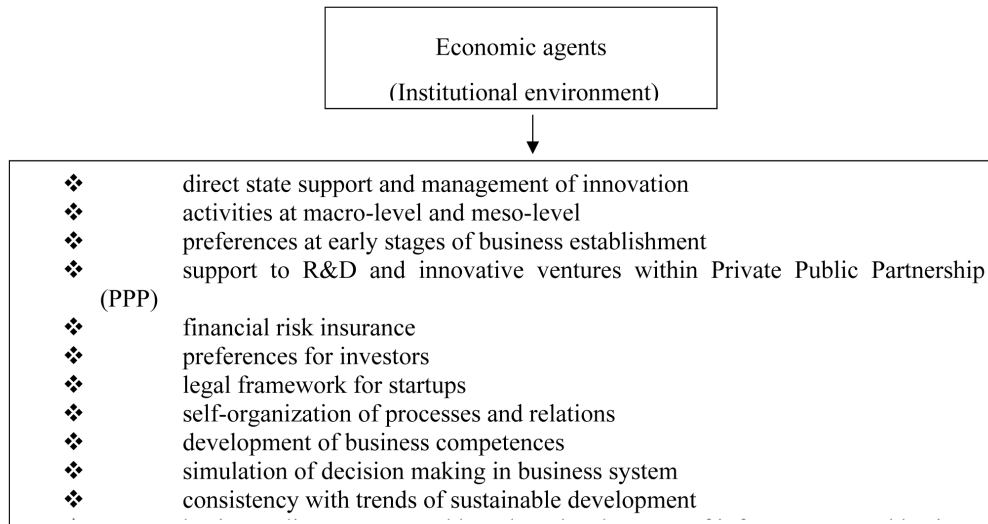


Figure 2. Factors affecting technological projects in innovation and entrepreneurship ecosystems

According to Figure 2, the government, universities and research centers, enterprises and entrepreneurs, innovation managers, investors, consumers of innovations, etc. are among economic agents operating within the framework of the ETE.

A number of economists state that innovation ecosystem rests on five basic principles (in parentheses are the so-called challenges, i.e. factors that are essential for development of the ecosystem but are not yet developed in the national context).

1. Science, engineering community and universities: they are main contributors of innovative ideas for commercialization, as well as staff which forms development teams for engineering companies and scientific and engineering expert examination (challenge: development of small innovative enterprises and institute of innovative entrepreneurship at the university).

2. Industry of venture investments: responsible for attracting financial resources and business competencies to the ecosystem necessary for formation of innovative companies and their transformation into a full-fledged business (challenge: development of investment institutions and management consulting in the field of innovative ventures).

3. Infrastructure: creates favorable conditions for existence of innovative companies. The infrastructure can be both tangible (technological

parks, business incubators, technological innovation centers, etc.) and intangible ('soft'). The latter refers to a variety of services specifically focused on needs and specifics of innovative companies: intellectual property protection services, introduction and promotion of innovative products to foreign markets, outsourcing of 'non-innovative' aspects of activities, etc. (challenge: development of components of a 'soft' infrastructure and mechanisms for bringing innovation to global markets).

4. Stable demand for innovation: it is a key to normal functioning of the entire ecosystem as a whole. We are talking not only about the consumer market but also about demand of large businesses and other companies in the real sector for high-tech products, for technologies and for innovative companies themselves, along with all their developments and intellectual property (as promising business objects for acquisition).

5. Legislative and legal framework creates a comfortable working environment not only for innovative companies themselves but also for all participants of the ecosystem. Here should be also set convenient rules of the game allowing building a reasonable balance of interests between different market players (challenge: development of legislation in the field of innovative ventures; transformation of the state from a 'player' to a 'referee' at the innovation field).

Stable operation of the ecosystem of innovations requires not only availability of all the above-mentioned elements but also their balanced development (Kuftryov & Perednya, 2013).

With regard to innovative entrepreneurship, there is much emphasis on a need for state support for its development. However, especially when it comes to small businesses or start-up companies, application of state measures of direct and indirect incentives becomes very problematic and difficult to apply. Thus, for example, small innovative venture is practically not an object of direct stimulation since the latter applies mainly not to business projects but to R & D and allocation of public resources (orders, grants and republican funds) between different areas of research and development (Kuftryov & Perednya, 2013).

Therefore, when it comes to formation and development of the institute of innovative ventures, it is necessary to create a favorable innovation climate in the economy and to establish a corresponding infrastructure.

In practice, this can be achieved by taking specific steps to create such an environment, including:

- implementation of measures of state support of small and medium-sized enterprises (SMEs); support and promotion of innovative developments (for example, through creation of venture funds);
- streamlining procedures for entrepreneurs to obtain state and municipal services, for example, through introduction of ‘electronic government’ and similar services);
- reduction of administrative barriers for business arrangement and development of a modern and accessible information and communication infrastructure in the region (registries of innovation projects and companies, associations of innovation regions and venture entrepreneurs);
- formation and development of the innovation infrastructure of a region (business incubators, industrial parks, research consortia) (Kuftryov & Perednya, 2013).

In this regard, we consider a role of an industrial technological park (ITP or Techno Park) in terms of the ETE development. Techno Park is an area specially organized to host new manufactures provided with utilities, infrastructure, and necessary administrative and legal conditions and managed by an ad hoc public or private company.

Several independent enterprises from the same or different industries can operate within an ITP. Multi-profile enterprises that have located their production facilities in a shared area are most often connected by shared value-added chains and

share a joint infrastructure of the park and services provided by the management company. Importance of the technological park for innovative ventures is that it is a kind of a ‘springboard’ for promotion of new high-tech and promising businesses and a localization point for private and public venture capital (Kuftryov & Perednya, 2013).

Development of innovative infrastructure is underlain by such factors as:

- support of innovative projects due to attraction of venture investments and subsidies from regional budgets;
- development of staff innovative potential;
- implementation of the latter of these directions can be achieved through active integration of research universities into the innovation system of the region as providers of highly qualified personnel in the field of innovative ventures.

As for our country, currently principal structural elements of the innovation system have been created and they already operate in the republic. However, it should be pointed out that tools to support innovations are weakly linked with each other; individual innovation production cycles are fragmented and poorly connected, and do not actually make a system. In the business environment, backward technological structures dominate, level of susceptibility of companies to new technological solutions remains low, in a bulk of organizations innovation activity is carried out in contingency. Moreover, offered findings of researches and developments are not used in Kazakhstan’s economy due to misbalance of the national innovation system (Dubina & Carayannis, 2014).

However, all elements of the innovation system are in place and a task of their integration with each other and transformation of their interaction into the system can be achieved precisely through development of infrastructure components of the system. One of these components, implemented on an international scale, can be defined as an ‘innovation corridor’. It is a mechanism for interaction of institutional elements (participants) of various innovation systems, ensuring introduction of innovative products or companies themselves into international markets.

Operation of the innovation corridor facilitates both enhancement of integration processes within innovation systems themselves and integration of systems with each other. It is noteworthy that interaction of the participants – ‘builders’ of the innovation corridor – can be informal and can rest on mutual interests as part of the development of their innovative tracks (Kuftryov & Perednya, 2013).

Those innovative companies and entrepreneurs who see significant prospects for commercialization of their decisions on international technology markets must get into the innovation corridor. Role of builders of the innovation corridor can be undertaken by:

- research universities and technological clusters created on the basis of their facilities;
- structures and agencies of international development created on the basis of regional state administration bodies;
- investment consulting companies that focus on ‘packaging’ of innovative projects at a preincubation stage (centers for substantiation of an innovation concept);
- infrastructure participants of the innovation system: business incubators, technological parks;
- formal and informal institutions of development and financial support for activities of the corridor (regional venture investment funds and their representative offices abroad, business angels, private investors).

Leading role in building an innovation corridor can be played by a research entrepreneurial university that focuses on effective project development of its international activities and has at its disposal resources essential for operation of the corridor: promising technological solutions and backlogs, as well as qualified scientific personnel with business skills (Kuftryov & Perednya, 2013).

Conclusion

Spatial ecosystem of technological entrepreneurship is a probabilistic dynamic system that encompasses processes of production, exchange, distribution, consumption and accumulation of innovative, technological, and human capital. Achieving a goal of sustainable development of the system is attributed to trends in the external environment and its adaptive properties as an object of management.

1. The innovation ecosystems themselves are becoming an important factor for increasing the

efficiency of entrepreneurship. Entrepreneurs face a set of challenges related to a need to balance goals and priorities, where development is possible only on the basis of principles of system compromise.

2. The sources of growth of the innovation and entrepreneurial ecosystem are not only the internal potential of the management system, but also external factors of development. They are an active innovation policy at the regional level with the support of science-intensive industries, interregional and intersectoral economic relations, as well as the ability and opportunity of the ecosystem to integrate into the international economic space. Business climate formed on the basis of development of infrastructure and business culture is one of the most important conditions to attract investments for innovative development and improve competitiveness of a particular region.

3. In order successfully to balance requirements set by an innovation ecosystem with objectives of enterprises in a systemic compromise, it is important for entrepreneurs to focus on self-regulation of processes and understanding of their potential role in these processes (Nambisan & Baron, 2012).

4. Formation of an optimal institutional environment that provides for compromise implementation of conflicting goals of economic agents with different statuses and functions, acts as an adaptation mechanism for a spatial innovation and business ecosystem that functions amid environmental uncertainty, contributes to balanced development of subsystems, enhances sustainability and efficiency.

5. The concept of an entrepreneurship ecosystem has been formulated. The role of institutional environment in maintenance of the process of its sustainable development has been defined, external and internal factors that have the most significant influence on this process have been identified, mathematical tools have been chosen that allow simulating possible directions for development of the technological entrepreneurship ecosystem in conditions of risk and uncertainty.

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UDC 06.52.00

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Models of development and regulation of the digital economy in the Republic of Kazakhstan

The digital economy is becoming an important driver of innovation, economic growth and competitiveness. More than 15 countries are implementing a national programme of digitization. The formation and development of the national segment of the digital economy through the use of trusted, mainly domestic ICT, and its further integration into the global digital economy, on the one hand, provides a “window of opportunity” for the integration of the economy of the Republic of Kazakhstan in the emerging world economic order, and on the other hand – carries significant risks to economic security and sovereignty of the state. The purpose of the study is to analyze the current state and develop effective measures to regulate the digital economy to achieve sustainable economic growth, improve the competitiveness of the economy and improve the quality of life of the population of the Republic of Kazakhstan. The introduction of information technologies in the public sector brings to a qualitatively new level key aspects of life – from payment for utilities to insurance policies and treatment. The methodology is based on methods of analysis, synthesis, induction and deduction. The value of the research is that the model of digital economy development is defined. The practical significance of the study lies in the development of proposals to improve the regulation of the digital economy in the Republic of Kazakhstan. The article is executed within the project AP05135078 “Formation and development of digital economy in the Republic of Kazakhstan: theory and practical measures of realization” of grant financing of scientific researches of the Ministry of education and science of the Republic of Kazakhstan.

Key words: digital economy, digital dividends, digital state, single digital market, online sales, development of electronic networks and digital services.

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Қазақстан Республикасында цифрлық экономиканы дамыту және реттеу модельдері

Сандық экономика инновациялардың, экономикалық өсудің және бәсекеге қабілеттілікті қамтамасыз етудің маңызды драйверіне айналады. Әлемнің 15-тен астам елі цифрландыру Ұлттық бағдарламаларын жүзеге асырады. Сенім білдірілген, басым түрде отандық АКТ – ны пайдалану негізінде цифрлық экономиканың ұлттық

сегментін қалыптастыру және дамыту және оның әлемдік цифрлық экономика кеңістігіне одан әрі кірігуі, бір жағынан, қалыптасқан әлемдік экономикалық тәртіпке Қазақстан Республикасының экономикасын енгізу үшін «мүмкіндіктер терезесін» ұсынады, ал екінші жағынан-экономикалық қауіпсіздік пен мемлекет егемендігінің Елеулі тәуекелдерін көтереді. Зерттеудің мақсаты-тұрақты экономикалық өсуге қол жеткізу, экономиканың бәсекеге қабілеттілігін арттыру және Қазақстан Республикасы халқының өмір сүру сапасын жақсарту үшін қазіргі заманғы жағдайды талдау және сандық экономиканы реттеудің тиімді шараларын әзірлеу. Мемлекеттік секторда ақпараттық технологияларды енгізу коммуналдық қызметтерді төлеуден бастап сақтандыру полистерін ресімдеуге және емдеуге дейінгі халық өмірінің негізгі аспектілерін сапалы жаңа деңгейге шығарады. Әдістеме талдау, синтез, индукция және дедукция әдістеріне негізделген. Зерттеудің құндылығы-сандық экономиканы даму моделі. Зерттеудің практикалық маңыздылығы Қазақстан Республикасында цифрлық экономиканы реттеуді жетілдіру бойынша ұсыныстарды әзірлеу болып табылады. Мақала AP05135078 «Қазақстан Республикасында цифрлық экономиканы қалыптастыру және дамыту: теория және практикалық іске асыру шаралары» жобасы аясында Қазақстан Республикасы Білім және ғылым министрлігінің ғылыми зерттеулерін гранттық қаржыландыру аясында орындалды.

Түйін сөздер: сандық экономика, сандық дивидендтер, сандық мемлекет, бірыңғай сандық нарық, онлайн сату, электрондық желілер мен сандық қызметтерді дамыту.

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Модели развития и регулирование цифровой экономики в Республике Казахстан

Цифровая экономика становится важнейшим драйвером инноваций, экономического роста и обеспечения конкурентоспособности. Более 15 стран мира реализуют национальные программы цифровизации. Формирование и развитие национального сегмента цифровой экономики на основе использования доверенных, преимущественно отечественных ИКТ, и его дальнейшая интеграция в пространство мировой цифровой экономики, с одной стороны, предоставляет «окно возможностей» для встраивания экономики Республики Казахстан в формирующийся мировой экономический порядок, а с другой стороны – несет значительные риски экономической безопасности и суверенитету государства. Цель исследования – анализ современного состояния и разработка эффективных мер регулирования цифровой экономики для достижения устойчивого экономического роста, повышения конкурентоспособности экономики и улучшения качества жизни населения Республики Казахстан. Внедрение информационных технологий в государственном секторе выводит на качественно новый уровень ключевые аспекты жизни населения – от оплаты коммунальных услуг до оформления страховых полисов и лечения. Методология основана на методах анализа, синтеза, индукции и дедукции. Ценность исследования заключается в том, что определена модель развития цифровой экономики. Практическая значимость исследования заключается в разработке предложений по совершенствованию регулирования цифровой экономики в Республике Казахстан. Статья выполнена в рамках проекта AP05135078 «Формирование и развитие цифровой экономики в Республике Казахстан: теория и практические меры реализации» грантового финансирования научных исследований Министерства образования и науки Республики Казахстан.

Ключевые слова: цифровая экономика, цифровые дивиденды, цифровое государство, единый цифровой рынок, продажи онлайн, развитие электронных сетей и цифровых услуг.

Introduction. In modern economic conditions in many countries, the digitalization of the economy is a strategic priority of development. According to the forecasts of the world's leading experts, by 2020 a quarter of the world economy will be digital, and the introduction of technologies of digitalization of the economy, allowing the state, business and society to interact effectively, is becoming an increasingly large-scale and dynamic process (Digital

Kazakhstan, 2018). Singapore forms the “Smart economy”, Canada creates an ICT-hub in Toronto, South Korea in the “Creative economy” focuses on the development of human capital, entrepreneurship and the spread of ICT, while Denmark focuses on the digitalization of the public sector.

Currently, the attention of the Government of the Republic of Kazakhstan and society to digitalization as a global trend, including the expectations of the

socio-economic effect of their implementation, are significant. And this level, first of all, is set by the scale and specifics adopted by the President of Kazakhstan N. Ah. Nazarbayev plan of the nation “100 concrete steps” (plan of the Nation -100 concrete steps).

In particular, one of the” 100 steps “is the creation of the state Corporation” Government for citizens “– a single provider of public services on the model of Canada Service in Canada and Centrelink in Australia (National Plan -100 concrete steps).

As part of the current reforms, Kazakhstan is focused on countries that have achieved significant success in creating a digital state. As you know, it is Austria, USA, Denmark, Australia, Canada, Singapore. According to the level of digitalization of the economy in 2016, Kazakhstan took the 50th place in the ranking of 85 countries and was in the group with the emerging digital economy (Third modernization: global competitiveness, 2017).

In the message of the President of the Republic of Kazakhstan to the people of Kazakhstan “the Third modernization of Kazakhstan: global competitiveness” dated January 31, 2017, it is noted that it is necessary to develop in the country such promising industries as 3D printing, online trading, mobile banking, digital services, including health and education, and others. These industries have already changed the structure of the economy of developed countries and gave a new quality to traditional industries (Tulegenova M. S., Syzdyk N. S. 2017, 12).

In connection with these aspects, The state program “Digital Kazakhstan” was developed (Digital Kazakhstan, 2017). The basis for its development was the decree Of the President of the Republic of Kazakhstan dated February 1, 2010 № 922 “on the Strategic development plan of the Republic of Kazakhstan until 2020” (on the strategic development plan of the Republic of Kazakhstan, 2010).

The Foundation of the program “Digital Kazakhstan” was the state program “Information Kazakhstan-2020”, approved in 2013 (Information Kazakhstan-2020). In The Message Of The President Of Kazakhstan N. Ah. Nazarbayev “growth of welfare of Kazakhs: increase of income and quality of life” from October 5, 2018.it is noted that it is necessary to ensure the development of such areas of the “economy of the future” as alternative energy, new materials, Biomedicine, big data Internet of things, artificial intelligence, blockchain and others. The place and role of the country in the global world depend on them in the future (growth of welfare

of Kazakhstan Citizens: increase of income and quality of life, 2018). The world Bank names three important categories of problems that are signs of the possibility of digital transformation: legal regulation, the availability of skills in the population and the creation of appropriate institutions of digital governance (the Digital economy has transformed, transformed 2018). Therefore, in order to transform the economy into a digital one, it is necessary to create an appropriate regulatory framework for e-business, reform the education system and involve citizens in the management of the state through e-services, transparency and control over budget spending. Such well-known foreign scientists as: M. Bahl, D. Charoen, C. Granasambandam, M. Knickrehm, R. Kling, K. Lamb, L. Margherio, L. Lane, T.L. Mesenbourg, M. Rouse, A. Tapscot.

Literature review. Research of the main trends of the digital economy dedicated to the works by I. V. Alekseeva, A. S. Airapetian, A. Bryan, A. P., Dobrynin, A. V. Druzhinin, K. A. Zhumagaliev, V. Ivanov, V. Yu. Konyukhov, D. Marchukova, V. P. Kuprianov, I. A. Matveeva, E. V. Popova, K. A. Seed, N.. Stefanova, D. V. Sikorski, D. A. Smirnova, I. M. Tushkanova, A. Rusina, L. Yu., Chernykh, A. A. Kharchenko and T. N. Yudina.

In the Republic of Kazakhstan, the problem of formation and development of the digital economy, Internet marketing, the information sector of the economy were engaged in such scientists as A. A. Ashimov, Dnishev F. M., A. K. Koshanov, G. M. Mutanov, B. M. Mukhamediev, N. To. Theoretical and practical issues], K. A. Sagadiyev, M. S. Tulegenova A. G., and Ploshay.

Despite the scientific contribution of scientists to the theory and practice of the formation and development of the digital economy, there are issues that require further study, in particular, requires clarification of the regulation of the digital economy.

The relevance, great demand, and not the study of the main trends in the development of the digital economy in the future predetermined the choice of topics and main areas of research.

Material and Methods. The research methodology is based on a comprehensive analysis of the problem. The state can provide a “digital leap” in the country through the accelerated development of specific technologies. In such cases, the state assumes the role of an investor, determining the key, the most promising areas of financing, based on the assessment of long-term return on investment, competitive position, trends, as well as invested in the fundamental conditions of success, such as education and retraining. In South Korea, with the

active position of the state, support companies are beginning to independently invest in breakthrough digital technologies.

Results and Discussion. Thus, one of the largest Telecom operators in the country-SKT – has indicated its intention to invest more than 4

billion US dollars in artificial intelligence and Internet of things technologies. Table 1 shows what tasks and goals should be set by the state and companies in order to achieve good results in the implementation of digitalization in the country (Tabl. 1):

Table 1 – Challenges faced by the state and companies for the introduction of the digital economy in Kazakhstan*

Companies	State
Introduction of new technologies, improvement and digitalization of production processes	Improvement and digitalization of production processes
Search for new personnel, cooperation with educational and research centers	Introduction of new approaches to learning, improvement of educational processes
Investment in new technologies, choice of advanced areas	Increasing investment in NIOC
Increase of competitiveness, development of innovative culture on the model of the world's highly developed digital companies	Preparation of the base for mass retraining of personnel, due to the disappearance of many professions and the emergence of new professions and jobs
	Improvement of the innovation processes and good management on the part of the state. Digitalization of public services, increasing literacy and universal involvement of the population in the digital economy
*Note: developed by the author	

The digital economy in developed countries develops in different ways, but they have important common features: an enabling environment for development and innovation, as well as large investments in digital technology and infrastructure. Kazakhstan has great opportunities to make technological leaps in all sectors of the economy. For the successful functioning of the digital economy in the country is necessary: the development of infrastructure with Internet access, using telecommunications, as well as e-business and Commerce. In accordance with the main directions of administrative reform, the priorities of the use of information technology in public administration are:

1) improving the effectiveness of the implementation of the law establishing the functions of the state and improving the mechanisms of state regulation.

2) improving the efficiency of law enforcement activities of public authorities.

3) improving the efficiency of control and Supervisory functions (Stefanova N. A, 2018 -122).

The legal framework for the regulation of the Kazakhstan market should take better account of the specifics of the relations developing in it. Therefore, it is important to take into account in the legislative form the degree and form of assistance of state employment agencies, both participants in

the labor market: the employer and the unemployed. In this regard, it is effective, first of all, to provide financial support to entrepreneurs who create additional jobs for the unemployed, through the competent employment authorities. The need for the regulatory role of the state in restructuring the social development of organizations, taking into account the growing tension in the domestic labor markets, becomes obvious, which is confirmed by the special attention of the state to solving social problems.

In this regard, we believe that it should:

– develop a strategy for regulating the digital economy in accordance with the chosen model of development of the Republic of Kazakhstan and its regional features;

– develop a package of legislative acts, providing them with temporary housing and health services, social insurance.

Research result. The greatest difficulty is the issue of regulation of innovative processes is the fact that technology is evolving faster than the legislation. The Law “on digital economy in the Republic of Kazakhstan” is proposed (figure 1). Solutions can have a counter – effect: for example, increased control over information can affect the development of the Internet, and support for a particular format of digital communications-lead to the consolidation of

one business model, while creating obstacles to the emergence of new ones.

First of all, this document should include a General part that defines all the concepts related to the digital economy, describe the principles on which the digital economy is based in Kazakhstan.

Strengthening the system of state control over the procedures of the digital economy involves monitoring for possible insolvency of the activities of not only economically and socially important enterprises. We consider it necessary to expand the coverage of enterprises. In addition, the

implementation of state control and monitoring should cover more extensive crisis management infrastructure.

The formation of the development model is the key to sustainable development of the company. An indicator of reputation is the assessment of stakeholders' opinions about the company and their intention to take economic actions and make decisions related to the company. To understand the structure of the classical economic model, it is necessary to consider the main subjects and mechanisms of economic interaction (Fig. 1):

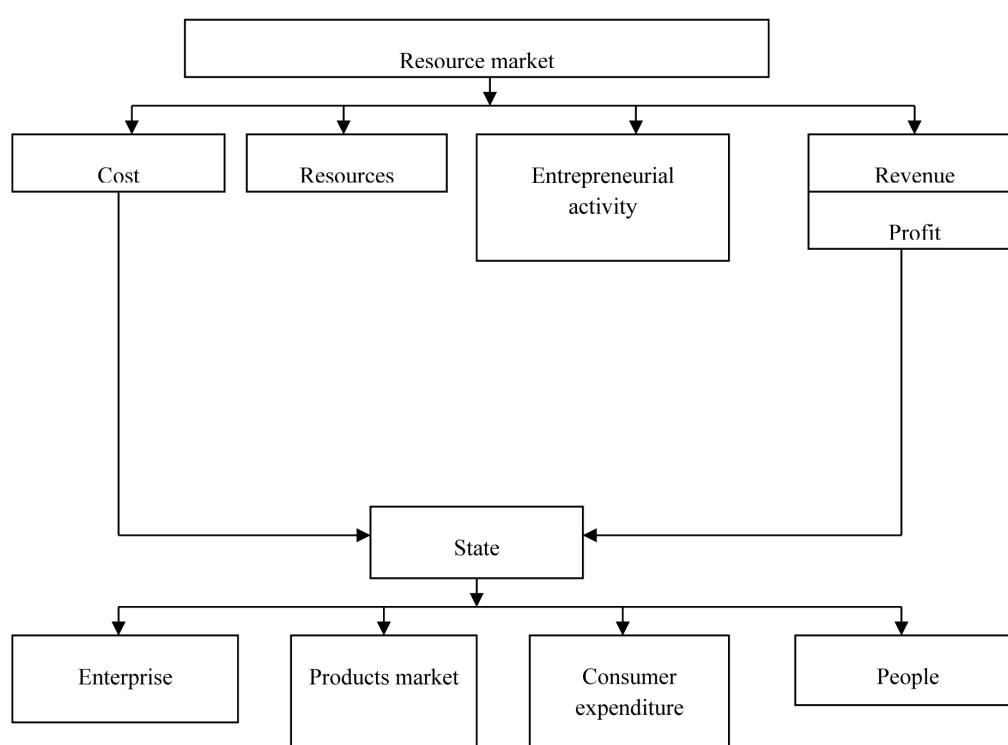


Figure 1. Economic model

*Note: according to literature 2, 3

In the national economy there are three entities: the population (households), enterprises, and the state. Each of the economic entities under consideration has a number of specific features that carry out many activities. The main creative element of economic turnover are enterprises (firms) that produce the necessary products and services for society (households). The activities of firms aimed at making a profit. For the products sold, firms receive an appropriate monetary equivalent, in addition, they are the state's preddacha consists in the production of public goods, i.e. goods that are produced in the interests of the whole society. These include security,

social protection, the development of science and culture, and the formation of social infrastructure. The activity of the state does not pursue the purpose of profit and is aimed at the realization of national interests. Most authors who write about the economic model try to compare it with the economic models of other countries, the same level of development in different ways and methods (in the competitiveness index Kazakhstan took 59th place, 2018).

The digital economy is characterized by many indicators, in particular the index of economic freedom is calculated on the average of ten benchmarks: property rights, freedom from corruption, fiscal

freedom, government participation, freedom of enterprise, labor, trade, investment, monetary freedom, and financial freedom. In terms of the index, the Republic of Kazakhstan ranks 153rd out of 178 possible places from the countries represented in the ranking by methods (in the competitiveness index Kazakhstan took 59th place, 2018). In countries with freer economies, the welfare of the population is much higher, with economic freedom yielding relatively quick and tangible results, in contrast to the total state regulation of the economy, which prevails (Ranking of the world's countries by the level of economic freedom, 2017). Countries that pursue policies of economic freedom create favorable conditions for trade, entrepreneurship and innovation that generate economic growth. The index of economic freedom is primarily based on the degree of economic liberalism, covering macroeconomic indicators such as growth rates, degree of technological modernization, the level of development of infrastructure and that it innovation is important.

The conclusions emphasize the importance of the state of economic freedom, and therefore the economic model as a whole for the population. In "free" countries, its innovations are also more developed. Such countries have higher national income (the most developed countries in the field of IT technologies are Named, 2018). The policy of economic freedom creates favorable conditions for the development of the IT industry, which is considered to be the fastest growing industry in many countries of the world (Top 10 countries with advanced technologies, 2018).. Thanks to digital telecommunications, which include modern digital innovations, a model of the digital economy is often called the digital future (nnemtsov, 2017-320). The analysis of the economic situation, the rating of economic freedom, in the lists of which is not the best result, showed that the economy of the Republic of Kazakhstan must move from the existing model, which is used to the population, to the new digital economy of the future. Thus, the model of development of the digital economy should be implemented through digital telecommunications, which include modern innovations such as cloud computing, business Analytics, big data and much more. The main resource of the digital economy is information that does not dry up like other types of resources, it can be used an infinite number of times. The Internet is a global global network in which the area of use of resources is not limited, as well as storage thanks to cloud technologies. Today, all companies strive for digital trends, thanks to which there is a profit. And

digital trends, in turn, contribute to the simplification of the population's life, and improve the state of the economy in the country. Currently, the desire of transition to a digital economy has engulfed all spheres of life: education, online sales, health care, etc. For example, create server public services, made a significant step forward for simplification of life of the population. The accumulation of a large amount of information on the Internet has led to the need to store it somewhere and this has contributed to the emergence of new technologies such as big data and business Analytics. Big data or big data is applicable in many areas such as medicine and even in the field of education, where the need to store a large amount of information is at the forefront. Business Analytics, in turn, is applicable in any areas where the company is faced with a constant flow of business information. These areas are one of the key drivers of information technology development.

Thus, the presented model of development of the digital economy orients the company in accordance with the goals for effective work both in the short and long term. In this model, the main attention is paid to the adaptive response to the emergence of possible adverse situations. The very appearance of these situations is predicted, and measures to neutralize them are developed in advance. The application of this model of development of the digital economy will enhance the quality of ongoing monitoring of the market, the performance of planning of its development and the effectiveness of regulatory measures.

Conclusion

The essence of the digital economy lies in the fact that thanks to the development of digital technologies, the consumer can quickly get the services he needs, save money by buying products in online stores at lower prices. The core of the digital economy is the digital goods and services sector.

The growing role of the digital economy is that the digital economy is the basis of development in General and has an impact on a variety of industries such as banking, retail, transport, energy, education, health and many others. Currently, a number of factors affecting the development of the digital economy can be identified. Internal factors are managerial. External factors – infrastructure and General economic.

For the growth of the digital economy it is necessary to develop the national IT sector, to stimulate the creation of innovative technologies, to cooperate with foreign market actors for their development. It is necessary to attract investment

and motivation of entrepreneurial activity in this industry.

All strata of society – the state, the private sector, civil society and the IT community – must participate in digital economic activities. Ensuring information security of information and innovative technologies is also an important component.

The digital economy in the Republic of Kazakhstan is implemented in areas that include: digital transformation of traditional sectors of the economy, the development of human capital, the digitalization of public authorities, the development

of digital infrastructure, as well as a breakthrough in the development of the ecosystem of entrepreneurship in the field of digital technologies and, as a consequence, the change in production models and the creation of added value in the real sector of the economy. The regulation of the digital economy needs to be improved. The greatest difficulty is the issue of regulation of innovative processes is the fact that technology is evolving faster than industrial relations. At the same time, a draft Law “on the development of the digital economy in the Republic of Kazakhstan” is proposed.

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UDC 04.51.51

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Kazakh tea ceremony: traditions and innovations

Today it is impossible to imagine the Kazakh meal without tea. However, it entered the everyday life of the Kazakhs relatively recently. For centuries, the basis of the life of the Kazakhs was nomadic transhumance cattle breeding, in which sheep and herd horse breeding prevailed. This type of economy for a long time determined the specificity of the somewhat monotonous Kazakh cuisine, which was based mainly on the use of meat and milk, as well as a small number of grain products, in particular millet. However, from the end of the XVIII century. Fundamental changes in the political and, as a result, economic life of the Kazakhs began. They entailed a process of settling on the land, more frequent contacts with neighboring nations; In the Kazakh diet began numerous borrowings and distribution of new products. Purpose of the study at the end of XIX century in the diet of the Kazakhs, along with the name (the Kazakhs call it shai) tea is firmly entered.

Key words: tea, cattle breeding, diet of the Kazakhs, meat and milk, economic life of the Kazakhs.

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Қазақтардың шәй ішу әдебі: дәстүр мен жаңышылдық

Бұл мақалада авторлар қазақтардың шай ішу мәдениетінің өзгеріске ұшырауын жан-жақты талдаған. Сонымен қатар заманауи кезеңдегі өзгешеліктерін көрсетуге тырысқан. Негізінен авторлар этнографиялық далалық материалдарды пайдалана отырып өзіндік зерттеулер жүргізген. Авторлар мақала барысында бірнеше сұрақтарға жауап беруге тырысқан: «Қазақ халқы неліктен әдепті барынша сақтаған?», «Қонақжайлылық кезінде әдептілік нормаларын қалай сақтаған?», «Дәстүрлі әдеп ортада қаншалықты сақталған?» т.б. Осы мақаланы оқу барасында оқырмандар әдепке байланысты жаңа ақпараттар біле алады. Қазақ даласына шайдың келу тарихы, оның тұрмыста қолданысқа ие болуы, мәдениетте алған орны, шай ішу рәсімі, оның түрлері қарастырылған. Мақаланы жазудағы авторлардың мақсаты бұған дейінгі жазылған зерттеулерге және өздері жинаған этнографиялық деректерге сүйенеді. Қытайдан бастау алған шайдың Қазақстан жеріне таралуының жолдары, оның XIX ғ. тамақ рационына кіруі, бұл туралы ғалымдардың жазған пікірі жазылған. Мақалада қазақтағы «ақ шай», «қара шай», «бордама шай», «сарғасқа шай», «ет қосқан шай» түрлеріне сипаттама беріліп, Қазақстанның әр өңіріндегі аталған шай түрлерінің таралуы жан-жақты талдаған. Қазақ шай ішу мәдениетін шыңдау арқылы заманауи үрдістерді жаңғырту керек.

Түйін сөздер: шәй, этикет, салт-дәстүр, өзін-өзі тәрбиелеу, ережелер, қонақжайлылық.

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Казахская чайная церемония: традиции и инновации

В данной статье авторы рассматривают казахскую трапезу чайепития от истока до современности. Детально описана основа жизнедеятельность казахов, рассказывается о кочевом отгонном скотоводстве овцеводстве и табунное коневодство. Также авторы тщательно проанализировали вариацию казахской чайной культуры. Он также пытался показать различия в современную эпоху. В основном авторы провели собственные исследования с использованием материалов этнографического поля. Авторы попытались ответить на ряд вопросов в статье: «Почему казахский народ следовал этике?», «Как они поддерживали хорошую мораль при гостеприимстве?», «Насколько строг в этической среде?» Читая эту статью, читатели могут узнать новую информацию об этике. История чая в казахской степи, история чая, его место в культуре, место чая, чай и его виды. В статье авторы опираются на предыдущие исследования и собираемые ими этнографические данные. Целью статьи является показать пути распространения чая из Китая в Казахстан в XIX веке. запись в рацион питания, как написано учеными. В статье описываются казахские «белый чай», «черный чай», «чайный чай», «чайный чай» и «чай с мясом», а также анализируется распространение этих видов чая в различных регионах Казахстана. вместе с названием (казахи называют его шай) прочно вошел чай.

Ключевые слова: чай, скотоводство, рацион казахов, мясо и молоко, хозяйственная жизнь казахов.

Introduction. In different parts of Kazakhstan, tea began to spread, apparently, in various ways and at different times. This was determined by the vast territory of the settlement of the Kazakhs, in which several centers of gravity were formed – Russian cities in the west of Bukhara, Khiva and other Central Asian cities in the south, Kuldja, Chuguchak and, in general, China in the east (Monograph-catalog 2012: 122). The purpose of this article is to show the Kazakh tea ceremony for two centuries.

The main directions and ideas of scientific research in ethnology is Levi-Strauss often mentioned Montaigne's essays on cannibalism as an early example of "ethnology"; he pursued a goal through a structural method to discover universal invariants in human society, as which he accepted the prohibition of incest. However, the demands of such a cultural universality were criticized by various social thinkers of the XIX and XX centuries, among whom were Marx, Nietzsche and others.

The Kalmyks (the Dzhungars) played a key role in the distribution of tea on the lands west of China (Pokhlebin 2000: 7). Kalmyks regularly fought with the cities of Central Asia, sometimes settled in them, were part of the military elite under the rulers (Abashin 2001: 63). And there the Kalmyks influenced the urban population, addicted to tea, which confirms the initial spread of a special type of tea – shir-choi (tea with milk).

In part, the Kalmyks played a similar role in the distribution of tea among the Kazakhs in the eastern steppes. Dzhungarian khanate was a powerful and restless eastern neighbor of the Kazakh tribes. But it not only made devastating raids to the west. Kalmyks actively traded with China, buying or bartering tea for cattle for their own use, since the sale of tea to the West was almost monopolized by the Bukharians (Potanin 1868: 39), and by the middle of the XIX century. – Russian merchants (Nebolsin 1856: 55). During periods of complicated relations between the Kalmyks and the Chinese, their trade was interrupted, and then tea was delivered to the Kalmyks "from Siberia, through Kyakhta, Tomsk", and "at the same time, Dzhungaria from China passed through Semipalatinsk and Kyakhta to China Dzhungar cattle and camels for the Chinese troops, who was compared in the fields of Dzungaria", notes G.N. Potanin with irony (Kivokurtseva, 1996: 5). Naturally, the widely distributed "Kalmyk tea" was familiar to the Kazakhs.

With the fall of Dzhungaria (1757-1758), the role of the Kazakhs in the region has greatly changed. The Kazakhs quickly occupied these lands, and with them the vacant trading niche: "The Chinese, who had previously supplied their troops with horses from the Kyrgyz and Dzhungar steppes, attracted Kyghyz (Dobrosmyslov, 1900: 30) to exchange horses for goods, and thus, the former trade on East arose again.

“ (Dal 2001: 157) Since then, the Kazakh trade in Ust-Kamenogorsk and Semipalatinsk, the fortresses of St. Peter on Ishim and Yamyshevskaya became active. Trade along the route that already passes through the western regions of the Kazakh steppe, for example, from Urga through the Ulus of Ablai at Konchinskoe Lake and Baklan fortress to Orenburg, begins to actively develop (Nebolsin 1850: 178).

A common commodity for the Kazakhs was cattle (horses for the military needs of Russians and Chinese), various furs (foxes, woodchucks, etc.), saiga skin, salt, and Armenian, which were exchanged for iron products (knives, axes, cauldrons), flour and cloth. This set of goods remained unchanged in all points of trade and exchange for a very long time.

Literature review. Another interesting fact is that the Kazakhs have so much tea for tea, that the tradition of tea is served to the visitor. Due to the seasonal specification, the preparation of tea, its subtlety treatments are of interest. The tea parties in Kazakhstan are compared with the Japanese. There is also a peculiarity of tea parties in other nations. In the Kazakh community, the so-called “tea tea”, “tea for tea”, “mood tea” and “thankful tea” have been preserved. The procedure for granulating tea according to etiquette was a kind of dosage. In the course of the article A. Levshin, GN Potanin, AN Dobromyslov, MY Quotes from data. At the moment, about the tea ceremony Professor R.A. Beknazarov is an author of an article published in the *Ethnographic Review Magazine*. However, few Kazakhs by the middle of the XIX century began to trade and tea. Tea in the trade of the Kazakhs took, one might say, a symbolic place. There are minor references to the sale of tea in St. Peter’s fortress by G.N.Potanin; “In 1758, brick and baikhov tea 5 brick poods were taken out of the fortress, but these figures do not give clarity – who bought this tea, because in the trade exchange with China, the Kazakhs “changed them for yashny grain, wheat flour and groats ” [Notes on the way from St. Petersburg to Barnaul, 1850]. Statistics on the sale of tea by Kazakhs increased, and only slightly, by the middle of the 19th century. Here are eloquent figures: in seven years (1840-1846), the Kazakhs sold tea for 12 thousand rubles by silver. At the same time, in one 1840, the Kazakhs sold livestock in Orenburg and Troitsk for 790 thousand rubles, in 1843 for 1 million 200 thousand rubles. For comparison, we point out that China annually 1841, 1842, 1845 and 1846. tea was brought in the amount of about 7 million rubles in silver (Argynbaev 1962: 65).

Since the mid-60s of the XIX century, tea was already sold in many cities of Russia, in particular

in Odessa, Poltava, Kharkov, Rostov, Orenburg, Samara, Uralsk, Astrakhan (Zalessky 1991: 31). It is natural to assume that the Kazakhs bought tea in Orenburg or Uralsk. At the same time, it is firmly in the daily use of the entire Russian population.

Material and methods. The theme of the article is dedicated to the Kazakh tea ceremony. The topic is actual because of the less studied in ethnography. The history of the tea in the Kazakh steppe, the history of tea, its place in the culture, the place of tea, tea, and its types. In the article, the authors rely on previous research and ethnographic data they collect. The ways of spreading tea from China to Kazakhstan, in the XIX century. the entry into the diet of food, as written by scientists. The article describes the Kazakh “white tea”, “black tea”, “tea tea”, “tea tea” and “tea with meat”, and analyzed the distribution of these types of tea in different regions of Kazakhstan.

Results and discussion. Speaking about contacts with the Russian population, it is important not to forget that the Russian settlers were not the same (Krasnov 1887: 421). Old believers, who moved to the eastern regions of Kazakhstan and Altai, did not drink tea for religious reasons either. But the Cossacks of Irtysh, Orenburg and the Urals loved this drink. The use of tea by the Russians and Ukrainians of the largest migration center at the end of the 19th and 20th centuries was massive. Tea did not take its place in the Kazakh food culture overnight. This process can be resurrected by reading the diaries and essays of travelers, researchers who have fallen into the Kazakh steppes at different times. All of them point to the constant use of kumys by Kazakhs, which they drank almost all year round: “For those who see for the first time how much kumys Kyrgyz drink, it will seem incredible” (Levshin 1996: 303), “from morning till evening the Kyrgyz kumys blows and satisfying them both hunger and thirst, he then consumes little other food”. But instructions on the use of tea until the middle of the XIX century are very rare, and almost all belong to the higher strata of Kazakh society.

Apparently, the first that the Kazakhs drink tea was written by A.I. Levshin in 1832: “Khans, sultans and some rich people begin to drink tea with sugar or honey, and the branches that wander near the Chinese borders use Chinese tea, like the Mongols “(Nebolsin, 1856: 182). The direction of G.P.Nebolsin relates to this time: “Brick tea is sold in large quantities to Kalmyks and is beginning to come into use among Kyrgyz people” (Kittary 1849: 32). Interesting observations of V. I. Dahl. In the story “Main” twice described the situation associated with

tea drinking. At first, tea is mentioned in connection with the kargalinskytatar, “who left me with nothing, in a lightly empty cart in which lay: a samovar, a pillow, arshin and bezmen – and only, but returned, having gotten hold of god knows where, in a horse riding, in a fox-clad toe coat, stretched out on a feather bed, and drank the road tea exactly five times a day” (Slyuz, 1862).

Until the middle of the XIX century, mostly prosperous Kazakhs drank tea. The second half of the XIX century. – This is the time when they begin to drink it in all layers of the Kazakh society, and it gradually becomes a favorite drink; “With regard to tea, the Kyrgyz are very indulgent with our bailiffs and even the merchants of the old cut: they also revere tea as an equally pleasant drink in the bitter cold and suffocating heat,” wrote an observer in the middle of the century, who visited the Kazakh by the prosperous Kazakh Bukey Horde (Chormanov, 1889). In 1862, the Northern Bee correspondent N.Slyuz reported from the Irtysh border line that at the commemoration the Kazakhs put, in addition to a yurt for koumiss, and a “tea yurt” (Jacmon, 1892: 32). In the regions bordering China, tea in the 1870s was used by all Kazakhs: “Brick tea in general use; the rich samovars, the poor copper and cast iron kettles, or simply brewed in cauldrons. The rich drink and long leaf tea” (Bagimbaev 1904: 69). An ethnographer A.N.Kharuzin, who traveled around the Bukey steppe in the late 1880s, was offered tea in every yurt that was encountered on the way – it was impossible to let the guest go without tea (Nekrasova 1915: 18). In 1894, the Kyrgyz Steppe Gazette talked about commemorations in the Karkaraly district, where “meat, koumiss, tea, and boursaks were abundant in abundance,” for which, among other things, 100 pounds of tea, a few heads of sugar and several dozen boursaks – pieces of unleavened dough fried in boiling fat or butter. At the end of XIX century. In many publications, tea is often mentioned as something which has long been a part of Kazakh life.

The history of the spread of tea in the Kazakh environment suggests that many factors contributed to this. Obviously, the first who introduced the Kazakhs to tea were their eastern neighbors, the Kalmyks. But its wide distribution among the Kazakhs is more closely linked with the influence of the Siberian and Volga Tatars, as well as the Russians. We assume that at first tea became a habit among merchants, caravan-bashi – those Kazakhs who traveled around for business more often and talked more closely with people who already consumed tea. Through them, as well as under the influence of

interethnic contacts, tea, being an expensive product, spread primarily among the Kazakh nobility. Mass use of tea by the Kazakhs became possible during the transition to a sedentary lifestyle and changes in the economic structure. For nomads, simplicity and speed of cooking were important, which was typical in the preparation of lactic acid products. Tea drinking implies a lot of time. Since the formation of sedentary Kazakh settlements took place mainly along the river banks, more water and fuel became necessary for tea. At the same time, this entailed a change in the composition of the herd – herd horse breeding was reduced as well, and the production of kumys decreased, which was partly replaced by tea. Closer contacts with the Russian and Tatar people, for whom this drink has become in a certain sense national, also contributed to the formation of a tea culture among the Kazakhs. Kazakhs consume tea “without analyzing the time and place, before everything and after everything,” wrote M.Ya.Kittary in the middle of the 19th century. And indeed, if you look when the Kazakhs drink tea, then there are no strictly established rules for this: they drink it both before and after the main meal, by itself, for various reasons. Perhaps no treat is complete without tea.

Tea-drinking in everyday life is often arranged, for example, during regular visits of neighbors or close acquaintances, in order to mentally talk with friends, just sit with your family, etc. Tea drinking can act as a separate meal, such as breakfast (Borisovskiy 1898: 102).

Tea drinking as an integral part of the meal is necessarily included in the traditional treats accompanying the numerous Kazakh rites. It certainly rejects any traditional feast. After tea, after the washing of hands, the flow of meat follows. At the end of the meal, kumys used to be served (Kivokurtseva 1996: 8), and today instead of kumys they are having tea drinking again. N.Zh. Shakhanova describes the meal on the occasion of the first pregnancy of the young daughter-in-law, to which all the wives of relatives and neighbors were invited (Shakhanova 1990: 83.). It began with tea, then meat followed, and after the meat tea was served again (Yudahin 1965: 833). Such an order is preserved today during ceremonial meals for old people (Sadaka, tleu).

Depending on the situation, tea can be long or fast. For example, the visiting matchmakers (the most honored guests of the Kazakhs. There is a saying: “Son in law for a year, and a matchmaker for a hundred years”) immediately treat with tea and sit with them for a long time, talking. However, it is not customary to talk about the purpose of arrival at this

time, the main conversations are postponed until the end of the meal (meat). Only then you can ask “Do you have any requests or requests for me?” etc.

Quick tea drinking (in one Kazakh family they were called “tea on duty”) tripled when many people had to come to the house, but not at the same time, to congratulate or express condolences. A quick tea is made by the townspeople of the Kazakhs after the funeral – on the table in the house where they are commemorated, everything is cooked; for those who come with condolences, they quickly make tea, and after drinking it, they leave.

Varieties of tea and tea utensils. Kazakhs traditionally prefer to drink black tea. Previously, it was mostly tiled tea, which was bought from Russian and Tatar merchants. (For its preparation, leftover tea leaves were collected and old leaves were mixed, ground, moistened with rice water and, after steaming, pressed in the form of bricks or tiles (Kuftin 1926: 35). Tiled or brick tea (bricks, tactashai, tasshai) Kazakhs drank until the 50-60-ies of the twentieth century. From the second half of the twentieth century, long leaf tea was used – crumbly. The word “baikhovi”, known since the 60s of the XIXth century, comes from the Chinese “baihe” – lily (bai he cha – originally from the Chinese meant “tea from the stem and petals of some eaten lilies”). But this word was widely adopted already in the post-war USSR. Nowadays, Kazakhs call black tea “reds” (Kyzylshai). The word “red” does not indicate the color of tea leaves, but the color of tea after adding it to milk: it should not be whitish, but red, i.e. brewing should be strong. Therefore, Kyzyl shay can be translated as strong tea. (Such a translation is provided by the Kyrgyz Kyzyl tea by K.K Yudahin (Kharuzin, 1889).

In the Soviet period, of all the Moroccan Kazakhs, the most valued so-called tea was Three Elephants (Indian tea in packs in three elephants) and Tea No. 36 – 50-100 g packs. Anyone who went to Moscow, necessarily brought a large amount of this tea. Houses created large stocks – 100-200 packs. They were necessary not only because a lot of tea was spent on tea. It was also used in the gift exchange: it was considered the best gift, and donated not one by one, but 10-20 packs each; on a pack of tea, they wrapped them in small pieces of cloth (zhyrtys) for traditional gifts at commemorations or weddings. Today, with a large variety of types of tea, as a rule, not so much the brand as the volume of the package is important – usually 500-gram packs are bought, because the consumption of tea remains very significant.

The spread of tea introduced certain utensils into the life of the Kazakhs. B.A. Kuftin points

out that “porcelain dishes – cups with saucers and “kese”(wide Turkestan-type cups) came into use along with the spread of tea consumption” (Konovalov, 1986: 88). Traditionally, the Kazakhs kept wooden dishes in special felt bags – ayak cap, elongated in length and rounded down.

They also began to store and transport porcelain kese. Nowadays, almost every home has wooden spoons – they pour milk in a kese.

Kazakhs had small chests for storage of tea – shay sandyk – wooden, often on legs with a loop and a lock. All that was needed for tea drinking was kept there: besides the tea itself, sweets, sugar, cookies, and sweets.

Brewing methods. Today, Kazakhs drink black tea with milk, but this was not always the case: A.N.Kharuzin noted that Kazakhs drink tea without sugar, while drinking, “sometimes they pour milk into tea”(Kharuzin, 1889: 253). Tea brewing methods were influenced by the traditions of tea drinking of those peoples from whom the Kazakhs borrowed tea. The northern Kazakhs, including the Bukeys, to whom tea came from the Tatars and Russians, apparently first drank black tea without milk. The Kazakhs, who are neighbors of the Kalmyks, drank the so-called Kalmyk tea – with milk, butter and salt. The Kazakhs of the Altai, until recently, added tea, in addition to milk, cream, sour cream, talkan, lard, salt or sugar (Shakhanova, 1998: 75).

The Kazakhs of the south-western regions of Kazakhstan, like the Turkmen of the north-western Turkmenistan, brewed tea in the original way described by V.V. Pokhlebkina: “They brew tea not with water, but with milk, and the milk is very fat, usually camel. This method is acceptable in hot climates of the desert and saline steppes, where the lack of water and the presence of hot sand (60-80 ° C) creates the basic conditions for such brewing. A large 2.5-3 liter earthenware kettle is placed in hot sand for warming up. Then, low-grade Indian low-end black tea (Kyrgyz-Russian dictionary / Comp 1965: 833) is poured into it, at the rate of 25 g per 1 l of milk, “moistened” with a glass of boiling water so that the tea will “finish off” a little, and then immediately pour boiling camel’s milk and maintain 10-15 minutes, then pour the cream formed during the preparation of the chal. After that, the tea must be strongly shaken in the teapot several times from one dish to another so that it mixes (Kuftin 1926: 108).

Today, the most common method of brewing tea is the next. (We drank such tea in the Volga region, in the Altai Mountains and in different regions of Kazakhstan). In the teapot they make strong fresh, necessarily hot tea leaves, for which this teapot is

kept on a small hot plate. Near the hostess is also some kind of pot of boiled milk and a boiling samovar. First, a bowl (kese) is poured with milk (usually it is poured with a wooden spoon, and then it is one full spoon), then tea from the teapot is added through a sieve, then boiling water is added from the samovar. Moreover, the ratio of brewing and boiling water is set “by feeling”, so each time the tea has a slightly different taste.

Of course, today there are individual preferences in how to drink tea. Some, especially townspeople, drink tea without milk, with lemon, honey, etc. Naturally, the Kazakhs, who inhabit vast areas, have local ways of brewing tea.

Tea ceremony. It can be assumed that together with tea drinking to the Kazakhs they passed on to some knowledge about the existence of special rules for drinking tea “tea ceremony”. Otherwise, what can be explained by the fact that they quickly developed tea etiquette. By tradition, the Kazakhs, like all the peoples of Central Asia, are not allowed to pour the bowl to the brim: the less tea is poured into a cup, the more respect is given to the guest. However, in different regions of Kazakhstan, the amount of tea “with respect” is different. So, a young Kazakh woman, having arrived from the Alma-Ata region in Kyzyl-Orda, was very surprised when they poured tea almost on the bottom – they had to pour much more in the village. She was told that if you pour a lot, it will be accepted as if you want the guest to leave sooner (Glukhov 1927: 122).

Tea, as before, is drunk a lot; the hosts all the time watching that the guest drinking bowl was not empty. There are several ways to show that you are already drunk. One of them was described by M. Ya. Kittary (Fielstrup, 1927: 82) and A.N. Kharuzin: “The visitor is served first with tea, which he drinks

five, six or more cups, indicating the reluctance to drink more by tilting the cup on a saucer (like our peasants)” (Shakhanova, 1990: 84). Other ways are to put the bowl on its side; put the spoon in a bowl or on top of the rim of the cup. But even when the guest makes it clear that he no longer wants tea, the hosts usually persuade him to drink another drink.

Conclusions

Today, the Kazakhs have this skill in women, they usually pour tea, and they have special requirements. It is necessary to brew tea well, to pour it properly, to serve the guests in the order that the tradition requires, and then not to confuse where their drinking bowl is when the guests start serving empty cups. It is also necessary to ensure that there is always boiling water, and the tea leaves do not end, and the dishes should not be booming. A woman pouring tea should sit properly, not turn her back to the guests. It can be said that in the entire tea ceremony, the figure of a woman pouring tea acquired a special aesthetic value from the Kazakhs. As Kazakhstan ethnographers testify, the same attitude persists today: “A woman pouring tea should be agile and attentive... Just because she is in the center of attention, she should look neat, her movements should be smooth. Guests like to watch her. The atmosphere of the feast, the level of reception of guests depends on her ability to pour and serve tea.

Tea drinking today is an important part of western everyday life. In this gentle tinkle of cups and saucers, a sweet manifestation of female hospitality, common concerns about cream and sugar, we find unconditional confirmation that the cult of tea is recognized everywhere. To some extent, this allows us to hope that the West and the East can meet on the soil tastes”.

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UDC 06.51.77

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Theoretical foundations of regional monetary integration and the practice of forming its prerequisites in the EAEU

The article discusses the historical, political and fundamental economic prerequisites for the transition to monetary integration within the framework of the EAEU at the present stage of its development. The purpose of the study is to identify the readiness degree of the EAEU member countries transition to integration in the monetary sphere in modern conditions. The study makes it possible to substantiate the idea that a currency union in the framework of regional economic integration should be viewed as a natural result of significant volumes of goods, services and investments movement between member countries. The necessity and possibility of creating a currency union are determined and evaluated from the standpoint of the trade intensity and investment flows between the member countries of the Eurasian Economic Union. The methodology of the study is based on the key ideas of the "optimum currency areas" theory. The statistical data on foreign investments in the EAEU countries, on the share of gross volumes of mutual trade in the total volume of foreign trade in the EAEU as a whole and in the EAEU member states, are given. Analysis of mutual trade and investment indicators showed an insufficient level of economic convergence in the EAEU, assessed from the standpoint of the mutual trade intensity and mutual foreign direct investment intensity. At the moment, the volumes and dynamics of trade and investment flow between the EAEU member states do not cause an objective need for a transition to monetary cooperation at the level of a currency union. This research allows us to consider the problem of transition to monetary integration between the countries participating in the EAEU from the importance standpoint of economic prerequisites. The practical significance of the work lies in the substantiation of the objective prerequisites for the formation and creation of a monetary union in the course of regional integration processes development.

Key words: Currency union, optimal currency area, mutual trade intensity, mutual investment intensity, customs union.

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Аймақтық валюталық интеграцияның теориялық негіздері және оның ЕАЭО шеңберіндегі алғышарттарының қалыптасу тәжірибесі

Бұл мақалада ЕАЭО-тың қазіргі даму сатысында валюта одағын құрудың негізгі тарихи-саяси және экономикалық алғышарттары қарастырылған. Зерттеудің негізгі мақсаты – ЕАЭО-қа мүше-елдердің қазіргі жағдайда валюталық интеграцияны құруға дайындығын анықтау. Мақалада жүргізілген зерттеу келесі идеяны негіздеуге мүмкіндік береді: аймақтық экономикалық интеграция шеңберінде валюталық одақты мүше-елдер арасындағы тауарлардың, қызметтер мен инвестициялардың айтарлықтай көлемінің қозғалысының заңды нәтижесі ретінде қарастырған жөн. Еуразиялық экономикалық одаққа мүше-елдер арасындағы сауда және инвестициялық ағымдардың қарқындылығы тұрғысынан Валюта одағын құрудың қажеттілігі мен мүмкіндігі анықталады және бағаланады. Зерттеудің әдіснамасы оңтайлы валюталар теориясының авторларының негізгі идеяларына негізделген. Зерттеудің әдіснамасы «оңтайлы валюта аймағы» теориясының негізгі идеяларына негізделген. Мақалада ЕАЭО елдеріне бағытталған шетелдік инвестициялар бойынша, тұтастай ЕАЭО-

тағы жалпы сыртқы сауданың және оның ішіндегі мүше мемлекеттердің өзара сауда көлемдерінің үлесі туралы статистикалық деректер келтірілген. Өзара сауда және инвестиция көрсеткіштерінің талдауы ЕАЭО-қа мүше-елдердің экономикалық конвергенциясының жеткіліксіз деңгейін көрсетті. Қазіргі кезде ЕАЭО-қа мүше-елдер арасындағы сауда және инвестициялық ағымдардың көлемдері мен серпіні валюта одағы деңгейіндегі ынтымақтастыққа өтуге объективті қажеттілікті тудырмайды. Жүргізілген зерттеу экономикалық алғышарттардың маңыздылығы тұрғысынан мүше-елдердің валюталық интеграцияға көшу мәселесін қарастыруға мүмкіндік береді. Жұмыстың тәжірибелік маңыздылығы аймақтық интеграциялық үдерістерді дамыту барысында валюта одағын қалыптастыру мен құрудың объективті алғышарттарын анықтауына негізделеді.

Түйін сөздер: Валюталық одақ, оптималды валюталық аймақ, өзара сауданың қарқындылығы, өзара инвестициялардың қарқындылығы, кедендік одақ.

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Теоретические основы региональной валютной интеграции и практика формирования ее предпосылок в ЕАЭС

В статье рассматриваются историко-политические и основополагающие экономические предпосылки перехода к валютной интеграции в рамках ЕАЭС на современном этапе его развития. Цель проведенного исследования – выявление степени готовности перехода стран-членов ЕАЭС к интеграции в валютной сфере в современных условиях. Проведенное в статье исследование позволяет обосновать идею о том, что валютный союз в рамках региональной экономической интеграции должен рассматриваться как закономерный результат значительных объемов перемещения между странами-участниками товаров, услуг и инвестиций. Необходимость и возможность создания валютного союза определяется и оценивается с позиций интенсивности торговых и инвестиционных потоков между странами-участниками Евразийского Союза. Методология проведенного исследования основана на ключевых идеях авторов теории оптимальных валютных зон. Приведены статистические данные об иностранных инвестициях, поступивших в страны ЕАЭС, об удельном весе валовых объемов взаимной торговли в общем объеме внешней торговли по ЕАЭС в целом и по государствам-членам ЕАЭС. Анализ показателей взаимной торговли и инвестиций показал недостаточный уровень экономического сближения стран-участниц ЕАЭС, оцениваемого с позиций интенсивности взаимной торговли и взаимных прямых иностранных инвестиций. На данный момент объемы и динамика торговых и инвестиционных потоков между государствами-участниками ЕАЭС не вызывают объективной потребности к переходу к валютному сотрудничеству на уровне валютного союза. Проведенное исследование позволяет рассмотреть проблему перехода к валютной интеграции между странами-участниками ЕАЭС с позиций значимости экономических предпосылок. Практическое значение работы заключается в обосновании объективных предпосылок формирования и создания валютного союза в ходе развития региональных интеграционных процессов.

Ключевые слова: Валютный союз, оптимальная валютная зона, интенсивность взаимной торговли, интенсивность взаимных инвестиций, Таможенный союз.

Introduction. Evaluation of the development level of integration processes within the Eurasian Economic Union (EAEU) and the prospects for their deepening in the future is carried out in many areas. Among them, an important place is occupied by the study of the possibility and need for a transition to integration in the monetary sphere. Currency integration within the framework of the EAEU implies stabilization of exchange rates, the creation of a unified system of cross-border settlements, consolidation of currency and financial markets, and the creation of a currency union in the future – the final link of monetary integration. The issue of creating a currency union has been repeatedly

discussed by the heads of the allied states, but neither they nor the experts in the field of economic integration can find a rational solution to the task.

The article discusses the main economic prerequisites and the readiness of the EAEU member countries to join the currency union. The decision to accelerate the transition of the EAEU to a higher integration level, according to analysts, is largely due to the current foreign policy situation. However, the integration is an objective process. Therefore, the lack of a thorough phased scenario of convergence in the monetary cooperation sphere, a reasonable choice of the necessary elements of the future EAEU monetary system, the determination of expedient

dates for the transition to a new integration level, the hasty adoption of the most important economic decisions may become factors of a new systemic risk for economies EEU countries.

Literature review. The works of R. Mandell served as the basis for numerous studies in the field of monetary integration by representatives of various economic schools. Scientists have identified the most significant criteria, compliance with which is considered mandatory to maintain stability in the economies of the currency area countries. R. McKinnon as a necessary condition determined the mutual openness of the economies of the allied states (McKinnon, 1963: 717-725). P. Kenen added diversification of national economies. The scientist considered fiscal integration to be another measure of the readiness of national economies to join the optimal currency area (Kenen, 1969: 41-60). J.M. Fleming came to the conclusion that in the countries of the optimal currency area prices should be similar (Fleming, 1971: 467-488). J. Ingram as a prerequisite for the optimality of the currency area considered the integration of financial markets (Ingram, 1969: 95-100). According to R. Vobel, the important conditions for the formation of the currency area are the volatility of real exchange rates and the correlation of economic shocks (Vaubel, 1976: 429-470). The need for institutional and political integration within the framework of the monetary zone was substantiated in the research of M. Mussa (Mussa, 1997: 217-221), I. Ishiyama (Ishiyama, 1975: 344-383) and R. McKinnon (McKinnon, 1997: 227-229).

Material and Methods. This research aims to identify the objective economic prerequisites for monetary integration in the framework of the EAEU. The general methodological basis of the thesis is the general scientific methods of knowledge used for the theoretical analysis of economic phenomena.

The authors use the general scientific principles of universalism, comprehensiveness, system, communication, development, as well as the fundamental principles of economic science in the field of international economic relations at the global and regional level.

Specialized theoretical and methodological prerequisites were the conceptual provisions on international economic integration, the interaction of the Eurasian region states and the development of the Eurasian Economic Union. The study was carried out using both general theoretical and private economic methods (the unity of historical, logical and statistical methods).

The study used two complementary approaches. The first approach is analytical. It is based

on identifying the contradiction between the requirements for building an optimal integration system in the Eurasian region and the emerging practice of its formation. The second approach is prognostic. It is based on the premise that overcoming this contradiction is possible due to the sustainable and progressive development of the Eurasian Economic Union, taking into account the political and economic realities of our time.

The information and empirical base of the study was compiled by materials of international and state organizations: The Statistical Service of the Eurasian Economic Commission, the Eurasian Development Bank, the central banks of the EAEU member countries, statistical bulletins and analytical reviews of the Eurasian Economic Commission, monographic literature of domestic and foreign scientists, empirical and analytical materials, hosted on the Internet.

Results and Discussion. The deepening of regional economic integration forms the prerequisites for the formation and development of monetary integration. At the same time, the policy of most countries, aimed at accelerating the integration processes, is due to the additional benefits from the formation of a single economic space. As it is known, R. Mandell, on the basis of the research, concluded that it is easier to withstand the "supply and demand shocks" within the framework of country associations that allow free movement of goods, labor and capital (Mundell, 1973: 114-132).

In the study of issues and problems of monetary integration within the framework of integration unions of states, the works of R. Mandell undoubtedly played an important role. He introduced the term "optimal currency area". This term is currently used to designate a geographic region in which the single currency is used as a means of payment, or national currencies with mutual fixation of exchange rates. In this case, in relation to the currencies of third countries, the regime of joint navigation is applied.

R. Mandell insisted that a fixed exchange rate regime, which would reduce currency risks and reduce costs associated with the conversion of national currencies, is necessary to increase the mobility of production factors. At the same time, the scientist defined the unrestricted movement across the state borders of goods, labor, and financial resources as the main criterion for the formation of the currency zone (Mundell, 1961: 657-665).

The identification of the prerequisites for the integration of the EAEU countries in the monetary sphere and the possibility of its formation in the form of a monetary union is based on the theory of optimal

currency zones. In the framework of the traditional approach, the goal is to determine the economic basis, which allows to proceed to the development of monetary integration processes in the EAEU.

In our opinion, for the transition within the framework of the EAEU to the creation of mechanisms for monetary integration, it is necessary to take into account, first of all, the following two fundamental economic prerequisites:

- The intensity of mutual trade;
- The intensity of mutual investments.

The volume and intensity of mutual trade and mutual investment flows predetermine the significance of mutual monetary and financial flows, which in turn create or do not create the need for the development of monetary integration within the integration unions.

Considering the possibilities of the formation and development of integration in the monetary sphere within the EAEU, first of all it is necessary to dwell on the historical prerequisites for the creation of this integration association.

The most important historical prerequisite for economic cooperation of the Eurasian Economic Union member states is their entry into the unified national economic complex of the USSR in the past. After the collapse of the Soviet Union and the transformation of the former republics into independent states, national economies were created with their own national currencies. Each of the new states was looking for new ways to develop their economies, going far beyond the limits of the former Soviet economic space. This, accordingly, led to the rupture of the existing economic interrelations and disintegration processes.

A number of attempts by the former Soviet republics to restore economic cooperation were expressed in the emergence of various projects and agreements to create new unions and associations. Some of them remained at the level of projects, agreements or unstable groups (Central Asian Union, Customs Union of Belarus, Kazakhstan and Russia, Common Economic Space of Belarus, Kazakhstan, Russia and Ukraine). Some unions as economic associations today exist largely formally (CIS). The EurAsEC created in 2000 and quite successfully manifested itself was abolished in 2015 and was formed as Eurasian Economic Union.

The main achievement of the integration processes intensification between the post-Soviet republics was the organization of the Customs Union (CU) of Russia, Belarus and Kazakhstan in 2010. Within the CU, a number of goals set for them were achieved: customs duties and payments were

abolished in the mutual trade of the participating countries, quality assessment and certification methods were unified, a single customs space was created, and a single database on some economic activity aspects was organized. Also, on the entire territory of the CU, the citizens equal rights of the participating countries were ensured in employment.

The CU of the three states served as a serious economic basis for the creation of the EAEU. The agreement on its creation came into force on January 1, 2015. According to this agreement, within the territories of the EAEU member countries, freedom movement of goods, services, capital and labor, and a coordinated, unified policy in economic sectors are ensured. Within the framework of the EAEU, the Customs Union continues to be maintained, of which Armenia and Kyrgyzstan, which later joined the EAEU, are also participants. An important aspect of the Union's activities has become the system of centralized distribution of customs duties paid when crossing the borders of the Common Economic Space. In addition, the CU has a mechanism for coordinated collection and distribution of indirect taxes.

At present, the further development of the EAEU raises many questions, the solution of which requires addressing both the theoretical foundations of the regional integration development and the practice of its implementation within the integration union. The most important problem in Union member countries is integration deepening of the national economies.

In this vein, scientists and practitioners have repeatedly raised and continue to discuss the possibilities and prospects for the integration of the Union member countries in the monetary and financial sphere. At the same time, a lot of attention is paid not only to the analysis of existing trade, financial and investment flows, but also to the use of national currencies in international settlements. A number of scientific studies, publications and statements in the media are devoted to assessing the possibilities of currency integration, the creation of a monetary union within the EAEU and the introduction of a single supranational currency.

A study of the world's leading scientists' publications in the regional monetary integration development, scientific works of authors from the EAEU countries, agreements and treaties between the EAEU member countries led to the conclusion that, for the creation and development of monetary integration, certain economic prerequisites are necessary. In our opinion, these include the above-indicated level of mutual trade intensity and mutual investments intensity in the EAEU. An analysis of

the current volume, the dynamics of mutual trade and investment flows development, and an assessment of the prospects for their growth allows us to draw conclusions about the possibilities for the development of monetary integration processes and the prospects for creating a currency union within the EAEU.

The intensity of mutual trade. Trade is a fundamental factor in creating and deepening economic integration. The increase in mutual trade accelerates the regional integration process of countries. Let's analyze the volume of mutual trade of the countries participating in the EAEU (Table 1):

Table 1 – Data on the share of mutual trade gross volumes in the total volume of foreign trade for the EAEU as a whole and for the EAEU member states separately for 2011 and 2017*

State	2011		2017	
	Share of trade with third countries	Share of mutual trade	Share of trade with third countries	Share of mutual trade
Armenia	-	-	70,4%	29,6%
Belarus	53,6%	46,4%	47,5%	52,5%
Kazakhstan	81,8%	18,2%	77,2%	22,8%
Kyrgyzstan	-	-	61,6%	38,4%
Russia	92,5%	7,5%	91,0%	9,0%
CU / EAEU	88,0%	12,0%	85,4%	14,6%

*Note: Compiled by the authors based on data provided in sources. (Eurasian Economic Commission, 2012: 13), (Eurasian Economic Commission, 2017: 3)

At the end of 2011, mutual trade with the member countries of the Customs Union accounted for most of the Belarus – 46.4%, for the Kazakhstan it was 18.2% and for the Russian Federation only 7.5% of foreign trade turnover. The overwhelming majority of the foreign trade of these three countries accounted for trade with third countries. So, in the total volume of the Russian Federation foreign trade, this part was 92.5%, for Kazakhstan – 81.8%, and for Belarus – 53.6%.

In 2017, compared with 2011, the share of mutual trade in the total volume of the EAEU foreign trade increased from 12.0% to 14.6%. The share of mutual trade in Belarus increased from 46.4% to 52.5%, in Kazakhstan from 18.2% to 22.8%, in the Russian Federation from 7.5% to 9%.

Consequently, according to the data for 2017, the Belarus is the most focused on the market of the Customs Union – 52.5% and Kyrgyzstan – 38.4%

In general, the share of mutual trade of the EAEU countries in 2017 amounted to 14.6%. Such a low figure is explained by the fact that Russia is the largest economy in the region, and the share of trade with third countries in this state is over 90%. The large size of the Russian economy does not allow it to direct the bulk of its foreign trade flows to the

markets of its partner countries in the EAEU. The size of the other EAEU countries' economies is many times smaller than the Russian economy. So, in 2017, Russia's GDP, according to the Eurasian Economic Commission, amounted to 1,577.8 billion dollars US. Belarus's GDP is 54.4 billion dollars US or 3.4% of the Russian Federation's GDP, Kazakhstan – 159.4 billion dollars US (10.1%), Armenia – 11.5 billion dollars US (0.7%), Kyrgyzstan – 7.5 billion dollars US (0.4%) (Eurasian Economic Commission, 2018: 44).

An increase in the share of mutual trade can be called as a positive prerequisite. This result indicates that the EAEU member countries began to trade more among themselves. However, despite the growth over the past 10 years of the mutual trade indicator within the EAEU, the possibilities for its further growth in the near future are limited. The reasons for this situation lie in a huge difference in the size of the economy and markets of Russia and other Union members. Also, own trade and other economic interests of all member countries are of great importance.

As it is known, trade flows generate currency flows, financial flows and settlement operations. If mutual trade within an integration union occupies

less than 15%, as in the EEU, then, accordingly, it does not cause a strong need to regulate and facilitate monetary and financial flows and the development of monetary integration. The main part of the cash flows associated with foreign trade of the EAEU participants rushes beyond it. Transaction costs associated with their exchange of national currencies and lending of mutual trade are not so great as to seek to coordinate the exchange rates of national currencies and create a currency union.

By analyzing the structure and geography of exports and imports of the EAEU countries, we can make the following conclusions: firstly, the prevalence of raw materials is observed in foreign exports, while imports are saturated with end-use

products; secondly, at present, the participating countries need markets outside the EAEU, as well as the procurement of high-tech goods, the production of which in the framework of the union is yet to be established. Dependence on external sales markets, as well as on the supply of products from third countries, not only does not contribute to the deepening of integration, but can have a restraining effect on the development of economic ties within the Eurasian Union.

The intensity of mutual investments. Let us analyze the foreign investment flows in the EAEU, including the volume of investments received in the countries from the Union member states and retired in the opposite direction, including foreign direct investment (FDI) – Table 2:

Table 2 – Foreign investments in the EAEU countries, for 2013-2017, million USD*

State	Year							
	2014		2015		2016		2017	
	FDI	Including from EAEU	FDI	Including from EAEU	FDI	Including from EAEU	FDI	Including from EAEU
Armenia	403,9	108,5	178,3	185,6	338,1	90,9	249,8	0,9
Belarus	1 862,0	618,0	1 652,3	736,8	1 246,9	543,8	1 276,4	462,7
Kazakhstan	7 224,6	525,3	6 379,4	191,3	16 900,7	287,2	4 654,2	492,9
Kyrgyzstan	348,0	48,4	1 141,7	512,5	615,9	279,5	107,2	78,1
Russia	22 031,3	459,5	6 853,0	513,1	32 538,9	414,3	28 557,5	91,3

*Note: Compiled by the author based on the data provided in the source (Eurasian Economic Commission, 2017: 11-13).

For a more accurate study of the capital mobility within the community consider the proportion of foreign investment from the EEU countries.

From the second table data it can be seen that, as in the foreign trade of the EAEU countries, the overwhelming majority of investment flows falls on countries outside the EAEU. Mutual investment flows in their size are many times smaller than flows from other countries.

In Belarus the largest investments from non-community countries are investments from Germany, directed to the mining industry, and from France, attracted to the alcohol industry and telecommunications.

For the Kyrgyz Republic, attracting foreign investment is a priority for the country's

macroeconomic development. The main volume of investments in Kyrgyzstan comes from the EEU countries, about 45%.

The Russian Federation and the Republic of Kazakhstan have an insignificant share of foreign investments from the EEU countries. These countries are investing more in community countries than accepting.

Mutual investment flows are largely dependent on the GDP of each integration union country. Usually the volume of investment from large countries is greater. Therefore, for Russia and Kazakhstan, the significance of investments from other EAEU countries is low. These countries mainly receive investments from other countries of the world, mainly from the European Union and USA (table 3).

Table 3 – Direct investment flows by country for 2017*

State	FDI	Including from EAEU	Including from CIS	Including from another countries
Kazakhstan	4 654, 2	492, 9	4, 7	4 156, 6
Russia	28 557, 5	91, 3	7, 1	28 459, 1

*Note: Compiled by the author on the basis of data presented in source (Eurasian Economic Commission, 2017: 11-13).

About 88-89% of investment flows go to Kazakhstan from other countries of the world, and 99% in Russia. Such high rates are explained by the fact that the economies of these countries are larger than others.

The distribution of mutual investments in the EAEU countries by industry provides an opportunity to assess the degree of interpenetration of capital within individual industries. More than 40% of mutual FDI of the studied countries falls on the fuel and energy complex. A significant share in mutual investments belongs to such industries as: non-ferrous metallurgy (about 12%), transport (approximately 9%), communications and information technology (8%). The shares of the agri-food complex and the financial sector are also significant: these industries account for 6% of the total mutual FDI.

At the same time, the sectoral focus of the EAEU countries investments differs significantly. Thus, more than 50% of Russia's accumulated direct investment was directed to the fuel and energy complex, 13% to the non-ferrous metallurgy sector, 9% to the communications and information technologies sector. About 6% is in the financial sector, the same amount in transport.

The sectoral structure of the accumulated FDI of Belarus includes the fuel complex (more than 45%), machine building (23%), the agri-food sector (22%), transport (8%) and only slightly finance (about 1%).

The main share of external accumulated in the EAEU FDI of Kazakhstan accounts for agriculture and food (33%), transport (over 20%), tourism (approximately 17%), non-ferrous metallurgy (6%) and the chemical sector (6%).

Most of Armenia's and Kyrgyz's investments in the EAEU have been invested in the agro-industrial complex (Kuznetsov, Kvashnin, Sidorova, 2016: 68).

The increase in the share of mutual direct investments, as well as their sectoral structure in the EAEU member countries, confirm the interest of entrepreneurs in investing funds in certain sectors of the economy in order to expand business in the entire

union. In addition, investments in the real sector stimulate economic growth, which has now acquired special significance for all EAEU countries.

An organization such as the Eurasian Development Bank (EDB) also contributes to the movement of capital on the EAEU territory. The EDB manages the funds of the Eurasian Foundation for Stabilization and Development (EFSD). Financial loans are the main form of providing resources to the fund, they are allocated only to the governments of the participating States. With the help of financial loans, anti-crisis programs are supported, the specific parameters of which are determined by the government of the borrowing country itself. Such programs should meet the goals of the EFSD and include measures to achieve macroeconomic stability, improve budget parameters, balance of payments, entrepreneurial climate, and develop financial and economic cooperation between the participating states.

The fund's investment loans are allocated primarily to support large investment projects that are integrative in nature, for example, in the field of energy and infrastructure. Also, loans can be directed to support large national investment projects, they can be attracted both by the states themselves and by companies implementing interstate investment projects.

Conclusion

At the moment, the economic prerequisites for monetary and financial integration have not been created yet in the EAEU. There are problems in the economic integration development level of the participating countries, assessed by the intensity of mutual trade and investment flows. The share of mutual trade in the total volume of foreign trade in the EAEU is only 14.6% – this is a very low result. Also, there are no basic prerequisites for financial integration due to low rates of mutual investments. The problem is also in the direction of investments, the main investment flows are directed to the mining industry and metallurgy.

It should be noted that the EAEU has extensive programs that including international experience in solving the tasks of ensuring free movement of capital, organizing information exchange, regulating and developing the foreign exchange market, creating and implementing monetary policy, etc. But these tasks do not imply the creation of a single currency, they only contain landmarks that allow to take the first step to a currency union. Until the formation of a single

financial market in 2025, the Eurasian Economic Commission does not see the point in switching to a single currency.

At the moment, the EAEU member countries should study and use the experience of using currency, settlement and payment mechanisms of other integration associations. Only after creating a reliable economic platform they can move on to the stage of forming a single currency area and the transition to a currency union.

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UDC 19.01.09

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Why Study Journalism: Motivation of Future Kazakh Journalists

This paper is part of a large international research project: Journalism Students across the Globe: Professionalization, Identity and Challenges in a Changing Environment. Journalism education in Kazakhstan, like elsewhere, needs to account for changes in the information environment. This project examines the motives to study journalism by students from Kazakhstan. Do today's student motivations reflect an understanding of new media with its text, images, infographics, data, and new genres; and how should a journalist combine knowledge of the various media fields? Study of the motivations of Kazakh students in this context is important for both national interests and aligning Kazakh journalism education with international expectations. An online survey used open-ended questions to elicit replies. Questions focused on career opportunities for journalism students, aspects of education that motivate students and whether a university degree is necessary to become a professional journalist. Findings were compared to historical journalistic motivations in Kazakhstan. Students now are driven by different motives. In the past journalistic education was a building block for a career in politics or writing. Now students know various fields of journalism and what the fields offer. Journalism students prefer TV, but a high percentage also prefer the increasingly important online environment. The formula for modern education in the age of information and new technologies is an ongoing systematic process of learning for both educators and students, driven by motivations that are important not only within the walls of universities, but in everyday life.

Key words: journalism education, motivation, new media, state independence, Kazakhstan.

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Неліктен журналистиканы зерттеу болпшақ Қазақстандық журналистерді насихаттау

Бұл мақалада үлкен халықаралық зерттеу жобасы жарыққа шығады: жахандық журналистика: кәсібилік, сәйкестендіру және өзгеретін ортадағы проблемалар. Журналистік білім беру Қазақстандағы ақпараттың қалай болғанына қарамастан, білім беруді жетілдіруді қажет етеді. Бұл жобада қазақстандық студенттердің журналистиканы үйренудің мотивтері талқыланады. Күнделікті мотивтерден оқушыларға олардың жаңа мәтіндерді, суреттерді, инфографиканы, деректерді, жаңа жанрларды түсінуді және БАҚ-нің әртүрлі саласындағы білімді журналист қалай біріктіруді қарастырады. Бұл тұрғыда қазақстандық студенттердің мотивациясын зерттеу ұлттық мүдде үшін де, қазақстандық журналистік білімнің халықаралық үміттерге сәйкес келуі үшін де маңызды. Онлайн-сауалнама жауап алу үшін ашық сұрақтарды пайдаланды. Студенттік журналистердің мансаптық мүмкіндіктері, оқушыларды ынталандыратын білім беру аспектілері және кәсіби журналист болу үшін жоғары білім алу қажеттілігі туралы сұрақтар қойылған. Нәтижелер тарихи призма арқылы қарастырылды. Студенттер әрқашан әртүрлі мотивтермен қозғалыста болады. Бұрын журналистік білім саясатта немесе жазу саласында мансапқа негіз болатын. Енді студенттер-журналистер телевидениені жақсы көреді, бірақ үлкен пайызы онлайн ортаны маңызды деп санайды. Ақпараттық және жаңа технологиялар заманындағы қазіргі білім формуласы мұғалімдер мен оқушылар үшін ғана емес, сонымен қатар күнделікті өмірде университеттер қабырғаларында маңызды рөл атқаратын үздіксіз жүйелі процесс болып табылады.

Түйін сөздер: журналистік білім, мотивация, жаңа медиа, мемлекеттік егемендік, Қазақстан.

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Зачем изучать журналистику: мотивация будущих журналистов

Эта статья является частью большого международного исследовательского проекта: Глобальная журналистика: профессионализация, идентичность и проблемы в меняющейся среде. Журналистское образование в Казахстане, как и везде, должно учитывать изменения в информационной среде. В этом проекте рассматриваются мотивы изучения журналистики студентами из Казахстана. Отражают ли сегодняшние мотивы студента понимание новых медиа с их текстом, изображениями, инфографикой, данными и новыми жанрами; и как журналист должен объединять знания различных областей СМИ? Изучение мотивации казахстанских студентов в этом контексте важно как для национальных интересов, так и для приведения казахстанского журналистского образования в соответствии с международными ожиданиями.

В онлайн-опросе использовались открытые вопросы для получения ответов. Вопросы были сосредоточены на возможностях карьерного роста студентов-журналистов, аспектах образования, которые мотивируют студентов, и на том, необходимо ли высшее образование, чтобы стать профессиональным журналистом. Результаты были рассмотрены сквозь историческую призму. Студенты всегда движимы разными мотивами. В прошлом журналистское образование было основой для карьеры в политике или писательстве. Теперь студенты-журналисты предпочитают телевидение, но большой процент считает более важной онлайн-среду. Формула современного образования в век информации и новых технологий – это непрерывный систематический процесс обучения как для преподавателей, так и для студентов, движимых мотивами, которые важны не только в стенах университетов, но и в повседневной жизни.

Ключевые слова: журналистское образование, мотивация, новые медиа, государственная независимость, Казахстан.

Introduction. The first program for journalism education was introduced in Kazakhstan in 1934 at Al-Farabi Kazakh National University (KazNU). Today it is the largest school of journalism in Kazakhstan with about 700 students studying in three languages: Kazakh, Russian and English, through baccalaureate, master, and doctoral level education. There are about 22 public and private universities offering degrees in journalism in Kazakhstan. Today's students are the first generation born and raised in an independent Kazakhstan, free of the ideology of Marxism-Leninism and Communist Party standards. In addition to gaining independence, these young people are emerging into a world of new technologies, the Internet and private independent media. After Kazakhstan joined the Bologna Convention in 2003, thousands of students participated in exchange programs with European and American universities and further continued graduate studies at the world's top universities with the support of a state scholarship program called, "Bolashak." Understanding the motivations of these students as they train for media professions is important for understanding journalistic expectations in Kazakhstan and where they fit into the larger world view of journalism students.

This article presents the results of a survey conducted in Kazakhstan as part of the global survey

project, Journalism Students Across the Globe: Professionalization, Identity and Challenges in a Changing Environment. Journalism students from 42 countries participated in a global survey, including two universities from the Central Asia: American University of Central Asia (Kyrgyzstan) and al-Farabi Kazakh National University (Kazakhstan). The global survey was initiated and organized by Claudia Mellado, University of Santiago (Chile) and Folker Hanusch, Queensland University of Technology (Australia). KazNU was chosen to participate in the project because of the large number of journalism majors, and because it is one of the oldest journalism education institutions in the region as successor to the Communist Institute of Journalism established in 1934. As Kazakhstan grows as a new nation its journalism students face new challenges associated with a new media environment as well as those associated with a new nation.

Literature review. The motives for choosing a degree in journalism have been shaped by the mentality of the Kazakh nation for several centuries, including a close association with Russia. It is important to examine the motivations for those students who seek to be journalists in this new media environment, and today's media environment was shaped by Kazakhstan's past. There were three periods that formed the foundation for the

journalism profession in Kazakhstan. The first period occurred in the late 1800s and early 1900s with the founding of first the newspapers in Kazakh and Russian languages. The second period is from 1917 to 1991 when Kazakhstan was influenced by the Soviet Union. The third period occurs from 1991 to the present once Kazakhstan became independent.

Kazakh Media Histor. 1stperiod: Foundation of the first newspapers in Kazakh language.

The first Kazakh newspapers, *Turkestan Ualayatyryn Gazeti* (1870-1882) and *Dala Ualayatyryn Gazeti* (1888-1902), were established in Kazakhstan in the second half of the 19th century in the national outskirts of tsarist Russia. The independent newspapers *Kazakh Gazeti* (1907), *Serke* (1907), and the magazine *Aikap* (1911-1915) were created at the beginning of the struggle against the tsarist autocracy (Subhanberdina, Dautov 1995). The first journalists became public figures who enlightened readers. Early journalists Mukhamedzhan Seralin, Akhmet Baitursynov, and Myrzhakyp Dulatov established the primary motive for the profession of journalist during the first phase. Their mission was to be patriotic. Being a journalist in Kazakhstan meant more than searching for, preparing, and disseminating information. Kazakh educators promoted the role of journalism as a defender of national interests and national values. Therefore, any event was presented from the perspective of its impact on national values. As a result today's journalists continue to evaluate the benefits, burdens and general impact of events on the nation with more vigor than the usual "Five W's – What, Who, When, Where, Why." For Kazakhs journalism is not just a profession but a national duty. Therefore, Kazakh journalism is closely related to politics. The journalist was, and is, expected to be a public figure and a patriot. (Abdiraman, 2015) Journalists were the spiritual and moral leaders of the Kazakh nation: Abai, Shokan Valikhanov and Ibrahim Altynsarin. The journalism of the country is a chronicle, and the historical memory and practice of journalism was shaped by these progressive sons of Kazakh people who established the national mass media.

2nd period: Journalism in the Soviet Union. The first Soviet newspapers opened after the Bolshevik Revolution of 1917. In May 1923 there were 24 newspapers in Kazakhstan, 17 of which were in Russian, 6 in Kazakh, and one in Tatar, as well as eight magazines, including one in the Kazakh language. Only six out of one hundred people working in journalism had higher education. The staff was mainly composed of talented workers and

correspondents from rural areas. Every year several communists were sent to study at the State Institute of Journalism in Moscow (Bekhozhin, 1964; Imashev S, 1961; Ashenova, 2016). In 1930 there were 41 sent to Moscow, by May of 1931 the number went up to 55. There were special newspapers for the cooperative peasantry and in 1931 there were 37 new newspapers created in different regions of Kazakhstan. Regional newspapers played an increasing role in the collectivization process. The intensive development of a system to train workers and rural area correspondents took place during this period and they joined the staff of rural and regional newspapers. In 1934 the Kazakh Communist Institute of Journalism was established on Press Day. In the 1930s there were 345 newspapers, 307 broadcasting centers and 57 thousand radio receiving sets in Kazakhstan. A reduction in the number of newspapers occurred during the Patriotic War of 1941-1945 when journalists were sent to the front where 10 front-line and more than 10 divisional newspapers were published, two of them in the Kazakh language (Ashenova, 2016).

In the postwar period, the development of agriculture and the Virgin Land Campaign required further development of regional press. By 1958 there were 13 national, 33 regional, 11 urban and 206 rural newspapers and magazines. During these years national and local television started broadcasting in the country. In addition, print and radio offered new forms of journalism. The Union of Journalists of the USSR was created and hosted the first Congress of Journalists of Kazakhstan. The journalism of Kazakhstan during this period was already formed as a system of mass media and propaganda based on Soviet media models. During these years, the fight against "bourgeois-nationalist views" in literature, art and science was expressed in the press. The press opposed the original folk culture and criticized the national epos and performance of improvised poets (akyns) as an incitement of ideology for the "feudal elite," which was a crime. The independent opinion of the representatives of the Kazakh society, which did not align with the party's ideology, became the basis for the political persecution of many scholars and writers, including scholars like Professor Ermukhan Bekmakhanov. His book *Kazakhstan in the 20's-40's of 21st Century* was published in 1947. E. Bekmakhanov was accused of "bourgeois ultranationalism" and sentenced to 25 years in jail in 1952. He was later rehabilitated in 1954. Soviet authorities pursued the hard line of the party leadership which suppressed all manifestations of opposition. All media outlets were under total

control and censorship. During the “Cold War” from the beginning of 1950s through the 1980s there was confrontation between bourgeois and socialist journalism. The media formed an image of the ideological enemy, preparing negative content about the “bourgeois world.” Kazakh media followed the ideology set by the party in Moscow and complied with its requirements.

At the same time, despite the specific conditions under which journalism developed in Kazakhstan, much was accomplished regarding cultural education of the audience and growing professional skills of media workers. The increase in the number of newspapers, the emergence of radio, television, and documentary films required an increase in the number of journalists. The first journalism department was established in the Philological Department of the Kazakh State University after Kirov (now al-Farabi Kazakh National University). In the mid-1960s the School of Journalism was established and began to educate Kazakh journalists. Each year no more than 100 students, including 50 students studying in Kazakhstan language and 50 students studying in Russian language were admitted to the program. More than 50 percent were recruited from the industry, already working in the media, and the rest after high school. Since the School of Journalism was formed within the Philological Department, the orientation of training for a long time remained philological (Nemecek et.al., 2011). The faculty prepared journalists, editors, writers, taught the theory of literature and addressed all philological disciplines. For Kazakh journalists education was an important step into the world of writers who enjoyed great popularity and respect as the best representatives of a knowledge-based society, a kind of “standards of wisdom, honesty and Kazakh philosophy.” One of the opposition journalists Muftakh N. wrote: “Conduct a sociological survey among students of the School of Journalism and you will see that 90 out of 100 of Kazakhs came here just because they write poems and think of the journalist diploma not as an entrance ticket to the world of journalism, but as an entrance into the world of writers.” (Muftakh, 1996). The transition to the third period in the development of Kazakhstan journalism openly began in 1985 after the proclamation restructuring the Soviet Union. This led to the gradual easing of censorship and strict ideological control, the development of publicity, the expansion of freedom for journalistic activities, and the formation of media independent from Soviet control. This was not an uncontested change. The party was still strong and Kazakh journalists were subject to great pressure during the December

uprising in 1986 in which a group of people protested against communist power. It was sparked by a decision of the General Secretary of Central Committee of the Communist Party of the Soviet Union, S. Gorbachev, to discharge Dinmuhamed Kunayev from the position of First Secretary of the Communist Party and appoint a man who had no relation to Kazakhstan. December events in Kazakhstan were among the first protest meetings in Soviet Union. However, the effect was a rise in national consciousness, intensified social and political movement in society, with the press, journalists, radio and television becoming the main force of democratic transformation.

3rd period: Independent Kazakhstan. The role of the mass media in Kazakhstan changed dramatically after independence from the Soviet Union in 1991. There was the formation of democratic values and principles, and a growing democratic political culture. In addition, journalism helped achieve a national consolidation of citizens and introduced global values. On December 16, 1991 the law “On the State Independence of the Republic of Kazakhstan” was enacted, which legalized the emergence of an independent state of Kazakhstan. Media in Kazakhstan began to practice free of censorship, while the Communist Party of the Soviet Union and the Communist Party of Kazakhstan were terminating their activity. The first independent newspapers, radio and television stations were established. Media were divided into state supported and commercial operations. The format of broadcasting and the topics of interest changed becoming less ideological and more diverse. The program of journalism education at universities also changed. Schools of journalism, which previously existed only at KazNU, opened in all regions of Kazakhstan, and their numbers increased to 50. The system of admission also changed providing more opportunities to receive a degree in journalism. Earlier educational programs were coordinated with the leading universities of Russia, now the content of journalistic education began to depend on Ministry of Education and Science of Kazakhstan with the exception of KazNU which, as a research university, was given more autonomy over its own decisions about educational programs.

Modern Media Environment in Kazakhstan. Today Kazakhstan has a diverse media environment. In 2019 there were 3328 media, in which 1800 newspapers registered (83,8% are non-governmental) and 990 magazines (65% are non-governmental, and 33% are state owned). There were 128 registered TV stations. Only two are state owned: JSC Regional Television and Radio

Company (RTRC) “Kazakhstan” and JSC Agency “Khabar.” The structure of RTRC “Kazakhstan” includes four TV channels: “Kazakhstan” (100% in the Kazakh language) and its 19 regional branches, “Balapan” for children, “Kazsport” and “First Channel Eurasia.” JSC Agency “Khabar” includes TV channels “Khabar,” “24 KZ,” “Bilim zhane Madeniet” (knowledge and culture) and “Kazakh TV.” Regional state channels include “Zhetysu,”

“Almaty,” “CTC,” “9 Arna,” “Didar,” “Focus” and “Municipal channel.” There were 70 radio channels, four offered by the state. The state operates two online information agencies: inform.kz, bnews.kz. The state also operates a news aggregator in the Kazakh language at baq.kz and an information portal called Strategy2050.kz. (Dannye, 2019). The number of media outlets available in 2013, 2014, 2019 can be seen in Table 1:

Table 1 – Number of media outlets by year*.

Mass Media	Year 2013	Year 2014	Year 2019
Print media	1881	1898	2790
Newspapers	1362	1367	1800
Magazines	519	531	990
Electronic media	219	260	198
TV channels	71	95	128
Radio stations	49	58	70
News agencies	64	65	340
Satellite broadcasting operators	7	8	9
Cable TV operators	92	99	122

*Note: developed by the author

Online journalism is actively developing. Social networks have become a competitive source of information compared to traditional media and are second in popularity to television. If 10 years ago only 4% of the population of Kazakhstan had access to the Internet, at present it is around 70%, or 12 million users. The most popular networks are VKontakte at 2.7 million users, Classmates at 2 million, My World with 1.6 million, Facebook at 0.6 million, and Twitter at 0.3 million, as well as Instagram and Kazakh-social networks (Ruzanov, 2015).

Journalism Education. A study of students' attitudes towards their future profession is important knowledge for higher education. Motives for choice of degree in creative fields, such as journalism were determined by such traditional factors as “the diversity and fascination by the profession, its creative nature, the opportunity to communicate with interesting people, to be aware of the events, feelings and opinions of people.” (Korkonosenko, 2016). To what extent have motives changed when innovative technology and new media emerge and

content is not just text but images, infographics, data, and new genres; and when should a journalist combine knowledge of the various fields of media and communication?

Considering the questions of motives, the author also relies on the works of Russian scholars who are interested in journalistic motives (Vartanova E., McQuail, D., Trappel, J., 2015; Dzyaloshinsky, 2013 & 2011; Kolesnichenko, 2015). Another important source is the research of Professor Nico Drok (2011) of the Windesheim University of Applied Science and Leader of the European Competence Profile Project of the European Journalism Training Association (EJTA). Particularly, he notes that in the context of technological and economic changes in social development all 60 journalism schools from 25 European countries who are members of the EJTA demonstrate consensus on the future of the core competencies of the journalist. This position is consistent with the Declaration of Principles of the World Journalism Education Council (WJEC) adopted in Singapore (2007), that “Journalism is a global activity. Student-journalists must understand

that despite the political and cultural differences, they share common professional values and goals with colleagues from other countries. Therefore, journalism education should provide students with first-hand knowledge about the practice of journalism in other countries” (World Journalism Education Congress, 2016).

A survey of more than four thousand journalism students in Australia, Brazil, Chile, Mexico, South Africa, Spain, Switzerland and the United States showed that the motivation of students to obtain a journalism degree and their future plans and expectations depend on national contexts of journalism education. For more reliable recent statistics in years 2015-2016 universities of Australia and Chile organized a new large-scale study, covering almost all continents of the globe. Kazakhstan was included in the project for the first time. (Hanusch & Mellado, 2015; Hanush & Mellado, 2014; Hallin.& Mellado, 2017).

The Brazilian scholars Becker and de Castro (2014) discuss the importance of providing opportunities for students to think about journalism as a form of knowledge and produce more creative and critical news, which is important in preparing them as future professionals. The research of Dailey and Rocky (2016) points to the importance of intellectual and creative processes of journalism for the future. Norwegian scientist Morten Kronstad (2014) found value in the way journalism students who worked as journalists prior to becoming students use this experience in their education. The emphasis is on how students in undergraduate programs in the school of journalism use their experience and practical knowledge along with educational activities, and how this knowledge is expressed. The research studied students who started out as practicing journalists and it showed that practice and education is a strong combination for journalists and journalism education.

Pilar Sánchez-García (2016) conducted quantitative and qualitative content analysis of 66 educational undergraduate programs before and after the implementation of the European Higher Education Area in 35 Spanish universities that offer a degree in journalism. The research shows the process of adaptation of the first phase of the EHEA standards in the new media environment. The study reveals four directions: the map of education program of bachelor in journalism, changes in curriculum content, the overall succession or renewal of curriculum, and specialized education for new media. The main conclusion is that the gradual change of educational trends in Spain emphasizes

improving practice-specific training and a reduction of interdisciplinary-theoretical content. The study also shows that there is a restriction on the inclusion of mandatory courses about new technologies used in new professions.

Elias Machado and Tattiana Teixeira (2016) explain that journalism schools still follow the standard pedagogical model of teaching. The authors argue that the integration of teaching and applied research is particularly important for overcoming the current crisis of the media which face outdated business models created in the previous century. One of the main conclusions of the study is that a lack of cooperation between universities and the media industry should give way to a hybrid model of learning that includes multidisciplinary applied research projects aimed at developing new formats, graphic languages, methods, processes and prototypes of content for different production platforms.

Scholars suggest that journalism is changing and requires new educational models that value critical and creative thinking while providing practical experience and strong links to industry. There is no doubt that changes to the media influence the ways students perceive the profession and their motivations for pursuing a degree. At the same time, journalism education is adjusting to the needs of today’s journalism practice. Kazakhstan is in a particularly unique position of recently developing a national and commercial media. Study of the motivations of Kazakh students to pursue journalism in this context is important for both national interests and aligning Kazakh journalism education with international expectations.

Material and Methods. Organizers of the project “Journalism Students across the Globe: Professionalization, Identity and Challenges in a Changing Environment” developed the methodology for this project. The leading scientists Folker Hanusch of Queensland University of Technology and Claudia Mellado of the University of Santiago de Chile developed and shared research methodology, developed a survey as the research instrument, and monitored the data collection. The survey instrument was tested in prior research and found to be both reliable and valid (Hanush, 2013). This article reports on the collection of data in Kazakhstan.

This research is focused on determining reasons and motivations of young people for studying journalism. The demographic segment chosen for this study were students of journalism faculty in KazNU. An online tool was created and administered this survey. Open-ended questions

were chosen in order to elicit honest and genuine replies. Some of the most pertinent questions of the study focused on career opportunities journalism students hope to have, aspects of university education that motivate students to study and whether a university degree is necessary to become a professional journalist

While the overall survey focused on a number of important topics, this article presents the findings of the survey that focused on student's motivation for studying journalism from their perspective as future journalists. The focus of this research considers the following objectives:

1. to compare the motivation for choosing the profession of journalism in different periods of the country's development;
2. to show the influence of gender on the choice of profession;
3. to show the influence and role of the faculty of journalism in choosing to work in the field of journalism.

Subjects. The survey was translated from English to Kazakh and Russian languages and was distributed among undergraduate and graduate students of the School of Journalism. In total 334 students participated in the survey, representing about 50% of the total number of journalism students at the school. There were 35 questions in the questionnaire which was posted by the author using

the online survey service www.surveymonkey.com. In this article the authors examine only one aspect of the study "motivation for studying journalism from the perspective of future journalists" of Kazakhstan.

Results and Discussion. In Kazakhstan 334 students of the School of Journalism at KazNU participated in the survey: 84.76% bachelor students and 15.24% graduate students (master's degree). The year of education of the undergraduate students: 1st year – 25.38%, 2nd year – 25.68%, 3rd year – 31.12%, 4th year – 17.82%. Ages ranged from 18 to 34 years. Gender was 29.09% male and 70.91% female. The questionnaire was designed to compare different answers in order to understand the true opinion of students on a particular issue. For this study questions №1, 6, 13, and 14 of the master survey were used to identify the motives of future journalists.

Question №1 asked about the preferred field of work after study, "If you could choose, in which field would you like to work when you finish your studies?" Only 57.36% of the students surveyed chose to work in the field of journalism, 22.22% prefer to work in public relations and advertising, 8.11% – teaching and research, 11.71% – to create their own business, to be producers, directors (see Figure 1). There were also those who wished to change profession and to become lawyers or enroll in a different program (Fig.1):

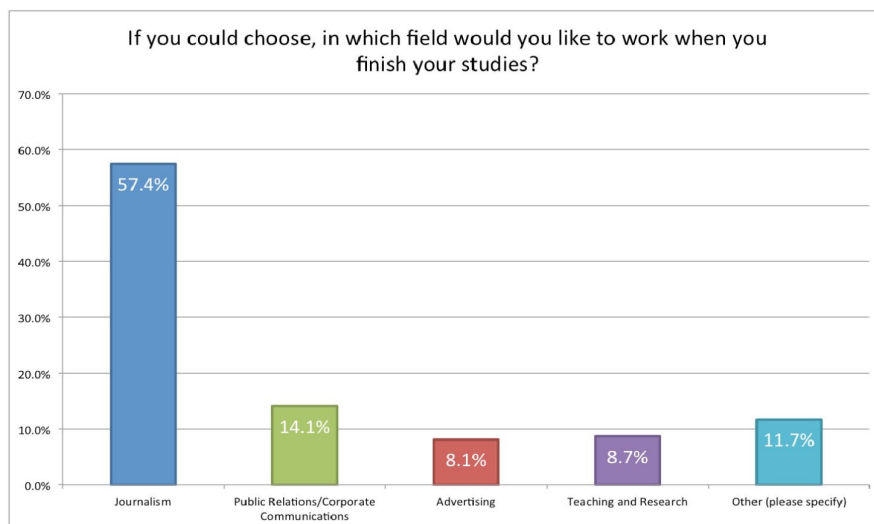


Figure 1. Percent of students represented by desired profession

*Note: developed by the author

Question № 6 is about the motives for choosing the degree. Students were offered about twenty motive activities in the field of journalism which

could meet the ambitions of young, entrepreneurial and talented persons. Each motive had five degrees of evaluation increasing from the category "Not

important at all” to “Extremely important.” All motives can be grouped by topics such as personal-career, the opportunity to demonstrate power, protection of state interests and common persons and others. Question № 6 asked, “Please rate the

following aspects in terms of the extent to which they motivated you to study your degree.” (see Table 2). Interpretations of the results can vary and bring different conclusions, therefore this table is presented in detail (Tabl.2):

Table 2. Motivation for pursuing degree*

Answer option	Not important at all	Little important	Some what important	Very important	Externally important	Rating Average	Response Count
The opportunity to travel	6%	9%	39%	13%	33%	3.56	329
The possibility of being famous	10%	14%	36%	18%	22%	3.28	326
To help in nation-building	3%	12%	35%	25%	26%	3.58	329
The varied and lively work	3%	9%	31%	27%	31%	3.74	329
The chance to influence public affairs	3%	9%	30%	29%	28%	3.71	326
To work for freedom and democracy	12%	14%	33%	19%	22%	3.24	326
The pleasure of writing	6%	12%	33%	21%	28%	3.52	326
The chance to help people in their everyday life	5%	10%	37%	26%	22%	3.5	329
The amount of money one can earn	5%	9%	37%	24%	25%	3.56	326
To hold people in power accountable	9%	16%	32%	25%	18%	3.29	327
To get a secure job	7%	9%	36%	22%	26%	3.52	327
The amount of autonomy one has	8%	18%	40%	18%	16%	3.17	326
To fight injustice	6%	14%	37%	24%	19%	3.36	326
My talent for journalism	5%	10%	32%	24%	28%	3.61	325
To be able to be creative	3%	9%	33%	27%	27%	3.66	327
The prestige of journalism as a profession	4%	16%	34%	21%	25%	3.47	324
The chance to meet different people	3%	6%	31%	28%	32%	3.79	325
The dynamic lifestyle	4%	6%	31%	28%	30%	3.74	325
To help the government achieve its goals for national development	4%	13%	35%	22%	26%	3.55	327
*Note: developed by the author							

First, students rated motivation on a 5-point scale from “not important at all” to “extremely important.” The data in Table 3 shows that most students chose

the central response option «somewhat important.» The highest percentage of “extremely important” responses indicated that some students chose

journalism to travel (33%) and meet different people (32%), for the varied and lively work (31%), and a dynamic life (30%). These four motivating factors were extremely important for over 30% percent of respondents. The “ratings average” indicates the overall importance of each motivating factor. The most important factors included three of the four motivations rated above as “extremely important.” These were to meet people (3.79) and have a dynamic life (3.74) with work that is varied and lively (3.74). Also, journalism students were motivated by the potential to influence public affair (3.71) and the opportunity to be creative (3.66). In addition to the important motivations were those of lesser concern. The least important motivation was autonomy (3.17). The next lowest included the promotion of freedom and democracy (3.24), being famous (3.24), and holding the powerful accountable (3.29). Although these were among the lowest ratings, more than 40% still considered these motivations “very important” or “extremely important.” These findings indicate that students want an interactive, dynamic, and varied professional life. The opportunity to become involved in public affairs is important even though this may not apply directly to the promotion of freedom and democracy or to holding those in power accountable. Still, all of the ratings averages were above 3.0 indicating a variety of motivations are important reasons for students to choose journalism careers.

Question №13 is somewhat provocative, asking whether it is necessary to study journalism and communication at the university level in order to be a good journalist. Most students found education important with 53.66% of the students “Very much agree” that journalism and communication should be studied at university level, “Somewhat agree” – 25.91%, “Somewhat disagree” – 12.80%, “Very much disagree” – 7.62%. The results show that more than half of the students think that it is necessary to study journalism and communication at university level in order to be a good journalist. This figure rises to almost 80% with those who “Somewhat agree.”

Question № 14 relates to the previous question and addressed those students who disagreed that it is necessary to study journalism at the university level and asked them about their opinion. About 51 detailed responses were received. Several key elements were present in the responses to why an education is unnecessary. These included whether the individual was already a journalist (23.5% of responses), practical training in the field (17.6%), and an understanding of journalism (13.7%). Students believed that “experience and practice are

essential,” “a talent to express one’s thoughts cannot be taught,” “a student has to study for four years at university, however it is necessary to have experience to become a journalist, and therefore studying for two years at university should be enough” There is an opinion that “if you choose to work on television, but you have unappealing look and a terrible diction, regardless of the high degree, you will not be able to present content on TV program. The talent of the journalist – is from God!” While some students believe that experience and natural talent are more important than education, this supports the overall claim that journalism education, along with theory, should include good training in the field.

The results of the study help us understand what motivates young students to be journalists and how journalism education can help students reach their goals of becoming professionals. This study provides a good overview of the motivations of students but also provides an opportunity to compare the motivation for choosing the profession of a journalist at different periods of the country’s development. If we compare the motivation for choosing the profession in the last century to the current century, we can see similarities and differences.

The first phase of Kazakh journalism featured the founders who brought the media and journalism education to Kazakhstan. Today’s educators in Kazakhstan also face a developing media and a changing media environment. They are re-constituting journalism degrees to meet the needs of today’s students and today’s media. A trend of our time is the interest to work not only in print media, but also in online media, where there is a convergence of the creative process. This requires the ability to write texts, to take video and photos, comment and communicate with your audience. This form of communication is appealing to students and is more frequently required by the media. This study provides some guidance to educators by pointing to the value of practical experience and various motivating factors

The motivations of students share similarities and differences with the position of the leaders of Alash Orda party with regard to the mission and role of the journalist, which is being a patriot of your country. Like Alash Orda, today’s students are motivated by an opportunity to influence public affairs. And while fighting injustice and helping the government achieve national development goals was not a top motivation for today’s students like it was for Alash Orda, these were still important motivations. As the 2nd phase of journalism developed under communism Alash Orda changed

as they were absorbed into communism and the role of the journalist became more ideological under Soviet control. Journalists were not allowed much autonomy and today's students were least motivated by the need for autonomy or the desire to promote freedom and democracy. In today's 3rd phase of Kazakh journalism, students are most motivated by the lifestyle of journalism, the opportunity to interact with others, and to influence public affairs. The challenge for journalism educators in Kazakhstan is to develop education programs that account for student motivation while at the same time account for today's new media and Kazakhstan's young and developing media as a relatively new country.

There was an important correlation between gender and the choice of profession. The study showed that more than 70 percent of students at the Journalism School are women. This is the trend not only in Kazakhstan but also around the world. In Soviet times, women accounted only for 3 to 4 percent. The School of Journalism admitted students mostly with work experience in newspapers after serving in the Soviet Army. Therefore, only a small percentage, including women, were high school graduates, and admittance required potential students to show their works published in newspapers. The result was that most early students were male. While more females were admitted during Soviet times, the increase in female enrollment was significant after the fall of the Soviet Union. It is interesting to note that nearly 71% of the survey respondents were female, which fits the profile of KazNU journalism students, but also indicates a female influence in the choice of motivations to be a journalist. The motivation to gain fame and popularity was not the most important, but more than half of the students dreamed of a career as a TV host or a travel reporter.

Another aspect of the study was to show the influence and role of the School of Journalism in the motivation of journalism students. One critical observation was the need to connect with the media and provide experience. The School of Journalism at KazNU motivates students by inviting prominent journalists and practitioners to conduct workshops and organize training in the form of case studies which makes the learning process more engaging and entertaining. In addition, the School of Journalism has its own high-quality television studio, radio studio, and special equipment for magazines and newspapers production with illustrations.

Conclusion

Students at KazNU study the media and start working with the media from the first year of the school, and this combination has successfully allowed them to secure employment by the time they graduate from university. Students of the School of Journalism of KazNU represent a new generation of young journalists of a sovereign state and are capable of independently and realistically assessing their motives for choosing journalism as a profession.

Findings of this research can be summarized by following conclusions: First, from analyzing the history of journalism in Kazakhstan it is evident that students are now driven by different motives than they were 50 years ago. In the 1960's journalistic education was considered a building block for a career in writing which was a popular occupation at that time. Now students have a clear idea of the various fields of journalism and in which they would like to work. The primary mass medium that journalism students prefer is TV, but a high percentage of students prefer to work in the increasingly important online environment. This new online trend in journalism in Kazakhstan provides another way for journalists to promote the flow of Kazakh-language and Russian language information through social networks which offer new ways to affect the public consciousness and shape Kazakhstan's media environment.

Moreover, the romantic and active life of a journalist appeals to today's students, but they clearly understand that behind the facade of a profession there is hard and complex work, and they value journalistic activities and potential rewards of the profession. They express readiness to develop and operate their country's information field, its national values and cultural priorities. The motivations of students represent those of a majority of female students. It is evident that journalism in Kazakhstan is aligned with global trends in gender politics, the majority of journalism students are female. These students challenged the system of journalism education while evaluating the importance of journalism education in the country and provided valuable information to guide journalism education. At the same time, they understand the value of education for professional development and self-improvement. This suggests that the formula for modern education in the age of information and new technologies is a constant and systematic process of learning for both educators and students, driven by motivations that are important not only within the walls of universities, but in everyday life.

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UDC 004.94(043)

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Modeling the mechanisms of the functioning of the logistics distribution system

Currently, the use of the concept of logistics in inventory management is considered by enterprises as one of the reserves to achieve a competitive advantage. In theory, inventory control deficit arises due to insufficient supply, unreliable source of supply, and because of inaccurate information provided by customers to suppliers. The solution to this problem consists in finding a compromise between the cost of creation of material stockpiles and storage costs, and the creation of the mechanisms of management of active systems, elements of which are suppliers and customers. The implementation of the control mechanisms of the two-level system supplier-consumer, we have considered the example of the game-theoretic model. For the consistency of the idea considered in the article, it should be emphasized that in the supply chain-each customer-consumer is also a supplier in an orderly sequence of suppliers and consumers, as long as the product does not reach the end user. In this article, the simulation game tool in the context of hierarchical games is used to simulate the simplest scheme of the logistics distribution system. In the process of realization of finished products the model of distribution logistics between the supplier and the consumer enterprises is considered. The case of deficit is simulated when the total volume of customers' orders for early delivery exceeds the production capacity of the supplier. The main purpose of the article is to give a clear idea of the functioning mechanisms used in the management of the distribution system of logistics, as well as to provide distribution logistics specialists with the possibility of effective solutions in the process of distribution of finished products in a deficit.

Key words: distribution logistics, functioning mechanisms, game-theoretic model, supplier, consumer.

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Логистикалық тарату жүйесінің жұмыс істеу механизмдерін моделдеу

Қазіргі уақытта қорларды басқаруда логистика тұжырымдамасын пайдалану кәсіпорындар бәсекелестік артықшылыққа қол жеткізу бойынша резервтердің бірі ретінде қарастырылуда. Қорларды басқару теориясында дефицит қордың жеткіліксіздігі мен жабдықтаудың сенімсіз көзінің, сондай-ақ тапсырыс берушілер жеткізушілерге ұсынатын жалған ақпараттың салдарынан де туындайды, бұл проблеманы шешу материалдық қорларды құруға арналған шығындар мен оларды сақтауға арналған шығындар арасындағы компромисті табудан, сондай-ақ элементтері жеткізушілер мен тұтынушылар болып табылатын белсенді жүйелерді басқару механизмдерін құрудан тұрады. Екі деңгейлі жеткізуші-тұтынушы жүйені басқару механизмдерін жүзеге асыруды біз теориялық-ойын моделінің мысалында қарастырдық. Мақалада талқыланатын идеяның дәлелді болуы үшін, логистикалық тізбекте – әрбір тапсырыс беруші өнім соңғы пайдаланушыға келіп түскенше жеткізушілер мен тұтынушылардың реттелген бірлігінде жеткізуші болып табылатынын атап өту қажет. Бұл мақалада логистикалық тарату жүйесінің қарапайым сызбасын модельдеу үшін иерархиялық ойындар контекстінде имитациялық ойын құралы қолданылады. Дайын өнімді өткізу барысында жеткізуші кәсіпорын мен тұтынушы кәсіпорын арасындағы тарату логистикасының моделі қарастырылды. Тапсырыс берушілердің мерзімінен бұрын жеткізуге тапсырыстарының жалпы көлемі өнім берушінің өндірістік қуатынан асып кеткенде дефицит жағдайындағы моделдеу. Мақаланың негізгі мақсаты – логистиканың тарату жүйесін басқару процесінде

пайдаланылатын жұмыс істеу механизмдері туралы нақты түсінік беру, сондай-ақ, бөлу логистикасы бойынша мамандарға тапшылық жағдайында дайын өнімді бөлу процесінде тиімді шешімдер қабылдау мүмкіндігін ұсыну.

Түйін сөздер: тарату логистикасы, жұмыс істеу механизмдері, теориялық-ойын моделі, жеткізуші, тұтынушы.

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Моделирование механизмов функционирования логистической распределительной системы

В настоящее время использование концепции логистики в управлении запасами рассматривается предприятиями в качестве одного из резервов по достижению конкурентного преимущества. В теории управления запасами дефицит возникает как из-за недостаточного запаса и ненадежного источника снабжения, так и из-за недостоверной информации, предоставляемой заказчиками поставщикам. Решение данной проблемы состоит в нахождении компромисса между затратами на создание материальных запасов и затратами на их хранение, так и построением механизмов управления активными системами, элементами которых являются поставщики и потребители. Реализацию механизмов управления двухуровневой системы поставщик-потребитель мы и рассмотрели на примере теоретико-игровой модели. Для состоятельности идеи рассматриваемой в статье, необходимо подчеркнуть, что в логистической цепи – каждый заказчик-потребитель также является поставщиком в упорядоченной последовательности поставщиков и потребителей, до тех пор, пока продукт не поступит к конечному пользователю. В данной статье для моделирования простейшей схемы логистической системы распределения используется инструмент имитационной игры в контексте иерархических игр. В процессе реализации готовой продукции рассмотрена модель распределительной логистики между предприятием-поставщиком и предприятиями-потребителями. Моделируется случай дефицита, когда общий объем заказов клиентов на досрочную поставку превышает производственные мощности поставщика. Основная цель статьи – дать четкое представление о механизмах функционирования, используемых в процессе управления распределительной системой логистики, а также представить специалистам по распределительной логистике возможность эффективных решений в процессе распределения готовой продукции в условиях дефицита.

Ключевые слова: логистика распределения, механизмы функционирования, теоретико-игровая модель, поставщик, потребители.

Introduction. Managing the supply of raw materials, materials, ready products significantly affects the results of the operation of distribution logistics. An integrated view of the distribution system was developed in the 60s-in the early 70s. During this period, it was realized that the combination of different functions that belong to the distribution of the manufactured product into a single management system, will have a large reserve of efficiency (Bowersox 2001:128; Christopher 1986:85).

The tasks of distribution logistics at the micro and macro levels are different (Nikolaychuk 2001:78; Zalmanova 1992:75; Akhmetkaliyeva 2017:115). At the enterprise level, i.at the micro-level, the logistics poses and solves the following tasks:

- planning the processes of distribution of product design, production and sale;
- organization of receiving and processing orders;
- organization of distribution in the through goods through production;

- selection of the type of packaging, making a decision on the completion, as well as organizing the execution of other operations immediately preceding the shipment in the volume of distribution functions;

- realization of distribution functions in the shipment of products;

- the organization of post-sales service in the volumes of the distribution function.

At the macro level, the tasks of distribution logistics are:

- selection of flow distribution schemes and modeling of their characteristics;

- determination of the optimal number of distribution centers (warehouses) in the serviced territory;

- determination of the optimal place location of distribution centers (warehouses) in the service area, as well as a number of other tasks associated with managing the flow of the district, region, country, continent or around the globe.

As the domestic and foreign experience of improving the supply management system shows, the idea is based on the idea of coordinated

interaction between all elements of the system "Supplier-consumers".

Literature review. A large number of works in which the coordination is performed by selecting the Cele features elements or fine functions or enabling functions or data of formation procedures (Ashimov 1986:48; Burkov 2000:67; Burkov 1994:272 ; Burkov 1971:165).

However, in real logistical distribution systems, such as "consumers Supplier" is often the formation of orders procedures for delivery, performance criteria elements and the system as a whole are determined and are fixed, but some parameters such as contract prices, the volume of orders for the supply of ready products and other , can be purposefully changed in a given area, for example, depending on the efficiency of production. Functioning of distribution logistics in the set-theoretic language as two-level active systems (Burkov 1977:117; Burkov 2015: 225).

Let's consider the multiple description of the model of the organizational mechanism of

distribution logistics. The status of supply processes is described depending on the status of the supplier enterprise acting as the sender of goods, and from consumers of ready products, which is demonstrated in Figure 1.

Denote by y_S the state of the enterprise-supplier, which is determined from the set of its states Y_S -the power of the supplier,

$$y_S \in Y_S,$$

through y_{Cj} – the state of the j – th consumer, which is determined from the set of its states Y_{Cj} , i.e.

$y_{Cj} \in Y_{Cj}$, $j \in J_C$, where J_C – a lot of consumers of ready products (Fig. 1):

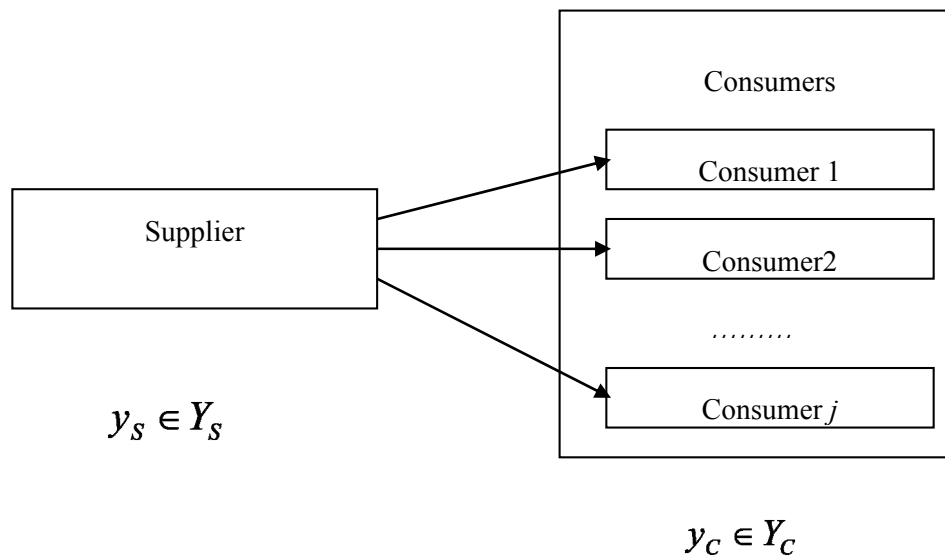


Figure 1 – Diagram of interaction of distribution logistics elements
 *Note: developed by the author

The state of all consumers is described in the form $y_C = \{y_{Cj}\}$, where $j \in J_C$, and is determined from the set of their states Y_C , i.e.

$$y_C = \{y_{Cj}\} \in Y_C,$$

$$Y_C = \prod_j Y_{Cj}, j \in J_C.$$

Then the state Y of the distribution process is determined from the set Y of possible states of distributions, i.e. $y \in Y$, where

$$y = (y_S, y_C),$$

$$Y = Y_S \cap Y_C.$$

The general state of the distribution logistics system can be described as

$$y^D = (y_S, y_C) \in Y^D = Y_S \times Y_C.$$

The following assumptions are made:

- Enterprises (supplier and consumers) belong to the same industry (Ashimov 1978:29);
- The volume of prematurely delivered ready products to consumers does not exceed the volume of additional output by the supplier;
- for each consumer the volume of products delivered to him ahead of schedule does not exceed the volume of his order;
- the supplier does not know the volumes of necessary products for each consumer and the values of the coefficients of their losses from the shortage of raw materials, he knows only the boundaries within which these quantities can vary.

Material and Methods. According to the methodology of the imitation game (Burkov 2000:32; Shepkin 1999:138) the supplier's task is to distribute the required order among consumers in such a way as to achieve minimum costs (losses) in the distributive subsystem "supplier-consumers" related to the deficit of production. This is achieved by rational satisfaction of requests from consumers. The plan for the distribution of the order between consumers is compiled on the basis of data on the loss factors of consumers in the case of shortages.

The game situation arises because the supplier lacks reliable information about the loss factors of each consumer and the possibility of providing consumers with unreliable information to the supplier at the planning stage.

As a compensating influence, which stimulates the provision of reliable information, mechanisms are in place with the use of fines (criterion management) (Kulzhabaev 1997:216; Germeier 1986: 255; Gubanov 2010: 138; Novikov 2013:26; Novikov 2014:127).

The task of each consumer is to minimize their own costs in the conditions of the chosen economic mechanism.

Two classes of management mechanisms are considered: the principle of rigid centralization and the principle of coordinated management without penalty, and the same management mechanisms with penalties. This case reflects the real situation, when consumers and the supplier, in accordance with contractual contracts, can establish control over losses from shortage of products.

Results and Discussion. Description of the model of the simulation game

We introduce the following notation:

x_i – the volume of prematurely delivered readyproducts to my consumer;

R_i – the volume of the order of the consumer;

B – additional release of readyproducts by the supplier;

μ_i – the coefficient of consumer losses from the shortage of raw materials (specific losses);

λ – premium to the price for early delivery of products;

d_i – coefficient of user's penalty for unreliable information;

The task of the supplier is to determine such volumes of readyproducts x_i that ensure the minimization of total losses

$$F = \sum_{i=1}^n \mu_i (R_i - x_i) \rightarrow \min \quad (1)$$

under constraints

$$\sum_{i=1}^n x_i \leq B \quad (2)$$

$$x_i \leq R_i, \quad i = 1 \div n \quad (3)$$

The target function of the i -th consumer is:

$$f_i = \lambda x_i + \mu_i (R_i - x_i) \rightarrow \min, \quad i = 1 \div n \quad (4)$$

If control laws with penalties are applied, then

$$f_i = \lambda x_i + \mu_i(R_i - x_i) + d_i |\mu_i - \mu_{i-1}| R_i \rightarrow \min \quad (5),$$

where μ_{i-1} is the estimate of the value μ_i reported to the supplier by the i -th consumer; $\underline{M}_i \leq \mu_i \leq \overline{M}_i$, $\underline{M}_i, \overline{M}_i$ respectively, the lower and upper limits of the change in the quantity μ_i , $i = 1 \div n$.

The supplier collects information about the urgency of deliveries from consumers. Information comes in the form of estimates. After that, the supplier solves the problem of optimal supply planning, applying various control mechanisms.

The mechanisms of control

Stages of the game. The supplier collects information about the urgency of deliveries from consumers. Information comes in the $\{\mu_i\}$ form of estimates. After that, the supplier solves the problem of optimal supply planning, applying various control mechanisms.

a) The principle of rigid centralization (Burkov 1977:38). In this case, the premium to the price for the urgency of delivery is a known constant value for the urgency λ of delivery is a known constant in advance. The supplier solves the problem:

$$F = \sum_{i=1}^n \mu_i (R_i - x_i) \rightarrow \min \quad (6)$$

under the conditions (1 – 3).

b) The principle of coordinated control (Ashimov 1986:103). In this case, it is determined in the course of solving the problem (1, 2, 6), taking into account the following additional conditions

$$(\lambda - \mu_i)x_i = \min_{0 \leq x_i \leq R_i} (\lambda - \mu_i)x_i, \quad i = 1 \div n \quad (7)$$

Conditions (7) require the harmonization of the interests of the supplier with the interests of consumers.

Preliminary analysis

According to the described model, we believe that on the basis of contracts-contracts for this supplier, consumers and the volume of the shipped order are determined to the consumer ($i = 1 \div n$). In

this case, three cases are possible: 1) $\sum_{i=1}^n R_i < B$,

$$2) \sum_{i=1}^n R_i > B, \quad 3) \sum_{i=1}^n R_i = B.$$

The supplier must draw up a schedule for the shipment x_i of ready products on the basis of customer requests taking into account their production capacities.

We assume that each consumer informs the supplier: the order in the required quantity of a certain volume of ready products R_i ; can also report information about the "urgency" of deliveries, for example, in the form of loss factors from the shortage of products β_i or the costs of its storage α_i .

It is natural to assume that for each consumer x_i , if the real shipment schedule R_i is rejected, the consumer bears losses in the event $x_i > R_i$ that it may be the cost of storing the surplus product, but with $x_i < R_i$ the loss from the shortage of raw materials.

We will consider the simplest case of a piecewise linear dependence of losses on the magnitude of the deficit $\Delta_i = R_i - x_i$, namely

$$f_i = \begin{cases} -\alpha_i \Delta_i & , \text{ если } \Delta_i \leq 0, \\ \beta_i \Delta_i & , \text{ если } \Delta_i > 0, \end{cases}$$

where α_i and β_i are the coefficients of losses from the deficit and from storage, respectively.

Total losses $\sum_{i=1}^n f_i$ will be taken as a criterion

for the effectiveness of the functioning of the

relationship between the supplier and consumers in the process of selling ready products.

Consider the following system of relationships between the supplier and consumers. The consumer pays for the products at a price c_0 , if the shipment is made at all. As a rule, the earlier the shipment is made, the more expensive the price, since early deliveries, beneficial to consumers, require the supplier to additional costs to increase their production capacity and temporary mobilization of production reserves. At the same time c_0 , it can correspond to the wholesale price of products, and the difference $c_i - c_0 = \lambda_i$ determines the "premium for urgency". The supplier, in turn, is fined for disrupting the delivery time of products (non-fulfillment of consumer applications, ie, when shipping schedules deviate from those declared R_i by consumers). These penalties can partially or completely go to compensate for losses to consumers. Assuming a piecewise-linear form of the penalty function, we write the target function of the vendor in the form

$$F = \sum_{i=1}^n \left[c_0 x_i - \begin{cases} \gamma_i (x_i - R_i) \\ \mu_i (R_i - x_i) \end{cases} \right] \quad (8)$$

where γ_i, μ_i are the coefficients of penalties.

Comment. In (8), the components of the vendor's target function that do not depend on the schedule of shipment of products are not included, and the time of the document circulation corresponding to the time gap between the sale of ready products and its shipment is not taken into account.

The target function of the consumer includes a product fee and a loss when the actual shipping schedule deviates from the desired

$$f_i = c_i x_i + \begin{cases} \alpha_i (x_i - R_i) \\ \beta_i (R_i - x_i) \end{cases}, \quad i = 1 \div n \quad (9)$$

It does not take into account the costs of consumers on overheads and transportation of products, because they are weakly dependent on the dynamics of supply.

Finally, we write down the restrictions that determine the allowable shipping schedules:

$$\sum_{i=1}^n x_i \leq B, \quad (10)$$

$$x_i \leq R_i, \quad (11)$$

$$x_i \geq 0, \quad i = 1 \div n$$

The schedule of shipment x_i of each consumer i does not coincide with the declared schedule of shipment R_i . In this case, the consumer i suffers losses due to a shortage of products or because of the costs of its storage, which forces him to insure himself against shortages or excessive deliveries in the next period, changing the order R_i .

Thus, there is a game situation between consumers, each of which tries to get a sufficient number of products at the right time; while taking into account only their own interests and showing maximum activity, consumers are going to minimize their costs. This can lead to a distortion of information about the real needs reported by the consumers to the supplier. The supplier, in turn, ships the products to consumers in accordance with their interests. As can be seen, the supplier-consumer system is a typical active system.

We perform a game-theoretic analysis of the functioning of the distribution subsystem: the supplier-consumer.

Let the formation of the initial data occur in a counter-way. Consumers can tell the supplier either the desired shipment schedule, or information about the loss factors, or both.

Suppose that the supplier and the consumer take into account the costs only from the short supply of products, accounting only for this production characteristic is justified by the fact that the losses from the deficit are much greater than other losses associated with storage, transportation and overhead costs; Moreover, early delivery in many cases is beneficial to consumers.

We will assume that the losses of consumers from shortages of products significantly exceed the costs of storing excess products. Neglecting the latter, we write down the consumer's objective function in the form

$$f_i = c_i x_i + \beta_i (R_i - x_i) 1[R_i - x_i], \quad (12)$$

where $1[\theta] = 1$ for $\theta \geq 0$ and $1[\theta] = 0$ for $\theta < 0$.

We assume that the supplier does not ship the products beyond the ordered quantity R_i , i.e. $x_i \leq R_i$ for all consumers. Then you can discard the component of the target function of the supplier as independent of the plan for shipment of ready products

$$\sum_{i=1}^n c_i x_i = c_i \sum_{i=1}^n R_i \quad (13)$$

The system functions as follows. At the stage of data generation, each consumer informs the supplier (order) R_i and possibly an estimate of the loss factor β_i . Assume that the penalty coefficient μ_i is equal (or directly proportional) to this evaluation. At the planning stage, the supplier determines the schedule for the shipment of products. At the same stage, prices $C = (C_i)$ are determined (or adjustments).

Various procedures for the formation of shipment plans and prices are possible depending on the management mechanisms (principles of strict centralization and coordinated management. In the law of rigid centralization of prices $\{C_i\}$ fixed (in particular $C_i = C_0$ – the wholesale price of products), and the shipment plan is defined as the optimal solution of the maximization problem (12) with conditions (10-11).

We pose the problem of determining x_i ($i = 1 \div n$), so that the costs (1) are minimal under constraints (2-3). The solution of this problem can be considered in two ways: by ordering the loss coefficients or the simplex method.

1) Let consumers be numbered in descending order of loss factors, that is,

$$\mu_1 \geq \mu_2 \geq \mu_3 \geq \dots \geq \mu_m$$

Define consumers as follows:

$$\sum_{j=1}^{k-1} x_j < B \leq \sum_{j=1}^k x_j \quad (14),$$

where the first $k - 1$ consumers receive the maximum order, the k -th consumer receives the balance, and the remaining consumers do not receive the order. The problem, however, is that the Supplier does not have complete and reliable information about the loss factors μ_i . This information is communicated to the Supplier by the consumers themselves. Here we are faced with the problem of the reliability of the data presented or the problem of manipulating information. Moreover, there are cases of both an overestimation of estimates of the coefficients of losses, and their understatement. The overestimation of estimates of loss factors probably aims to minimize the costs of the Supplier and the system as a whole, that is, the total costs determined on the basis of the reported (planned) estimates of the loss factors, and thus it is possible to increase own costs depending on the $\lambda (< > \mu_i)$ - surcharge to the price for the early delivery of products, which is established by the Supplier.

2) Simplex method. Underestimation of estimates of loss factors is intended not to receive an order even at the expense of increasing own losses. We will conduct an analysis of various mechanisms of order distribution from the perspective of possible manipulation of information. The results of the experiments performed for the case of rigid centralization are given and for the case of coordinated control.

From this it is clear, что при $\lambda > \mu_i$ it is profitable for consumers to underestimate, i.e. $\mu_i^1 < \mu_i$. that it is advantageous for consumers to underestimate the estimates. And when $\lambda < \mu_i$, on the contrary, there is a tendency to overestimate the estimates $\mu_i^1 > \mu_i$

Conclusions

Thus, depending on the values λ and μ_i some consumers greatly underestimate the collected estimates, while others, on the contrary, report an estimate much larger than the true value of their own μ_i .

As can be seen from the example, the value of the vendor's target function under these conditions is far from the optimal value.

The case of coordinated control, $d_i = 0$

Suppose that consumers do not take into account the impact of their reported estimates $\{\mu_i\}$ on the value λ . Then, under the conditions of perfect coordination (7), which can be written in the form: if $\mu_i < \lambda$, then $x_i = 0$, if $\mu_i > \lambda$, then follows that $x_i = R_i$ for $i = 1 \div n$ the following conditions are fulfilled: if $\mu_i < \lambda$, then $x_i = 0$, if $\mu_i > \lambda$, then $x_i = R_i$, $i = 1 \div n$, that describe the equilibrium state of the system. To get into equilibrium, the i -th consumer should tell the supplier the estimate $\mu_i^* = \mu_i$, $i = 1 \div n$. This

means that the equilibrium strategy of the i consumer who wants to get into an equilibrium state is $\mu_i^* = \mu_i$, $i = 1 \div n$.

The plan received by the supplier in solving the problem (8,9,12,13) on the basis of estimates $\{\mu_i^*\}$ is the optimal agreed plan.

Case of the game with a fine, $d_i > 0$.

With strict centralization, $\lambda = const$ and the application of weak penalties $0 < d_i < 1$, $i = 1 \div n$ it is difficult to obtain reliable information and consumers can not get into an equilibrium state. Only with strong penalties, when, $d_i \geq 1$, $i = 1 \div n$, consumers report reliable information $\mu_i^* = \mu_i$, $i = 1 \div n$ and the system comes to an equilibrium state, preferable for all. In the case of coordinated management, there is a weak enough penalty $0 < d_i < 1$, $i = 1 \div n$ to ensure that the system is in an equilibrium state and consumers would report $\mu_i^* = \mu_i$, $i = 1 \div n$.

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UDC 06.52.13

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Analysis of inflow the direct foreign investments in priority sector the economy of Kazakhstan

The inflow of foreign direct investment in Kazakhstan is carried out through the establishment of joint ventures, subsidiaries, privatization of state-owned enterprises with foreign capital, transfer of large industrial enterprises to the management of foreign firms and investment in the banking sector.

The article analyzes the inflow of foreign direct investment in the context from 2014 to 2018, in the priority sectors of the economy of the Republic of Kazakhstan, which are the mining industry, processing industry, professional scientific and technical activities and innovative development.

The paper deals with the issues of investment in priority sectors of the economy of Kazakhstan. The methodological basis of the research was analytical and statistical methods, dialectical method of cognition and observation.

The works of well-known authors of economists were studied and considered. According to the research of the analytical review, by 2022 the inflow of foreign direct investment should grow by 26% compared to the data of 2016, and the ratio of FDI to GDP should be at the level of 19%, while at the moment this figure is 16.5%. Given the investment restructuring and the direction of investment in the service segment of the economy, by 2022 the volume of foreign investment in fixed assets of the non-commodity sector of the economy should increase to 50%, also compared to 2016.

The bulk of foreign investment continues to be directed to areas that do not require large-scale investments and are characterized by rapid payback.

Thus, drawing a conclusion on the study of trends in the functioning, outflow and inflow of foreign direct investment in the priority sectors of the economy of the Republic of Kazakhstan, in the sectoral structure of investments, the main share is the mining industry, and the oil and gas industry is still in one of the first places in terms of attracted investments. Industries such as construction and manufacturing receive the least amount of foreign investment.

The article has scientific value and novelty of research.

Key words: foreign direct investment, industry, priority sectors.

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Қазақстан экономикасының басым сектораларына тікелей шетелдік инвестициялар ағынын талдау

Қазақстанға тікелей шетелдік инвестициялар ағыны бірлескен кәсіпорындар, еншілес кәсіпорындар құру, шетелдік капиталдың қатысуымен Мемлекеттік кәсіпорындарды жекешелендіру, ірі өнеркәсіптік кәсіпорындардың шетелдік фирмаларының басқаруына беру және банк секторын инвестициялау арқылы жүзеге асырылады.

Мақалада өндіруші өнеркәсіп, қайта өңдеу өнеркәсібі, кәсіптік ғылыми-техникалық қызмет және

инновациялық даму болып табылатын Қазақстан Республикасы экономикасының басым секторларына 2014 жылдан бастап 2018 жылға дейінгі бөліністе тікелей шетелдік инвестициялардың құйылуына талдау жүргізілді. Жұмыста ҚР экономикасының басым секторларына инвестициялау мәселелері зерттелді. Зерттеудің әдіснамалық негізі аналитикалық және статистикалық әдістер, таным мен бақылаудың диалектикалық әдісі болды. Белгілі экономистер авторларының жұмыстары зерделеніп, қаралды. 2022 жылға қарай талдамалық шолудың зерттеулері көрсеткендей, тікелей шетелдік инвестициялар ағыны 2016 жылғы деректермен салыстырғанда 26% – ға өсуі тиіс, ал ТШИ-ның ЖІӨ-ге қатынасы 19% деңгейінде болуы тиіс, ал ағымдағы сәтте бұл көрсеткіш 16,5% – ды құрайды. Инвестициялық қайта құрылымдауды және инвестициялардың экономиканың сервистік сегментіне бағытталуын ескере отырып, 2022 жылға қарай экономиканың шикізат емес секторының негізгі капиталына сыртқы инвестициялардың көлемі 2016 жылмен салыстырғанда 50% – ға дейін ұлғаюы тиіс.

Шетелдік инвестициялардың негізгі көлемі бұрынғысынша ауқымды салымдарды талап етпейтін және тез өтелімділікпен сипатталатын салаларға бағытталады.

Осылайша, Қазақстан Республикасы экономикасының басым секторлары бойынша тікелей шетелдік инвестициялардың жұмыс істеу үрдістерін, ағынын және ағынын зерттеу бойынша қорытынды жасай отырып, инвестициялардың салалық құрылымында негізгі үлесті тау-кен өндіру саласы алады, ал мұнай және газ өнеркәсібі бұрынғысынша тартылатын инвестициялар деңгейі бойынша бірінші орындардың бірінде болады. Құрылыс және өңдеу өнеркәсібі сияқты салалар шетелдік инвестициялардың ең аз санын алады. Мақалада зерттеудің ғылыми құндылығы мен жаңалығы бар.

Түйін сөздер: тікелей шетелдік инвестициялар, өнеркәсіп, басым салалар.

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Анализ притока прямых иностранных инвестиций в приоритетные сектора экономики Казахстана

Приток прямых иностранных инвестиций в Казахстан осуществляется посредством создания совместных предприятий, дочерних предприятий, приватизации государственных предприятий с участием иностранного капитала, передачи в управление иностранным фирмам крупных промышленных предприятий и инвестирования банковского сектора.

В статье проведен анализ притока прямых иностранных инвестиций в разрезе с 2014 по 2018 годы, в приоритетные сектора экономики Республики Казахстан, которыми являются добывающая промышленность, перерабатывающая промышленность, профессионально научно-техническая деятельность и инновационное развитие.

В работе были исследованы вопросы инвестирования в приоритетные сектора экономики РК. Методологической основой исследования послужили аналитический и статистические методы, диалектический метод познания и наблюдение.

Были изучены и рассмотрены работы известных зарубежных авторов экономистов. Как показывают исследования аналитического обзора к 2022 году приток прямых иностранных инвестиций должен вырасти на 26% по сравнению с данными 2016 года, а соотношение ПИИ к ВВП должно находиться на уровне 19%, тогда как на текущий момент этот показатель составляет 16,5%. Учитывая инвестиционную реструктуризацию и направленность инвестиций в сервисный сегмент экономики, к 2022 году объем внешних инвестиций в основной капитал не сырьевого сектора экономики должен увеличиться до 50%, также по сравнению с 2016 годом.

Основной объем иностранных инвестиций по-прежнему направляется в сферы, не требующие масштабных вложений и характеризующиеся быстрой окупаемостью.

Таким образом, делая вывод по исследованию тенденций функционирования, оттока и притока прямых иностранных инвестиций по приоритетным секторам экономики Республики Казахстан, в отраслевой структуре инвестиций, основную долю занимает горнодобывающая отрасль, а нефтяная и газовая промышленности по-прежнему находятся на одном из первых мест по уровню привлекаемых инвестиций. Такие отрасли как строительство и обрабатывающая промышленность получают наименьшее количество иностранных инвестиций. Статья имеет научную ценность и новизну исследования.

Ключевые слова: прямые иностранные инвестиции, промышленность, приоритетные сектора.

Introduction. As you know, the main task of the state investment policy of our country is to create a favorable environment for the expansion of extra-budgetary sources of financing of capital investments and attracting private domestic and foreign investments on the basis of further improvement of the regulatory framework and state support for effective investment projects (Atici C.2012:167-178).

There are several sectors of the economy: the development of natural resources, infrastructure, communications and information, which are essential for our country. The development of these industries will have an impact not only on economic growth, but also on the social sphere, as well as on the integration of Kazakhstan into the international community. These are capital-intensive industries, for the development of which both foreign capital and strict strategic control of the state are necessary (Birdsall N. 1993:137).

Focusing on market relations, the main direction of economic reforms is the development and implementation of the investment policy of the state aimed at ensuring high rates of economic growth and improving the efficiency of the economy. In the current conditions, in order to ensure structural reforms of the economy on the basis of the government's programmer of action to deepen reforms and in conditions of limited domestic sources of financing, it is extremely important to attract foreign capital to the economy of the Republic. Foreign investments in the global economy are becoming one of the most relevant and priority forms of economic cooperation between the countries. The total volume of these investments in the world is growing at a much higher rate each year than the total gross product of the countries of the world (Chichilnisky G. 1994:874).

Attracting investment resources on a national and regional scale is one of the priorities of Kazakhstan's economic policy. At the same time, the structure of foreign investments is an important issue (Copeland, B.R 1994:755).

Foreign investments characterize investments of capital by non-residents in the objects of investment in the country (David L. 2002:275).

Prospects for the development of the country's economy are closely linked to the need to attract foreign direct investment. The formation of a favorable investment climate and the solution of problems to attract foreign direct investment in the priority sectors of the Republic of Kazakhstan, in turn, are associated with a set of economic, social, political, infrastructure and other aspects

of economic development. Thus, at present, the Republic of Kazakhstan faces the task of attracting investments taking into account its own incentives and achievements of national goals (Dean, J.M. 1992:103).

Literature review. Studies on FDI have used several different proxies for the infrastructure variable (see Root, and Ahamed 1978y.; Nonnemberg and Cardoso 2002y.; Jaumotte 2004y. among others). Unfortunately, however, complete time series data on most of these proxies is not readily available for the period under study (1970-2007yy.). Consequently, this study followed Morisset (2000y.) and Nizar and Singleton (2001y.), among others and uses the number of telephone lines (landlines and mobile) per 1000 people in a country as a proxy for infrastructure. This has been reported to be a consistent and reliable measure of economic growth which has been extensively employed in the FDI literature (Asiedu, 2002y.; Loree and Guisinger, 1995y.; Khadaroo, and Seetanah, 2003y. Mutenyo, 2008y.; Opolot, et al 2008y.).

In fact, Opolot et al (2008y.) contend that although the number of telephone lines may not be the best proxy for infrastructure, its significance nonetheless shows that infrastructure development does matter for FDI inflows to SSA.

Also, Wheeler (2001y.) used data from three developing countries (China, Brazil and Mexico) with a high level of FDI to study its effect on pollution. In this case, he found that the level of FDI decreased the levels of pollution. For their part, Perkins and Neumayer (2008y.) verified the relationship between FDI and the efficiency in CO₂ and SO₂ emissions in 114 countries. The results proved that economies that started from a worse environmental situation improve their ecological efficiency faster when they adopted technologies and environmental policies similar to those of countries that started from a better situation, resulting in a convergence over time. Atici (2012y.) found, on the other hand, that the level of FDI had a negative and significant impact, so that they did not tend to increase pollution levels in the long term. On the other hand, the intensity of research and development activities has a great relevance on the relationship between the economic level and the level of pollution. On the one hand, there are direct effects of better efficiency on the reduction of pollution levels for a level of income. On the other hand, there is the effect of the greater benefit per unit of production, which decreases the energy intensity needed for production by each economic unit. Therefore, we assume that the greater the intensity of R&D activities, the lower the environmental impact

of economic activities (Wheeler D 2001:225).

Accordingly, in this study, the assumption was that a country with a large number of telephone lines is more likely to have better roads, Internet access, and water/electricity supply, or in short better infrastructure. The model was specified just like Maria Delgado et al. (2000) and Balamurali et al (2004), the time subscripts are omitted for presentation simplicity.

Material and Methods. The paper deals with the issues of investment in the priority sectors of the economy of Kazakhstan. The methodological basis of the research is analytical and statistical methods, dialectical method of cognition and observation. The research consists in the following, which sectors of the Republic of Kazakhstan are the priority, that is, the most attractive for foreign investors with the lowest risks, with a high growth of forecasting. The impact of FDI on the economic potential and development of the country's economy (Agosin M.R. 2000:146).

We have developed the following research plan:

1. Analysis of trends in the functioning, outflow and inflow of foreign direct investment in the priority sectors of the economy of the Republic of Kazakhstan.

2. The main countries investors in the Republic of Kazakhstan on the indicators.

Currently, the main factor of the world economy was the direct international production of business associations, based on the international movement of business capital. Capital is characterized by a high degree of international mobility, its movement occurs in the process of moving financial flows between creditors and borrowers of different countries, between owners and their firms, which they own abroad (Eskeland, G.S. 1997:1).

In the country context, the largest FDI flows are from the following countries: The Netherlands – \$ 3.1 million., US \$ 2.3 million, Switzerland -1.2 million dollars, China – \$ 495.3 million, Russia – \$ 444.6 million., Belgium – \$ 646.4 million, France – \$ 415.6 million, Korea – \$ 246.8 million, UK – \$ 245.2 million (Sarsenov 2017:4).

Foreign direct investment is considered not only as an additional source of domestic investment, but also as a way to gain access to new, improved technology, to the sales system in foreign markets, to new sources of financing. Foreign investment can help accelerate the creation of new industries (Pao 2011:765).

At the same time, there are serious concerns that the transfer of control over resources to foreign corporations may lead to their outflow abroad at

unreasonably low prices, negatively affect the potential of national economic development. Real investment policy should be based on the balance of positive and negative aspects of investment (Adeolu B. 2007:165).

Foreign investments in the global economy are becoming one of the most relevant and priority forms of economic cooperation between the countries. The total volume of these investments in the world is growing at a much higher rate each year than the total gross product of the countries of the world (Perkins 2008:2970).

Results and Discussion. Foreign direct investment includes both the investor's initial acquisition of property abroad and all subsequent transactions between the investor and the enterprise in which his capital is invested. The composition of direct investment includes:

- investment of equity capital by companies abroad – capital of branches and shares in subsidiaries and associates;

- reinvestment of profits – the share of the direct investor in the income of the enterprise with foreign investments, not distributed as dividends and not transferred to the direct investor;

- intra-corporate capital transfers in the form of loans and borrowings between the direct investor, on the one hand, and subsidiaries, associates and branches, on the other.

In most studies on foreign investment, there is a positive role played by investment in the development of the economy of each country, not an exception, and our country – Kazakhstan.

In recent years, investment attractiveness accounts for the share of industrial real sectors of Kazakhstan, which attracted almost 2/3 of all capital investments. One of the strategic plans of the Ministry for investment and development of the Republic of Kazakhstan for 2017-2021yy. is the development of a diversified economy by improving the investment climate, including the involvement of TNCs in the manufacturing industry rather than in the raw materials sector of the economy.

The inflow of foreign direct investment in Kazakhstan is carried out through the establishment of joint ventures and subsidiaries, privatization of state-owned enterprises with foreign capital, transfer of large industrial enterprises to the management of foreign firms and investment in the banking sector. The main form of attracting direct investment in the Republic are joint ventures (JV), to a lesser extent – with 100% foreign capital-subsiaries. The largest number of them was organized jointly with Turkey, Russia, China,

Germany, the USA, Italy, South Korea, Great Britain and other countries.

As shown in figure 1 for the period 2014-2016yy. gross inflow of foreign direct investment (hereinafter-

FDI) in Kazakhstan amounted to 59.6 billion dollars. United States (of which in 2014 stands at 23.7 million. US \$ 14.8 million in 2015 – USA and in 2016 – about us \$ 21 million. USA.) – Fig.1:

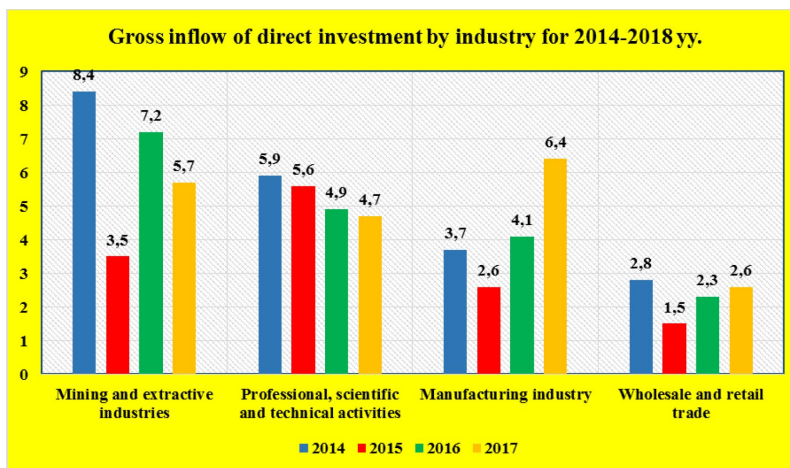


Figure 1. Gross inflow of direct investment by industry for 2014-2017 years.,
(Calculations Rabking.kz on the basis of data of NB RK)*

*Note: developed by the author

As can be seen from figure 1, there is still a steady trend of investment in the extractive industry, with a decrease in the level of scientific and technical activities. At the same time, there is a positive trend in investment in the manufacturing industry.

Due to the fall in prices for the main export commodities, there has been a decline in FDI inflows to our country.

Thus, in comparison with 2014 (\$23.7 million). The volume of gross FDI for 2016 decreased by 11.5 % to \$ 21 million. USA. At the same time, despite the decline in FDI in a number of industries, compared with 2014, FDI in the manufacturing industry increased in 2016:

- production of chemical products 4.8 times (2016y. – \$ 173 million)., 2014y. – \$ 35.9 million.);
- production of textiles, clothing and leather 2.8 times (2016y. – \$ 16.8 million)., 2014y. – \$ 6.1 million.);
- production of vehicles and equipment-2.4 times (2016y. – \$ 20.8 million)., 2014y. – \$ 8.6 million.);
- production of the metallurgical industry by 1.2 times (2016y. – \$ 3.5 million)., 2014y. – \$ 3 million.).

According to the National Bank of the Republic of Kazakhstan in the 1st half of 2017y., the volume of gross FDI inflow amounted to \$ 10.5 million. that is 8.6% more than in the same period of 2016y. (\$9.6 million).

The largest increase in gross FDI inflows is seen in industries such as:

- trade-by 54.2% (\$1.3 million);
- mining-2.2% (\$5.7 million);
- manufacturing-by 46.7% (\$2.4 million);
- transport – 10.3% (\$308.4 million);
- agriculture – by 13.7% (\$14.3 million).

The largest fall in gross FDI inflows in the following sectors:

- professional, scientific and technical activities-95% (\$151.2 million);
- in exploration decline of 95.3%;
- information and communication-94.2% (\$21.7 million).

At the same time, the share of the manufacturing industry in the production of oil and coal, processing of petroleum products in the investment structure increased from 16.9% (in the 1st half of 2016y.) to 22.8% (in the 1st half of 2017y.).

In the context of the new economic reality – the outflow of capital from emerging markets and falling prices for the main export commodity positions, the Government of the Republic of Kazakhstan faces the task of finding new sources of investment in the development of production in non-commodity sectors of the economy.

In order to improve the investment climate, significant measures are being taken to support investors, including:

- a package of incentives has been introduced, providing for investment preferences, stability of legislation;

- a detailed plan was adopted to improve the investment climate, aimed at improving the visa and migration regime, the import of foreign labor, tax and customs legislation, etc.;

- since 2016, the WORLD is a “one window” for investors, where they can get the public services necessary for the implementation of investment projects. Also, “one window” was created in all regional centers of Kazakhstan;

- there is an investment Ombudsman, which protects the rights and legitimate interests of investors;

- a Government Council has been established to coordinate the work on major investment projects involving TNCs.

Also, in all regions there are councils to attract investment under the leadership of

government structure to address issues at the local level.

As part of the implementation of the National action plan for the implementation of The President’s address to the people of Kazakhstan dated November 30, 2015 “Kazakhstan – a new global reality: growth, reform, development” and “national Plan – 100 steps to implement five institutional reforms”, special attention will be focused on further improvement of the investment climate and attraction of TNCs.

In the long-term dynamics it is noticeable how the interest of countries to Kazakhstan increases. After a sharp decline in global investment flows in 2014y. (up to 1.3 trillion. doll.) in Kazakhstan, their volume fell by a significant 38.7% next year.

However, since 2016 y., there has been a systematic restoration of the investment attractiveness of industries against the background of modernization of the investment climate of the country in favor of” effective “ investments aimed at increasing production and trade turnover (Fig.2):

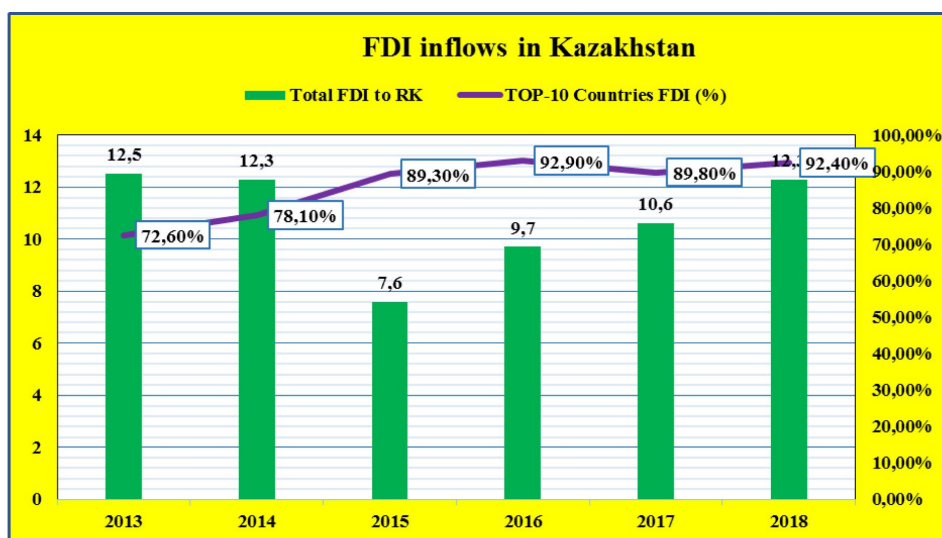


Figure 2. The histogram of FDI inflows to Kazakhstan, billion us dollars USA, (Calculations Rabking.kz on the basis of data of NB RK)*

*Note: developed by the author

As shown in Fig.1, investments in fixed assets for January-April 2018y. amounted to 2.6 trillion tenge – this is 41.6% more than in 2017y. (it was 1.9 trillion tenge). The main areas of investment are:

- industry-1.7 trillion tenge (2017y. – 1.1 trillion tenge),

- operations with real estate – 335.9 million tenge. (2017y. – 251,9 million tenge)
- transport and storage – 304.1 million tenge. (2017y. – 191,9 million tenge).

Collectively, the share of these three areas is 88.4%, or 2.3 trillion tenge.

In industry, the main share of investments is directed to the production of crude oil and natural gas – 1.1 trillion tenge (65%), production of coke

and petroleum products – 215 million tenge (12.8%), and production of metal ores – 98 million tenge (5.8%) – Tabl 1:

Table 1 – Investments in fixed capital (January-April million tenge)*

Direction by industry	2017 year	2018 year	growth
All Industry	1128,4	1682,7	49,1%
Real estate transactions	251,9	335,9	33,4%
Transport and storage	191,9	304,1	58,4%
Agriculture, forestry and fisheries	47,2	60,1	27,2%
Wholesale and retail trade	40,4	53,9	33,5%
Education	42,5	37,7	-11,3%
Restaurant and hotel business	22,4	32,4	44,8%
Construction of objects	13,1	21,8	66,7%
Health and social services	10,4	19,0	82,4%
Arts, entertainment and recreation	10,7	19,0	76,9%
Information and telecommunications	14,4	17,1	18,8%
Financial and insurance activities	14,0	15,1	7,5%
Professional, scientific and technical activities	10,1	11,4	12,7%
Administrative and support activities	49,5	10,0	-79,8%
Public administration, defence and social security	6,2	6,2	-3,1%
Provision of other services	3,0	3,0	-14,6%
Total	1856.1	2628.8	41,6%
*Note: developed by the author The calculations used the data of the COP I RK finprom.kz 2018y.			

Table 1 shows that investments in the industrial sector grew by 44.2%, to 2.1 trillion tenge from the beginning of 2018y. The volume of investments in oil production increased by 68.1 %. According to the Agency, almost three – quarters of investments were in the extractive sectors of the commodity sector, and 65% – directly to oil and gas production. With an overall growth of investment in fixed assets of the industrial sector of 44.2 % for the year, taking into account inflation, the growth was 31.2 percent.

In the mining sector, 88.5% of investments are directed to the sphere of oil and gas production – 1.4 trillion tenge, which is 68.1% more than in 2017y. this is 65% of all investments in the industrial sector. Another 129.6 million tenge, or 8.3% of investments in the mining industry, is directed to the extraction of metals, plus 25.7% for the year, and 28.7 million tenge, 1.8% – in coal mining. Thus, the annual growth of investments in this area has increased by 2.1 times (Table 2).

Table 2 – Investments in fixed assets. Mining and quarrying. January-May 2018 y., million tenge*

Extractive industry	2017 year	2018 year	Growth per year, %
Mining and quarrying	1002,7	1569,8	56,6
Crude oil and natural gas production	826,1	1388,8	68,1

Mining of metal ores	103,1	129,6	25,7
Coal and lignite mining	13,6	28,7	111,0
Technical services in the mining industry	57,0	19,2	-66,3
Other mining and quarrying	2,3	3,4	46,8
Manufacturing industry	303,1	404,8	33,6
Electricity, gas, steam and air conditioning	114,4	111,8	-2,3
Water supply: Sewerage system, waste collection and distribution control	61,1	49,6	-18,9
*Note: developed by the author According to: KS ME RK (Energy Prom)			

Almost three quarters of all investments in the industry are directed to the mining sector – 73.5%, or 1.6 million tenge, which is 56.6% more than a year ago. Another 19% was in the segment of processing – 404.8 million tenge, which is 33.6% more than a year earlier. Less than 8% of all investments in the industrial sector have contributed to energy and water supply.

In the refining segment, the main volume of investments also fell on the sphere related to oil – 225.4 million tenge was poured into the production of coke and refined products, plus 38.3% for the year.

In second place – the metallurgical industry-15% of investment in processing, 62.9 million tenge, followed by the food industry-46.3 million tenge – is 11.4% of the investments of the manufacturing industry.

In the first half of 2018y., Kazakhstan attracted 12.3 million us dollars to the national economy, which is 15.4% more than a year earlier — 10.6 million us dollars.

It is noteworthy that 92.4% (\$11.3 billion) of the US) all investment flows to the country formed a total of 10 countries – Fig. 3:

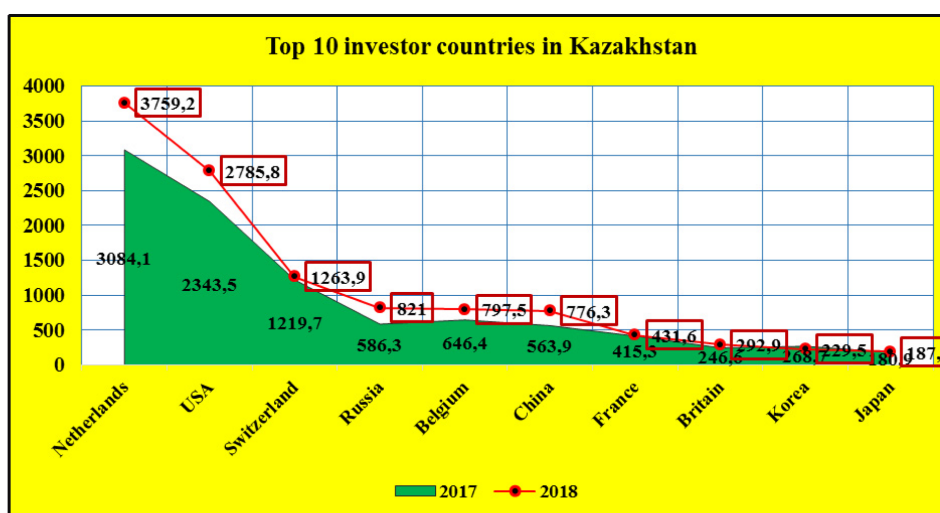


Figure 3. Chart of the main countries investing in Kazakhstan's economy (in million \$ USA), (Calculations Rabking.kz on the basis of data of NB RK)*

*Note: developed by the author

The absolute leader in investments is the Netherlands, for 6 months the volume of investments amounted to 3.8 million dollars. The second strategic investor-the US-is 2.8 million dollars. Switzerland

closes the top three insurance leaders – \$ 1.3 million. The nearest neighbor Russia in 2018y. invested in joint projects in the amount of 821 million dollars, against 586.3 million a year earlier.

Representatives of the 10 largest investor countries formed a pool of the most attractive industries. Dutch investors in the history of economic relations with Kazakhstan have invested 54.2 million dollars (75.8% of all investments) in the mining industry. In the manufacturing industry and professional, scientific and technical activities directed 5.3 million and 5 million dollars, respectively (a total of 14.5%).

US investors have a similar industry investment portfolio: the mining industry accounts for 91.6% (\$28.2 million.) all investment volumes. Also, investors from the US see the potential in the financial sector of Kazakhstan, cumulative investments in which amount to 1.3 million dollars (share – 4.3%). Close the list of investments in professional, scientific and technical activities – 479.6 million dollars (share – 1.6%).

Investment preferences of active investors from Switzerland are radically different from those of the previous two countries. For example, the main Kazakh industry investment magnet for Swiss investors is the manufacturing industry: \$ 3.1 billion. US (65.8%) accumulated investments. Next is the wholesale and retail trade, repair of motor vehicles and motorcycles: 480,1 million USD (a share of 10.1%). In the TOP 3 industries also got information and communication – 408.2 million dollars. (8.6%). The total investment from Switzerland at the end of the first half of 2018y. is 4.7 million dollars (Figure 3).

At the same time, it is noted that the Northern neighbor – Russia – is not only one of the key investors of the national economy, but also an important strategic partner. The flow of investments from Russia to Kazakhstan for all years of relations is 12.2 million dollars.

Russian investors, unlike their counterparts (TOP 10 investor countries), have made a more diversified portfolio, distributing investments

in relatively equal shares. 24.3% (\$3 million) was allocated to the manufacturing industry.) all means. The mining industry attracted 2.6 million dollars (21.2%) of Russian assets. Closes the three potential industries of wholesale and retail trade, repair of cars and motorcycles: 1.9 million dollars (15.9%).

According to the research of the analytical review, by 2022y. the inflow of foreign direct investment should grow by 26% compared to the data of 2016, and the ratio of FDI to GDP should be at the level of 19%, while at the moment this figure is 16.5%. Taking into account the investment restructuring and the focus of investments in the service segment of the economy, by 2022y. the volume of foreign investments in fixed assets of the non-commodity sector of the economy should increase to 50%, also compared to 2016y.

The bulk of foreign investment continues to be directed to areas that do not require large-scale investments and are characterized by rapid payback.

Conclusion

Thus, making a conclusion on the study of trends in the functioning, outflow and inflow of foreign direct investment in the priority sectors of the economy of the Republic of Kazakhstan, in the sectoral structure of investments, the main share is occupied by the mining industry, and the oil and gas industry is still one of the first places in terms of attracted investments. Industries such as construction and manufacturing receive the least foreign investment. These figures for the last two industries have not changed significantly over the past 5 years. Investors are still reluctant to invest in these industries. The main investors in Kazakhstan are developed countries such as the Netherlands, the USA, Switzerland, China, Russia, Belgium, France, Korea and the UK.

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UDC 06.35.31

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The role and importance of accounting information system in the context of digitalization

Information is an essential life resource that is practically understood as necessary and useful data presented in a convenient way, in accordance with the requirements of the user. An information system can be defined as a combination of information resources, processes, and people who collect, transform, and distribute information to organizations. There are many different types of information systems.

The accounting system is understood as a certain integrity or set of accounting elements that are in relationship with each other. This system includes a logical complex, which refers information aimed at the correct measurement of the final results of activities in order to ensure the interests of the economic entity and the state. The optimal accounting system will be one that meets the requirements of accuracy, timeliness, low cost and eliminates the possibility of theft or fraud, etc.

To date, primary accounting remains insufficiently orderly, time-consuming and poorly organized, and this hinders the development of integrated information processing systems. The main objective of primary accounting is not only to collect, measure and process information, but also to provide feedback in the preparation and decision-making. Increasing the level of automation and widespread use of various types of computer technology at all stages of the accounting process makes it possible to abandon the primary documents in the form of paper.

Key word: Information, primary accounting, accounting system, automation.

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Цифрландыру жағдайындағы есептік ақпараттық жүйенің рөлі мен маңызы

Ақпарат маңызды өмірлік ресурс, оны пайдаланушының қажеттілігіне сәйкес қолайлы үлгіде қажетті мәліметтер деп түсінуге болады. Ақпараттық жүйені ақпарат ресурстарының, процесстердің және оларды жинап, өңдеп, ұйым ішінде таратушы адамдардың жиынтығы ретінде анықтауға болады. Ақпараттық жүйелердің түрлі үлгілері саналуан.

Есептік жүйе деп өзара байланысқан есеп элементтерінің белгілі бір тұтастығы немесе жиынтығын қарастыруға болады. Бұл жүйе мемлекет пен экономикалық субъектілер өз мүдделерін қамтамасыз ету мақсатында қызметтің соңғы нәтижелерін дұрыс бағалауға бағытталған ақпарат айналысы жүзеге асатын логикалық кешен болып табылады. Ең қолайлы есеп жүйесі дәлдік, уақыттылық талаптарына сай келетін, өзіндік құны төмен, алдау және алаяқтыққа жол бермейтін жүйе болып табылады.

Бүгінгі күні алғашқы есептің толыққанды реттелмеген, еңбек сыйымдылығы жоғары және жетік ұйымдастырлмаған болуына байланысты бүкіл интеграциялық ақпаратты өңдеу жүйесінің дамуы тежелуде. Алғашқы есептің басты мақсаты ақпаратты жинау, бағалау және өңдеу ғана емес, сонымен қатар кері байланысты, яғни, шешімдерді дайындау және қабылдауды қамтамасыз ету деп түсініледі. Автоматтандыру деңгейінің артуы, есептік барлық процесстерде есептеу техникаларын кеңінен пайдалану қағаз түріндегі алғашқы есеп құжаттарынан бас тартуға мүмкіндік береді.

Түйін сөздер: ақпарат, алғашқы есеп, есеп жүйесі, автоматтандыру.

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Роль и значение учетной информационной системы в условиях цифровизации

Информация является важнейшим жизненным ресурсом, который практически понимают как необходимые и полезные данные, представленные в удобном виде, в соответствии с требованиями пользователя. Информационную систему можно определить как соединение информационных ресурсов, процессов и людей, которые собирают, преобразуют и распространяют информацию в организации. Существует огромное количество различных типов информационных систем.

Под учетной системой понимается определенная целостность или множество элементов учета, находящаяся во взаимосвязи друг с другом. Это система включает в себя логический комплекс, в котором обращается информация, направленная на правильное измерение конечных результатов деятельности в целях обеспечения интересов экономического субъекта и государства. Оптимальной учетной системой будет та, которая отвечает требованиям точности, своевременности, низкой себестоимости и исключает возможность хищения или обмана и т.д.

На сегодняшний день первичный учет остается недостаточно упорядоченным, трудоемким и плохо организованным, а это сдерживает развитие интегрированных систем обработки информации. Основной задачей первичного учета заключается не только в сборе, измерении и обработке информации, но и в обеспечении обратной связи при подготовке и принятии решений. Повышение уровня автоматизации и широкое использование различных видов вычислительной техники на всех стадиях учетного процесса выдвигает возможность отказа от первичных документов в виде бумажных носителей.

Ключевые слова: информация, первичный учет, учетная система, автоматизация.

Introduction. The modern economy is unthinkable without effective management. The success of management is largely determined by the effectiveness of integrated decisions that take into account the most diverse factors and trends in their development. An important category of integrated solutions is the enterprise information processing system. One of the main goals of data processing systems is to improve the efficiency of the company, institution or organization. Data processing system should: provide General or detailed data on the results of the work. To allow one to easily determine the trends of important indicators. Provide time-critical information without significant delay. Perform accurate and complete data analysis.

It is considered that rationalization of information process with distribution on it of elements of

production activity (rationing, technology) has to increase efficiency of administrative work. One of the main indicators of the efficiency of the enterprise is its productivity: quality, quantity and speed of information processing.

Any organization processes information to produce two types of “products”: information (data, documents, speech information) and decisions (operational and strategic). The organization receives initial (incoming) information in various forms: documents that deliver information in the form of words and numbers; speech information on the phone; data from computers, often in electronic form. Final (outgoing) information is produced in the same forms.

Literature review. In the process of daily activities of companies there is a significant amount

of operational information. Information support of managers in making management decisions necessitates the creation of a data Bank, which are integrated elements of the information system of companies. Kazakhstan scientist in the field of management accounting K. T. Higashikawa in his book “Managerial accounting” gives the following classification of information.

The role and importance of the accounting information system in terms of digitalization is well disclosed in their books Fedorova G. V. information technologies of accounting, analysis and audit.

The sources of information and works of the following authors were useful in writing the article

Information systems in Economics: Textbook for University students / ed. G. A. Titorenko. Lashina,

Soloviev: Information systems and technologies in Economics and marketing (for bachelors).

Tot managed to write an article Law of the Republic of Kazakhstan «on accounting and financial reporting».

Material and Methods. In the course of writing the article was applied a systematic analysis of the main provisions of legal acts, as well as discussions of economists and practitioners in the field of accounting and auditing.

Material characteristic. Information is facts, data, observations and everything that somehow expands our knowledge. The number of 1,000, taken by itself, is not information, but the statement that the organization employs 1,000 people, can already be considered information (Fig.1):

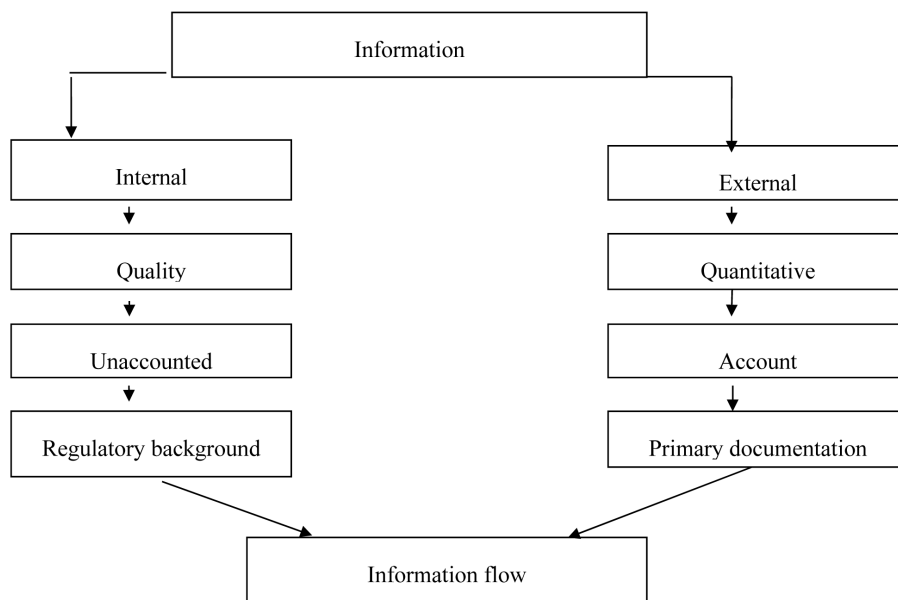


Figure 1. Classification of management information*

*Note: developed by the author

The basis of modern organization of accounting – processing of constantly circulating flow of accounting, and in some cases, and non-accounting information.

To accounting sources include: bookkeeping and accounting; statistical accounting; online accounting; selective credentials.

To Neuchatel sources include: materials, internal and external audit; the audit results of the tax service; print materials, explanatory notes and memoranda, correspondence with partners and others.

This information is the first stage of preparation of data for management decisions, the second

stage – their analysis and evaluation. As a result, an accounting and analytical system is formed (K. Drury, 2005: 1071).

The basic concept of “system” is an abstract concept with many definitions. The system can be defined as a group of interrelated and interacting elements that form a single unit, or as a group of components acting together to achieve a common goal, performing input, output and conversion (information, material, substance).

An information system can be defined as a combination of information resources, processes, and people who collect, transform, and distribute

information to organizations. There are many different types of information systems (hereinafter referred to as is) – from conventional (traditional), i.e. without the use of computers, to is based on the use of computers, software and IP specialists. The overall objective of IP is to transform “raw” data resources into information “products” needed by specific users (Titonenko, 2006: 253).

The information system is a more mobile system that allows managers to freely and quickly, at their workplace, use, depending on the situation, special means of designing alternative solutions. The special status of IP in management was realized in 1970, due to the emergence of the concept of decision support systems (DSS). The conceptual basis is the model of decision-making By G. Simon. (Law of the Republic of Kazakhstan, 2007:12)

The decision-making process for Simon Has three stages: information, design, and selection stage. At the information stage, the environment is studied, the events and conditions that require decision-making are determined. At the project stage, possible activities (alternatives) are developed and evaluated. At the selection stage, justify and select a certain alternative, organizing monitoring (monitoring) of its implementation.

Results and Discussion. The modern concept of IP is due to the understanding of the roles of IP in organizations, analysis of the role of IP in promoting mass current operations, as well as the impact of IP on the achievement of strategic advantages in competition. From this point of view, G. M. Ustinov gives a conceptual scheme of IP levels in organizations where the highest level is the first: (Nurgazina Z, K, 201:240)

1. Providing strategic competitive advantages.
2. Ensuring management decision-making.

3. Ensuring ongoing business operations.

Under the accounting system (from Greek. systema – whole composed of parts, Union), writes F. S. Seidakhmetov, means a definite integrity or the set of elements of accounting while interacting with each other. Such a system includes a logical complex, which summarizes information aimed at the correct measurement of the final results of activities in order to ensure the interests of the economic entity and the state. (Seidakhmetova F.S., 2013:230 p).

Information on the size of the material and labor resources, how to Finance them and the results achieved is necessary for both employees of the organization for effective work and “external” persons to assess its activities. It is this information and provides accounting.

Accounting primarily provides quantitative information and is characterized by the fact that it usually operates with data expressed in monetary units. Management accounting is a process within an organization that provides the necessary information used to plan, manage and control the activities of the organization. The information system of accounting has certain features. Common to all information systems within an organization.

This: (Mustaev V, 2018:344).

- Recognition and collection of relevant information.
- Systematic recording of the collected information.
- Analysis and interpretation of the collected information.
- Reporting on available information in a form that meets the needs of users.

The relationship between these features can be represented as follows (Fig.2):

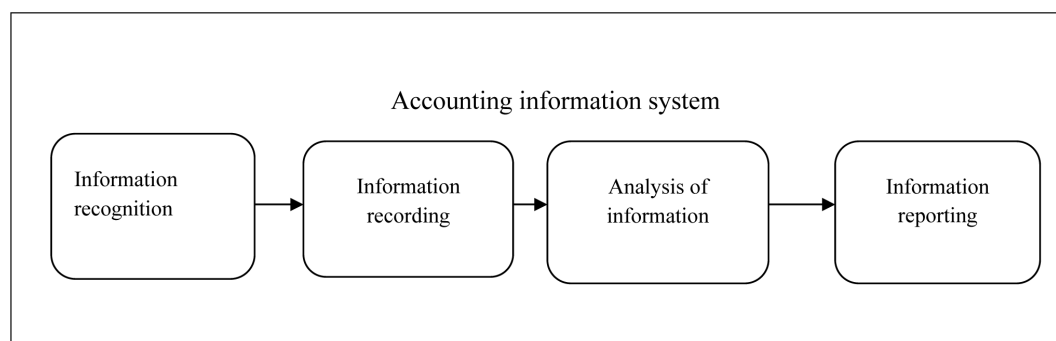


Figure 2. Accounting information system*

*Note: developed by the author

Figure 1 shows the four successive stages of the accounting information system. The first two stages are preparatory, and the last two involve the use of the information collected.

It is necessary to connect the process of information processing with the decision-making process. This will assess not only the results, but also the course of economic activity, economic processes and the possibility of influencing them by making the necessary management decisions. Depending on the information used and the tasks of analysis, the accounting and analytical system can be divided into three types: operational, tactical and strategic. (Lyubushin, 2014:304)

Operational – provides analysis and decision – making in the process of accounting for transactions, tactical – provides analysis and decision-making after transactions, strategic-provides retrospective analysis and decision-making on the basis of reporting and settlement data.

Management accounting is a part of accounting, which to some extent allows you to control and evaluate the financial and commodity flows of companies, calculating their effectiveness (Higashikawa K, 2008: 305).

In order to improve business efficiency, taking into account the growing competition, managers are required to carefully analyze the current activities of companies, plan the budget and control costs. In all of these cases, clear, standardized information is needed to enable the right management decisions to be made.

Increased attention to management information has an impact not only on the efficiency of production management, but also on the timely adoption of management decisions by managers for each process.

Information is needed to manage the production process. This information is obtained through accounting, which emerged as a function of production management. It is carried out by means of constant monitoring of economic processes, their quantitative measurement, registration and generalization. By considering business processes are characterized by quantitative and qualitative sides: is determined by the volume of goods produced and of goods sold, their cost, productivity, profits, profitability, etc.

Thus, economic accounting is a system of quantitative reflection and qualitative characteristics of economic phenomena and processes in order to control and better manage them.

Economic accounting consists of three different types of accounting: operational, statistical and accounting.

Operational accounting is a system of ongoing monitoring, control and management of individual business transactions in the course of their implementation. It is usually limited to the organization and is conducted at the places of economic operations (warehouse, shop, cash, etc.).

This type of accounting is the most simple in technique compared to other types of accounting and is carried out as necessary. Its data are not necessarily recorded in documents and can be obtained by oral conversation or by means of technical means and devices. Statistical accounting (statistics) is a system of registration, generalization and study of mass qualitatively homogeneous socio-economic phenomena (on the scale of industry, economic region, country).

Statistics collect and prepare information (on the population, number of employees, income, labor costs, etc.), which is used by the authorities and management to make management decisions at the state and regional levels.

Accounting is an ordered system of collecting, recording and summarizing information in monetary terms about the property, liabilities of organizations and their movement by continuous, continuous and documentary reflection of all business transactions (Simon G.A, 2015: 20)

For accounting is characterized by the use of special techniques and methods of processing of economic information: accounts, double entry business transactions in the accounts, balance sheet, etc.

Accounting as an information system performs measurement, registration, processing and transmission of financial information about a particular business entity in order to use this information to make informed management decisions and monitor their implementation.

Accounting is called the «language of business», because information about property accounting, business transactions, sources of formation of the organization's property is necessary for many users of financial statements. Potential users of accounting information are divided into internal and external. For rice.3 shows users who use accounting information for decision – making, i.e. who manages economic activities, as well as stakeholders, including investors, employees, suppliers, buyers, the state and its agencies, the public, auditors, etc. Fig.3:

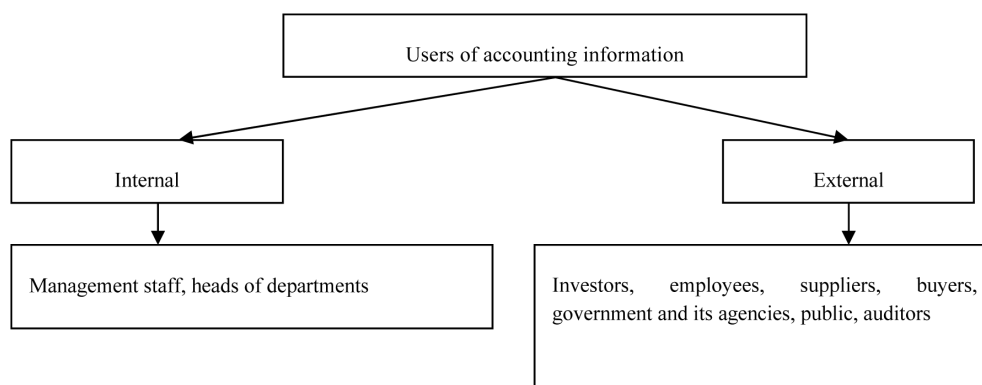


Figure 3. Users of accounting information*

*Note: developed by the author

The composition for each representative of the administration is determined depending on the position and functions performed by him, for managers, the most important information is the amount and rate of profit, cash adequacy, cost of production and profitability. Owners and co-owners are most interested in the profitability and liquidity of the organization.

The management of the organization is also interested in the information provided to external users and in the variety of information required for planning, analysis and control. It is understood that information for external users is formed, including on the basis of information for internal users related to the financial position of the organization, the financial results of its activities, changes in its financial position

External users have the following main interests in information generated in accounting:

1. investors and their representatives are interested in information about: the riskiness and profitability of the proposed or implemented investments; the ability of the organization to pay dividends;
2. lenders are interested in information that allows to determine whether the loans provided by them will be repaid in a timely manner and the corresponding interest will be paid;
3. suppliers and contractors are interested in information to determine whether the amounts due to them will be paid on time;
4. buyers and customers are interested in information about the continuation of the organization;
5. the authorities are interested in information for the implementation of their functions: the allocation of resources; regulation of the national economy;

development and implementation of national policy; conducting statistical monitoring;

6. the General public is interested in information on the role and contribution of the organization to the well-being of society at the local and regional levels.

Two groups of users – owners and management personnel – have a well-justified priority in the organization of accounting and reporting of the organization, moreover, within the framework of the Anglo-American model, the idea of dividing the accounting system into two interrelated categories has been actively developing for many decades: financial accounting and management accounting. Despite the fact that the functions of financial accounting and management accounting are largely the same, these two categories can be distinguished by who are the main users of their information.

Management accounting provides information on financing, investment and operating activities to persons within the organization who make decisions and are responsible for achieving profitability and liquidity objectives. Managers and employees engaged in economic activities need information about the results of their activities in the past and in the future.

Financial accounting includes the preparation of reports and their transmission to external decision-making users, so that they can assess how the business objectives are achieved. These reports are referred to as financial statements for external users.

Tax accounting is one of the leading links in the information system of financial and economic activity of the organization, formed on the principles of accounting in order to determine the tax base.

There are four stages in the accounting process:

1. Registration and measurement of credentials;
2. Systematization and generalization in accounting documents;
3. Combining information together for reporting;
4. Data synthesis and analysis.

The source object of the accounting process organization is the accounting item. In accounting

under the accounting nomenclature understand the composition of the names of economic facts (phenomena and processes) – is the characteristics of the state of objects of accounting, which should be reflected in the accounting system. Based on the theory Fabio Besta (1845-1923) you can bring the distinction into account at the time of the meeting (Seidakhmetova F.S, 2000: 336) – Fig.4:

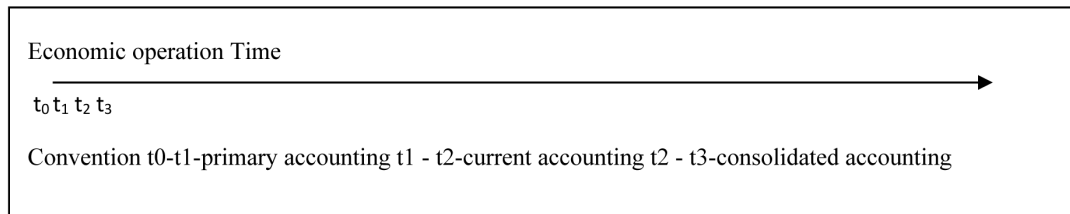


Figure 4. The movement of the accounting process in time*

*Note: developed by the author

The composition of objects of accounting in each period of the accounting process is determined by the content of the economic activity of a particular company and the objects of information. The uniformity of many accounting procedures plays an important role in the organization of accounting.

The set of rules and techniques of accounting, by which the interaction of the main elements of the accounting system can be attributed:

- primary observation;
- cost measurement;
- current grouping;
- final summary.

The initial stage of the accounting process is called the primary accounting, which are monitored, measured and recorded results in the media accounting information. In General, it is a repetitive time-organized process of collecting, recording, storing and storing information, in the conditions of automation – its transfer to computer media and initial processing.

At the stage of primary observation, the accomplished facts of economic activity are analyzed and divided into separate economic operations. Business transaction shall be accounted for if determined at the time of the transaction, its content, the value of the dimension.

At the stage of documenting the operation-prepared or accepted from other organizations primary documents reflecting all committed Financial and economic operations and their results (receipts, invoices, etc.). Primary documents are checked in form and in essence and registered.

At the stage of the current grouping of facts of economic activity, information of primary documents on the relevant financial and economic operation is reflected in accordance with the system of accounts, the accounting record of the operation is determined by the method of double entry, which is recorded in the accounting documents according to the selected form of accounting.

At the stage of final generalization of the facts of economic activity on the basis of current accounting at the end of each reporting period by means of closing transactions temporary accounts are closed and balances on permanent accounts are defined, and financial statements on the recommended forms are made. Financial statements are a system of indicators characterizing the financial and economic activities of the organization, its property and financial position for a certain period (reporting year).

At the stage of analysis of the organization on the basis of accounting data and financial statements are calculated financial ratios and analysis of key indicators.

In most cases, the activity of the accountant is directly related to the office work, which covers the set of the following works:

- preparation of correspondence (correspondence);
- reception of incoming (incoming) documents;
- send outgoing documents;
- registration and control over the execution of documents;
- storage of waste documents in the current archive;

– termination of storage of documents in the current archive.

The list of names of cases for grouping and storage of documents of the subject is called the nomenclature of office work. It is drawn up by the staff of the office in consultation with all divisions.

It specifies the list of cases required to store the correspondence of each Department.

According to generally accepted methodology of records management in modern conditions it is possible to identify three types of information flow: inbound, internal, outbound (Table 1):

Table 1 – Structure of information exchange*

The form of the document	Document flow		
	incoming	internal	Outgoing's
Electronic	Email message Facsimile information	Corporate network messages Faxes	Responses to e-mails Facsimile information
Paper	Letters, contracts. Legislative act Normative document Periodicals	Orders Instructions Reports Accounting document	Letters Contracts Press releases
*Note-according to the literature 5			

As you can see, the names of the documents may be different, but they ultimately indicate the nature of the facts reflected in them, which makes it easier to work with them. Important control and information value is the date, as economic facts can be the same type and repetitive. To prevent the possibility of re-use the same put them on the blanking dies.

The list of officials authorized to sign primary documents shall be approved by the head of the organization in coordination with the financial Director. "Electronic signatures" are being distributed.

The path that documents go from the moment of discharge to delivery to the archive is called document management. In this case, a hierarchy of signatures can be established depending on the position held, the amount of money, the scope and essence of the operation.

The movement of documents is regulated by the document flow schedule approved by the head of the organization. It can be issued in two versions – in the form of the scheme and in the form of the list of works on creation, check, processing of the documents performed by structural divisions of the organizations with indication of responsible executors and terms.

Document management systems include the following steps:

- development of Regulations on the accounting service;
- development of job descriptions of employees of accounting and other employees of the enterprise related to accounting;

– drawing up the schedule of document flow in the enterprise;

- creation of accounting information processing technology;
- development of the nomenclature of cases and the order of the current storage of documents;
- examination of the value of documents and preparation of cases for long-term storage.

The document flow schedule should be linked to the job descriptions and accounting policies of the organization. Responsibility for compliance with the document flow schedule, as well as for the timely and good-quality creation of documents and their transfer for reflection in accounting and reporting, for the accuracy of the data contained in them are the persons who created and signed this document.

The automated form of accounting is a successful combination of professional qualities and functions of the user with intellectual possibilities of the computer equipment allowing to receive information necessary for management and operational control in the convenient form in the form of printouts on accounts.

Currently, accounting is ineffective without computer data processing. Now on the market there are many accounting programs that meet a variety of requirements for them. It is especially difficult to choose the right program for your company. Mechanization of accounting reduces the complexity of accounting, but does not allow to make it fully operational, reduce the time for the rest of the reporting. Most fully these issues are

solved in terms of automation of the whole complex of accounting works. Particular importance is attached to the development of application software packages that implement automated solutions to all typical accounting tasks. Standard projects of complex automation of accounting with application of various types of computers for the industry, agriculture, the centralized accounts departments, the organizations which are on the state budget, and other organizations are developed. Currently, automation of accounting with the help of a personal computer is not a difficult task for either the developer or the user of accounting software. Today the simple solutions computerization of accounting achieved the hard way: from the computerization of individual sections of accounting work to establish associated databases for the information of the balance sheet. The development of computers by accountants at the level of not only the user, but also programming (and today this is a qualification requirement) has allowed to radically revise the strategy of accounting programs. As it turned out, it is more effective to have a single database structure for all areas of accounting.

Thus, in real time simultaneously solved the problem of balance sheet at every moment. Registration of primary documents-making the content and amount of business transactions in a single database of the enterprise. Network versions of accounting have solved the problem of dependence of the sites on the time of access to a single database.

SAP and Oracle are the world leaders in the market of foreign software ERP-products (Enterprise Resource Planning) and systems. From the developers in the CIS can be identified firm "1C", released on the market a new generation system – "1C:Enterprise 8. Production enterprise management", which provides ample opportunities for solving problems of integrated management of the organization and process analysis. For the organization of Kazakhstan in 2007 was released a localized version of this product – "1C:Enterprise 8. Management of the production enterprise for Kazakhstan".

Typically, the period of implementation of an ERP system can vary greatly from 6 months to several years. On average, the cost of implementing an ERP system of a Western developer is \$ 500 thousand, and domestic software is about \$50 thousand. The cost of one workplace on the basis of the product "1C:Enterprise 8. Management of production enterprise for Kazakhstan" is an average of \$ 2-3 thousand (Sultanova B.B, 2016:34)

The main features of automated data processing are:

- reflection of the economic activity of the organization in the form of accounting entries with the ability to conduct analytical accounting;
- keeping records of primary documents with the possibility of using standard operations;
- analytical and synthetic accounting of cash flow and material values on any accounts;
- consolidated and separate balance sheet for several divisions;
- accounting and revaluation of fixed assets, intangible assets, goods, materials, depreciation of fixed assets and intangible assets;
- mutual settlements with accountable persons;
- financial analysis and balance sheet modeling;
- maintenance amount and accrual accounting, balance sheet and off-balance sheet accounts;
- parallel maintenance of several cash registers and current accounts in rubles and currency, calculation of exchange rate and amount difference;
- accounting of cash transactions, maintaining the cash book, automatic export of data to The General Ledger;
- ability to view the register of transactions of documents-grounds;
- automatic generation of purchase Books and sales Books based on primary documents;
- automatic recalculation of the General Ledger and balances with turnover on accounts;
- ability to enter, adjust documents and transactions for any reporting period;
- flexible configuration of permissions (up to individual fields) and appearance of the module object lists;
- the formation of the main accounting reports;
- reporting to tax authorities and extra-budgetary funds.
- additional possibilities of automation of accounting:
 - export data and generated reports in Word and Excel formats, obtaining information in graphical form.

Flexible universal module is the basis of the accounting complex. The problem of flexibility and customizability in modern systems of processing of accounting information can have two solutions: the use of a large number of user-defined parameters of the system, which in one way or another change the behavior of the system (full-featured systems), or the presence of a built-in language to describe the algorithms of the system in different situations (tool systems).

Conclusion

“1C:Accounting 8.3” successfully combines the adaptive properties of both instrumental and full-featured systems. On the one hand, the program comes with a standard configuration, which is a ready-made setup to automate the most important areas of accounting, i.e. the system initially has built-in support for solving accounting problems. At the same time, a typical configuration contains a number of parameters that allow you to control its behavior, which is typical for full-featured systems.

On the other hand, a typical configuration is open for change: a trained user can change the algorithms or add completely new functions to take into account the specifics of a particular organization. For this “1C: Accounting 8.3” contains advanced tools, which is typical for tool systems.

Such capabilities of “1C: Accounting 8.3” open a new, different from the traditional approach to the construction of an automated accounting system. It provides that the accounting complex is formed from flexible universal modules. The module is a shell that includes a set of specialized tools designed to create information objects, describe their properties, relationships and information processing algorithms, as well as a mechanism for interpreting these descriptions. functionally, the module itself is not specialized, but can be configured to perform accounting functions through built-in tools. At any

time, the flexible universal module can be redesigned to perform other functions up to the complete restructuring of the module to the functions of a completely different accounting area. It is important that this setting (configuration) is not created at each workplace (not for each flexible universal module), and for the accounting complex (set of GUM) as a whole. Thus for each workplace (accounting worker) within the uniform configuration the individual user interface which includes the list of commands of management of accounting and reporting information available for this user is created. This approach allows to create complex complexes for automation of accounting of enterprises of different industry orientation on the basis of flexible universal modules.

Kazakhstan is in the process of changing and improving the legislation in the field of regulation of legal entities in this regard, regulatory reporting is regularly changing. When choosing any ERP system of Western or domestic production, it is necessary to look into the future and calculate all possible costs and consequences.

The selected system shall be supported by the developer and the cost of such support shall not exceed reasonable limits.

The right choice of system and supplier will allow you to maintain both business and market share, and in some cases, the level of profitability

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