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Assessment of the university entrepreneurial potential (comparative analysis)

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Abstract

Relevance. The relevance of the study is due to the need to conduct a comparative analysis of the Kazakhstan's universities with entrepreneurial universities from the leading countries of the world in order to assess their entrepreneurial potential.

Purpose. This article is aimed at identifying the universal criteria that define the concept of entrepreneurial university, with the help of which it is possible to assess how a university corresponds to the definition of entrepreneurial university, as well as to make assessment of the universities' entrepreneurial potential.

Methodology. The method of analyzing economic processes is the leading approach to the study of this problem, which allows considering in details the significant events and trends in the economic and social development of countries that has occurred as a result of implementation of the idea of entrepreneurial universities. In addition, the following research methods were used: online questioning of experts, comparative analysis, work with sources, system analysis, logical analysis, methods of synthesis and deduction.

Results. In this article, there are the results of the study: it has been identified the universal criteria that define the concept of entrepreneurial university, with the help of which it is possible to assess how a university meets this definition; it has been conducted an online survey of experts to assess the compliance of universities in Kazakhstan, the USA, Germany and India with the criteria of entrepreneurial university; it has been carried out a comparative analysis of entrepreneurship and entrepreneurial universities of these countries based on the data identified during the analysis; it has been given the general recommendations on the formation and development of entrepreneurial university.

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Conclusions. The materials of this article are valuable for science, as they contain recommendations for the formation and development of entrepreneurial university, based on the experience of the leading countries in this field, and in addition, it has been described the universal criteria for entrepreneurial university that will help in determining its entrepreneurial potential.

Keywords: knowledge economy; triple helix; HEInnovate; questioning of experts; promotion and development of entrepreneurship.

Introduction

The economy of the 21st century bears little resemblance to the economy of the late 19th and most of the 20th century. The explosive growth in production and use of new technologies, the decrease in the value and importance of physical labor have shown that knowledge is the most valuable resource for the modern economy. Considering the universities of Kazakhstan as an institution aimed at the creation of new knowledge and transferring knowledge to the next generations, it can be argued that there is a direct relationship between the organizational structure, teaching programs of the university and the country's economy. Thus, the entrepreneurial potential of Kazakhstan's universities is a necessary component of the modern economy, which can also be called the knowledge economy.

S. Harris [1] considers the entrepreneurship as the main incentive to the economy development, which makes the university education with an emphasis on the entrepreneurial activities of its graduates and the university itself as an effective way to develop entrepreneurship in society. The scientist sees great prospects for the development of the countries' economies and the financial prosperity of their citizens through the development of small businesses by the highly qualified graduates of entrepreneurial universities. H. Etzkowitz [2] also discusses the mutual influence of education and entrepreneurship in his work. On the example of Stanford University, the scientist has analyzed the significance of innovations in higher education and has concluded that there is an urgent need for constant changes in the academic environment, which would stimulate the development of new ideas and would not allow the establishing of archaic forms of management and teaching. L. Metcalf et al. [3] with colleagues have studied the issue in their work on financing and promotion of start-ups by universities, as well as the fact how this affects the formation and development of entrepreneurship in the universities. The authors focused on the concept of start-up acceleration, which emerged in response to the failed concept of incubation. The main difference between these two concepts is the availability of mentoring, funding, and other support services, when performing the university programs of start-up acceleration.

A. Link and R. Sarala [4] have empirically proved a positive connection between the use of knowledge obtained at the university and business success in the university entrepreneurial ecosystem, which again allows talking about the great prospects of entrepreneurial universities as a way to guarantee the sustainability of economic development of the state. The gender problem of implementation of entrepreneurial potential was considered in the study by M. Osmani et al. [5]. The authors' approach to solving this problem has been based

on the assumption that entrepreneurial activity includes a large share of creativity, since the process of creating and developing business cannot do without creating the value with the use of non-standard thinking. In the course of the work, the scientists confirmed the positive influence of female students' propensity for creative activity on their intention to engage in entrepreneurship. Considering higher education in Kazakhstan through the prism of benefits for the country's economy, the entrepreneurial potential of universities is extremely important dimension, and its qualitative definition and evaluation can help in building a further plan for the economic, social and cultural development of the country.

This study aims to identify the universal components of entrepreneurial potential of the university, which would be relevant for institutions in different geographical regions, and accordingly, with different cultural and historical experience in the field of higher education, and also this study aims to conduct a comparative analysis of these components for the universities in Kazakhstan, the USA, Germany and India.

Materials and Methods

This study was carried out using the method of analyzing economic processes, namely the results of the entrepreneurship development with the help of entrepreneurial universities in the USA, Germany, India and Kazakhstan, and the impact of these processes on the economies of these countries. In addition, the following research methods were used: online questioning of experts, comparative analysis, work with sources, system analysis, logical analysis, methods of synthesis and deduction.

The first stage of the work was aimed at studying the previous research on the theme of entrepreneurial universities and identifying the theme of this study. To do this, the authors carried out the work with sources. This and the next stages of the work became preparatory ones, and they were used to create a theoretical basis for subsequent work.

At the second stage of the study, a questionnaire was developed, which was compiled based on the materials by U. Gyr et al. [6]. During the survey, experts assessed the individual, organizational and institutional characteristics of entrepreneurial university using this questionnaire.

At the third stage of the study, it was conducted an online survey of experts (N = 422) from the countries such as Kazakhstan, the USA, Germany and India in order to assess the criteria for the entrepreneurial potential of universities of the above-mentioned countries. Each of the experts was given a questionnaire, and they needed to evaluate the statements from questionnaire on a scale of 1 to 10, where 1 – the statement does not correspond to reality at all, and 10 – the statement completely corresponds to reality. The survey was aimed at assessing

the entrepreneurial potential of universities in Kazakhstan, the USA, Germany and India, as well as at comparative analysis of these assessments. The assessment of entrepreneurial potential of universities in this study was aimed at identifying trends in the development of entrepreneurship in the system of higher education institutions in each of the countries considered.

At the fourth stage, the work was carried out with the information obtained during the survey of experts using the methods of systemic and logical analysis, as well as the method of analyzing economic processes. System analysis was used to identify systemic prerequisites for the growth of economies of the USA, Indian and Germany due to the development of entrepreneurial universities. The logical analysis in this work was used to identify criteria that can be used to assess how the university meets the definition of entrepreneurial university in terms of a set of organizational, institutional (university) and individual (students) entrepreneurial potential. Using the method of analyzing economic processes, the authors described significant events and trends in the economic and social development of the countries under consideration.

The final, fifth, stage of the study was implemented using the method of synthesis, comparative analysis and deduction. Through the synthesis method, it was combined the results of online survey of experts and the method of analyzing economic processes. A comparative analysis has been used to compare entrepreneurial universities in the Republic of Kazakhstan with universities in the United States, Germany and India as one of the most developed countries in their regions, whose efforts and resources are aimed at developing and supporting entrepreneurial universities, which allows assessing the realistic development prospects of entrepreneurial universities in Kazakhstan for the economy and socio-cultural sphere of the state. The deduction method made it possible to make universal recommendations, the implementation of which in higher education institutions will help transform them into entrepreneurial universities.

Results

The concept of the triple helix that is often mentioned when studying the entrepreneurial potential of universities means the cooperation of the following fundamental institutions:

1. Universities as carriers of knowledge;
2. Industry (business) as a carrier of production capacities and human capital;

3. Governments as a carrier of organizational capabilities, financial and political capital.

Provided that universities, industry and government interact qualitatively, it is possible to count on the development of region's (country's) competitiveness [7]. However, with the exclusion of one of the elements of the triple helix, it is also possible talking about the positive results of such cooperation. In the case of interaction of universities with the government, development is carried out in the field of socio-cultural needs of society; the quality of interaction between the management units of universities and the government is improving, the quality is also improving and the volume of state support is increasing. At the same time, the cooperation of universities with industry has a positive effect on the economic and technological development of the region (country) [8]. Thus, within the framework of university's cooperation both with the government (state structures and programs) and with industry (representatives of large and small businesses, individual entrepreneurs), it is possible to expect the formation and development of entrepreneurship in two categorical clusters: Student; University.

The development of the students' entrepreneurial potential will be expressed in increasing interest in entrepreneurial activity, plans for the implementation of entrepreneurial activity and directly in the entrepreneurship. The entrepreneurial potential of university, in turn, will be manifested in entrepreneurship aimed at the commercialization of scientific activities: discoveries, start-ups, patents, licenses, etc. Based on the above-mentioned, the authors have identified the criteria by which it is possible to assess how a university meets the definition of entrepreneurial university in terms of a combination of organizational, institutional (university) and individual (students) entrepreneurial potential:

- structure of management and organization of entrepreneurial activity;
- actions aimed at developing and maintaining business initiatives;
- quality and effectiveness of business courses in the educational program of university;
- attitude of university staff (teachers and administration) and students towards entrepreneurship;
- encouragement of students' entrepreneurial activity both at the level of teachers and systemically (for example, additional points).

Based on the survey of experts, each of the stated criteria was given a score (Table 1).

Table 1. Comparison criteria for entrepreneurial potential of Universities in Kazakhstan, the USA, Germany and India

Comparison criteria	Kazakhstan Universities	USA Universities	Germany Universities	India Universities
Structure of management and organization of entrepreneurial activity	2.3	8.6	7.9	7.0
Actions aimed at developing and maintaining business initiatives	4.1	8.8	8.4	7.5
The quality and effectiveness of business courses in the educational program of university	3.4	9.0	6.8	8.4
The attitude of university staff (teachers and administration) and students towards entrepreneurship	6.8	9.1	7.9	8.3

Encouragement of students' entrepreneurial activity both at the level of teachers and systemically (for example, additional points)	2.6	6.8	7.4	7.2
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Source: it is compiled by the authors.

The results of the experts' survey presented in the Table 1 indicate a low level of development of entrepreneurial universities in Kazakhstan, however, the above-average score of the criterion "attitude of university staff (teachers and administration) and students to entrepreneurship" definitely indicates a mature public demand for the development of entrepreneurial universities in the country. The system of entrepreneurial universities is most developed in the United States, where almost every higher education institution has a Master of Business Administration program [9], which trains the middle and top managers. This program was particularly effective due to the cooperation of universities, industry and government as part of the triple helix concept, which guaranteed the timely transfer of a request regarding the required competencies of specialists from the representatives of industrial sector to the educational one. In addition, the USA government is conducting an ongoing social and cultural work aimed at increasing the public's interest in entrepreneurship. Measures taken by the USA leadership include tax policies aimed at reducing the cost of doing business, the adoption of concessional lending programs, grants, subsidies, as well as programs for prospective entrepreneurs who are not the USA citizens. All this significantly affects the growth of the USA economy, since the constant increase in the volume of GDP (gross domestic product) in the state guarantees a sustainable development, constant influx of international investment and the possibility of deploying new programs to develop entrepreneurship in the country.

The United States ranks first in the world by the degree of entrepreneurship development [10]. Currently, according to the report from the USA Small Business Association, there are over 32.5 million small businesses in the country, which at the same time amounts to 99.9% of all business in the country. In addition, small businesses provide 44% of the country's economic activity [11], which also shows that entrepreneurs play a critical role in the USA economy. Thus, the high-quality preparation of students for entrepreneurial activity guarantees the economic stability, as well as relieves tension within society in matters of state support for certain segments of the population (for example, pensioners), since such a widely developed culture of entrepreneurship contributes to the formation of a stable idea of individualism in society.

Entrepreneurial universities in Germany, as a country with one of the most developed economies in Europe, has also received high evaluation from the experts. There are 39 entrepreneurial universities in the country, where students can choose one of the 55 programs [12], and in the ranking of countries with the most developed entrepreneurship, the country ranks second after the United States [10]. Germany, as a country with a market economy model, is extremely interested in the development of entrepreneurship. For example, this is expressed in a special attention of the country's authorities to supporting start-ups: in 2020, the authorities allocated 2 billion euros to help this type of small business during the lockdown due to the COVID-19 pandemic [13]. Thus, by developing the

entrepreneurial potential of German universities, sponsoring various programs to support small businesses, as well as creating a stable economic and political environment, Germany stimulates the development of entrepreneurship and the growth of its own economy [14]. It is also important to note the high degree of entrepreneurship bureaucratization in the country, which does not cause any particular inconvenience in Germany due to the cultural and historical prerequisites, however in other countries, the inheritance of the German system of accounting and control of entrepreneurs can provoke a bureaucratic collapse.

India ranks 9th in the world and 1st in Asia in terms of entrepreneurship development [10]. The country actively implements programs aimed at entrepreneurship development; the Ministry of Skills Development and Enterprise (MSDE) was even created to oversee them. To develop the entrepreneurship, India is actively cooperating with Germany as a leading country in Europe in building a small business system. The Pilot Project on the Entrepreneurship Development is one of the MSDE India's projects, which aims at developing the entrepreneurial potential of Indian universities, which provides students and graduates with easier access to entrepreneurship; as part of the initiative, the Ministry has developed the methods for protecting young entrepreneurs, as well as the entrepreneurship training programs [15]. The Government of India also makes a lot of efforts to solve the issue of gender inequality in the country: with the help of government programs and grants, the support of women entrepreneurs is carried out. With the help of shift acceleration in society's perception of the role of women in India, the country's government is seeking to increase the share of entrepreneurs and small business workers at the expense of this segment of the population.

In general, given the lack of higher educational institutions in the Republic of Kazakhstan that fully correspond to the characteristics of entrepreneurial university, based on the results of expert assessment, it is possible to talk about the number of other effective actions and initiatives of the country's government that aimed at involving representatives of the industrial sector in the educational and scientific processes (formation of a triple helix). This can be done through the creation of technology parks, agencies and bureaus responsible for the development in the fields of science and education, agriculture, mechanical engineering (for the needs of the transport and oil and gas industries), electrical engineering and mineral excavation [16], which creates a strong basis for the development prospects of entrepreneurial universities. These and other initiatives allowed increasing the share of small and medium-sized businesses in Kazakhstan's GDP from 24% in 2016 to 32% by the end of 2021. The government business support programs are one of the ways to support entrepreneurs in Kazakhstan, for which more than 2 billion dollars have been allocated [17].

One of the positive effects of the creation of technology parks, agencies and bureaus is the emergence of professional managers in this environment, whose

knowledge in the field of science is developed on a par with administrative skills; such specialists in the future can become a decisive factor in the success of entrepreneurial universities, since their experience of cooperation with scientists, business representatives and the government is unprecedented for Kazakhstan. Another effective way to assess the entrepreneurial potential of universities is to consider the dynamics of the entrepreneurs' age in a selected country [18-20]. If the average age of people starting their business is decreasing, then with a high probability, the educational programs or government initiatives have influenced this, which aimed at involving young people in the entrepreneurship. The formation of an effective system of technology parks, scientific parks and other initiatives aimed at developing the entrepreneurial potential in Kazakhstan as a country with a developing economy can become the first step towards the creation of entrepreneurial universities [21; 22]. This approach was first applied in the United States at Stanford and Massachusetts Universities and showed good results – Stanford is now recognized as the best entrepreneurial university in the world [19; 23-25]. Based on the experience of the most successful countries in the regions of Asia, North America and Europe, this study can provide a number of recommendations aimed at creating universities with high entrepreneurial potential:

1. Creation of a strong theoretical base, according to which all innovations are introduced into the educational process and administration by the educational institution.

2. For the effective integration of innovations, it is required a high-quality theoretical training of university staff: advanced training courses, experience exchange programs, the ability to publish scientific articles.

3. Expanding the idea of entrepreneurship from simply starting a business towards the prospects for commercialization of any activity (including scientific) is an incentive to increase the public's interest in entrepreneurship. The introduction of a business course in the training program in higher education institutions will allow increasing the economic literacy of students and give them a broader understanding of entrepreneurship.

4. An effective way to launch the programs of development of entrepreneurial potential is the universities' cooperation with international organizations or other universities in order to learn from the experience of building an entrepreneurial ecosystem.

5. It is necessary to give the opportunity to integrate innovations into the educational process or university administration to all interested parties, including students. This will allow not only implementing programs initiated by the government or university leadership, but also financing the ready-made projects created by students or teachers. Thus, considering the request from students and teachers, it is possible to guarantee the demand for the program and reduce the cost of its development. In addition, this approach will make it possible to settle disagreements between the scientific and administrative teams.

6. Enshrining in the charter and documents of the university guarantees of the continuity of the institution development vector. This will help prevent problems in the case of staff changing (especially in the university administration). In addition, it is also important to develop

and consolidate mechanisms to support teachers and students in their entrepreneurial activities.

7. In the context of uncertainty and transition period, good relations between all participants of the process are extremely important for the university staff and students, which will serve as a catalyst for the commercialization of the university's scientific activities. For establishing such relationships, it is required an informal leader who will support and inspire his colleagues to embrace innovation and serve as an example of successful entrepreneur.

These recommendations are general and varied, and these recommendations are subject to adjustment depending on how the university operates, as well as depending on its relations with government and industry. To determine the required scope and sequence of actions, the authors recommend turning to the HEInnovate and Ashoka Changemaker Campus programs, which are widely recognized tools for developing the entrepreneurial potential of universities, with the help of which it is possible to assess the university's need for innovation and fulfill this need through cooperation. In addition, with the help of the HEInnovate program, each university can determine the required sequence of implementation of the innovations presented above, depending on the current state of affairs in the university, the attitude of employees to entrepreneurship, the level of funding and other factors.

Discussion

K. Lahikainen et al. [20] confirmed in their study of the problems of developing an entrepreneurial university ecosystem on the example of a Finnish university campus the importance of cooperation between representatives of the Ministry of Education, the city administration, university managers and teachers, as well as students and their families. The authors believe that the main obstacle to the implementation of successful entrepreneurial university ecosystem is the disagreement between various managers and teaching staff of the university, which may perceive new strategies with hostility and not make efforts to implement them in their work and in the educational process. One of the ways to overcome this problem can be the development and implementation of mechanisms for encouraging entrepreneurial activity in the accounting and control system for managing payments to employees [26-28]. For example, in conditions where the entrepreneurial potential of the university is realized through the commercialization of scientific activities of university employees (discoveries, start-ups, patents, licenses, etc.), it is worth using financial rewards for participating in commercial activities [29]. In case of disagreement between teachers and the university administration regarding the students' employment in entrepreneurial activities, it is worth paying attention to the teacher's job description, and if necessary, to adjust it so that students' employment outside the classroom does not affect the assessment of the teacher's effectiveness.

In the course of this work, it has been considered a two-stage study by C. Bazan et al. [21] that is devoted to examining the impact of a university's entrepreneurial orientation on the entrepreneurial skills and teachers' propensity. The scientists has concluded that from the point of view of starting an entrepreneurial activity for teachers, the teachers' perception of the entrepreneurial

activity of their professional environment and the university as an institution is significant. If a teacher evaluates positively the entrepreneurial activity of his colleagues and the university, he is more likely to develop his entrepreneurial skills and vice versa. It is also important to note that the study showed the probable less important quality of entrepreneurial activity of colleagues and the university compared to the teachers' personal attitude. Thus, by creating a culture of entrepreneurship in society through various government programs, the country's authorities guarantee a more positive attitude towards entrepreneurship among the teaching staff of higher education institutions. The United States can be called the most striking example of such a culture; in this state, a massively positive assessment of entrepreneurship has become the result of government initiatives, and the involvement of population in small and medium-sized businesses continues to grow [30-33].

Another study reviewed in the course of the work was directed to studying the entrepreneurial ecosystems aimed at universities using the example of two large educational institutions in Trinidad and Tobago. The authors of this study, H. Allahar and R. Sookram [22], wanted to identify the effective ways to form the entrepreneurial potential of universities in the developing countries through the formation of entrepreneurial ecosystem. The considered methods included expanding the training program for students with an emphasis on entrepreneurial skills, the formation and development of entrepreneurial infrastructure, the universities' supervision of business incubators, the application of the triple helix concept. The authors consider the concept of a university-based entrepreneurial ecosystem effective for the developing countries and recommend including a course on developing entrepreneurial skills in the education program of the higher education institutions. The results of this study also confirm the opinion of H. Allahar and R. Sookram. Building a system of entrepreneurial universities as an element of a strategy for the transition to a knowledge economy is a complex and expensive project, and its implementation with the aim to reduce costs can start with local events. For this reason, when building a sequence for implementation of the elements of the entrepreneurial university idea into the higher education system, it is worth starting with establishing contacts with universities and the government in order to guarantee further control over the process of implementing an entrepreneurial university.

A study by S. Sanadgol and M. Dadfar [23] focused on how students of the Iranian University of Medical Sciences evaluate the entrepreneurial activities of their university. In their work, the authors consider the entrepreneurial component of university education as a link between higher education and industry (business). The results of the study has shown the low satisfaction of students with the way the educational institution uses and teaches students the principles of entrepreneurship, which has correlated with the assessment of entrepreneurial potential of the university according to a number of criteria. Such conclusions of scientists can be explained by the political system of the Iranian state; the system of government in this country excludes the possibility of implementing progressive concepts and processes in the education system, which means that Iranian universities are

exclusively focused on the function of providing knowledge without teaching students the skill of monetizing this knowledge, as well as without organizing the entrepreneurial activities based on the universities. In addition, the severe gender injustice in the country deprives economy of 50% of potential entrepreneurs [34; 35]. These conclusions again emphasize the urgent need for cooperation and gaining experience from the most progressive universities, since the international academic environment with diversified approaches is a foundation for the development of new ideas that contribute to the formulation of new educational functions and stimulate their implementation in a short time.

A. Biswas and R.K. Verma [24], in their work devoted to the students' character traits that lead to the formation of entrepreneurial intentions, argue that the personal qualities and motives are a key parameter that allows implementing the entrepreneurial potential of educational institution. The authors identified a number of character traits, the development of which positively correlates with the presence of entrepreneurial intentions. These include the following traits: ambitiousness, internal locus of control, fearlessness, diligence, positive attitude towards entrepreneurial activity and innovative thinking [36; 37]. The results of the study also showed a stable influence of the above-mentioned character traits on each other; in the process of entrepreneurial activity using their personal qualities, students showed their development and strengthening in parallel with the way entrepreneurial activity developed. In the study, A. Biswas and R.K. Verma show how the person's identity is important in any activity, as well as the fact that it is illogical and counterproductive to expect similar results from people with different character traits in the deployment of entrepreneurial activities. Thus, another way to stimulate the entrepreneurial potential of university ecosystem can be assistance in developing the required qualities in students, which will help increase the share of students with entrepreneurial intentions, or at least allow them to form a positive attitude towards entrepreneurial activity [38]. For example, an internal locus of control (confidence that a person influences his life to a greater extent, than external factors) can be formed during conversations with a curator, psychologist, or any reputable teacher [39-41].

In the study by T. Brekke [25], it was considered the interaction between universities and the industrial sector aimed at entrepreneurial discoveries. In the work, the author argues that closer interaction between universities and society can become a catalyst for entrepreneurial discoveries, since it will give students a more realistic understanding of the needs of the market, and the availability of scientific and technical base of the university will help implement the idea. One of the ways of interaction between universities and society can be the implementation of partnership programs aimed at promoting the development of local industry through the research and innovation [42]. Such programs, provided that there are no restrictions in duration, can guarantee the continuous circulation of knowledge between the specialists of industrial sector, students and university teachers, which will allow complementing the universities' functionality with the development, and most importantly, the implementation of innovations based on the existing

businesses [43-45]. Thus, the entrepreneurial potential of university can be realized through the third-party organizations.

Conclusions

As a result of the study, the authors conducted a comparative analysis of entrepreneurial universities. The purpose of the research was to study the entrepreneurial potential of universities in Kazakhstan in comparison with universities in other countries; for this, it has been defined the criteria that can be used to assess how a university meets the definition of entrepreneurial university in terms of the totality of organizational, institutional (university) and individual (students) entrepreneurial potential. It was considered the universities of Kazakhstan, Germany, USA and India. The conducted survey of experts has revealed a low level of compliance of Kazakhstan's universities with the criteria of entrepreneurial university, however, further detailed consideration of experience of the leading countries in the field of entrepreneurship has shown that universities in Kazakhstan have the potential to become entrepreneurial ones. This conclusion was made based on the fact that the actions of Kazakhstan government aimed at developing entrepreneurship in the country to some extent repeat the actions of the United States and India at the previous stages of development of entrepreneurial universities. In addition, an interesting fact is that the attitude of employees and students towards entrepreneurship in Kazakhstan has been rated by experts as above average, which indicates the willingness of the Kazakh society to accept innovations in the field of higher education.

Based on the materials studied in the work, it was compiled a list of recommendations aimed at the formation and development of entrepreneurial university. Since the concept of entrepreneurial university has appeared relatively recently, the scientists have not yet come to a common consensus regarding the methodology for transforming a classical higher education institution into the entrepreneurial university. Besides, when applying the theory of a triple helix, it is necessary to remember about the possible significant differences in the political and socio-cultural systems of different countries. In this regard, the recommendations proposed in the work should be supplemented by the HEInnovate and Ashoka Changemaker Campus programs, which are aimed at developing an individual strategy for implementing innovations. The authors recommend focusing further research on the development of proposals for the introduction of innovations in higher educational institutions of Kazakhstan, considering the peculiarities of local political and socio-economic conditions. The prospects for the development of the country's economy through entrepreneurial universities are quite high in this case.

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Conflict of Interest

None.

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Оцінка підприємницького потенціалу університету (порівняльний аналіз)

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Анотація

Актуальність. Актуальність дослідження обумовлена необхідністю проведення порівняльного аналізу казахстанських університетів з підприємницькими університетами провідних країн світу з метою оцінки їх підприємницького потенціалу.

Мета. Метою даної статті є виявлення універсальних критеріїв, що визначають поняття підприємницького університету, за допомогою яких можна оцінити, наскільки університет відповідає визначенню підприємницького університету, а також провести оцінку підприємницького потенціалу університетів.

Методологія. Провідним підходом до дослідження даної проблеми є метод аналізу економічних процесів, який дозволяє детально розглянути значущі події та тенденції в економічному та соціальному розвитку країн, що відбулися в результаті реалізації ідеї підприємницьких університетів. Крім того, було використано такі методи дослідження: онлайн-опитування експертів, порівняльний аналіз, робота з джерелами, системний аналіз, логічний аналіз, методи синтезу та дедукції.

Результати. У статті наведено результати дослідження: виявлено універсальні критерії, що визначають поняття підприємницького університету, за допомогою яких можна оцінити, наскільки університет відповідає цьому визначенню; проведено онлайн-опитування експертів для оцінки відповідності університетів Казахстану, США, Німеччини та Індії критеріям підприємницького університету; здійснено порівняльний аналіз підприємництва та підприємницьких університетів цих країн на основі даних, виявлених під час аналізу; надано загальні рекомендації щодо формування та розвитку підприємницького університету.

Висновки. Матеріали даної статті є цінними для науки, оскільки містять рекомендації щодо формування та розвитку підприємницького університету, засновані на досвіді країн-лідерів у цій сфері, а крім того, описано універсальні критерії підприємницького університету, які допоможуть у визначенні його підприємницького потенціалу.

Ключові слова: економіка знань; потрійна спіраль; HEInnovate; експертне опитування; стимулювання та розвиток підприємництва.