

IRSTI 06.81.25  
UDC 338.28

**B.S. UTEGULOVA,<sup>1</sup>**  
PhD.  
“Turan” University<sup>1</sup>

## **INNOVATIVE BUSINESS-MODEL OF THE ENTERPRISE AT THE MODERN STAGE AND PROSPECTS OF ITS DEVELOPMENT**

### **Abstract**

The article deals with innovative types of business model. The authors substantiate the conclusion that the business model and management structure of enterprises should be changed so that the innovative organizational culture and thinking inherent in open business models become an integral part of the corporate governance system. The need to create an innovative business model is explained by the fact that enterprises often manage to create a new product, but it does not bring the desired income. Moreover, it may even be unprofitable, and the enterprise postpones the invention to better times. However, it happens that other companies, offering a similar product later, become commercially successful. This may be due to the fact that, firstly, the company did not think about creating a market for a new product, which turned out to be too expensive or too complicated for potential buyers at that time. Therefore, when creating a new product, the company should carefully think about ways to promote a new product to potential consumers. Secondly, it is necessary to move to a new business model, which is the possibility of using technology in a completely new market, for example, military technology in the production of goods for the population. The business model should also be linked to in-house innovation processes. The choice of an adequate business model can significantly affect the ability of enterprises to successfully commercialize new products or services. The prospects for the development of the business model are considered as a long-term direction of structural policy in the field of science and business, and to ensure the overflow of investment in innovation.

Key words: business model, resources, innovations, organizational culture, competitiveness, information technologies.

The business model in the strategic management of the enterprise serves as a link between the identified opportunities in the external environment and the key competencies and abilities in the internal environment of the enterprise. The choice of a business model that best fits the identified opportunities or competencies can explain the success or failure of the company. This allows us to consider the impact of the business model on the generated economic rents. In a number of studies in this area, the attempt has been made to find a link between the type of business model and the performance of the company.

Successful management of the company requires a well-developed strategy adapted to the specifics of the business. The business model is closely related to the company's strategy. It is one of its components. For the right choice of business model and strategy of the company very necessary to study all directions of activity of the organization. There are many aspects that create differences between companies, ranging from the field of activity and ending with supply routes [1].

The practical application of the developed technology of forming business models of enterprises implementing investment projects has its own significant features depending on a number of circumstances related to whether a new enterprise is created for the implementation of the project or its implementation is expected at an already existing production.

The development and implementation of new technologies is a three-way process should be interested in the state, scientists and business, which is able to master these developments and offer the market a competitive product. Which means that, the decisive importance is the innovative activity of enterprises. The data of the statistics Committee of the MNE of Kazakhstan suggest a not very optimistic conclusion: Kazakhstan's business prefers to purchase ready-made technologies, software and equipment.

According to the World Economic Forum, digitalization opens up tremendous opportunities for business and society and can generate an additional \$ 30 trillion in revenue for the global economy over the next 10 years.

In 2018, the total costs of information and communication technologies in Kazakhstan amounted to 305,2 billion tenge, having decreased by 12,8% over the year. For comparison: in the same period

a year earlier, the costs of information and communication technologies increased by 29,8% to 349,9 billion tenge [2].

At the same time, the low level of awareness of entrepreneurs about innovative projects was shown in 2018. Among the main reasons for the lack of innovation are lack of Finance, low competence of staff, lack of information about objects for innovation, lack of market research, lack of demand for innovation.

In other words, the science has strong links with the production, is still not well-planned scheme of sustainable partnerships between science and business based on oncoming traffic applications innovative companies and universities and research organizations.

Investment in science, even large and prosperous Kazakhstan enterprises meager in comparison with global practice. At the same time, the dynamic development of the innovation sphere is one of the main components of the innovation economy, which requires not only the creation of an effective innovation system, but also the support of the innovation process itself, the creation of a favorable environment for this type of activity.

But even many of those companies that are engaged in research and development are defeated, if they rely only on the creation of an innovative product or technology. As a rule, new products and technologies require the construction of an appropriate business model for their successful commercial implementation. It is not uncommon for a company to reject a new technology because the development does not match the business model which is used at this stage. This largely explains the death of many venture companies, which are not always ready to rebuild their business model with the transition to a new stage of their life cycle.

In today's highly competitive business environment, it is not enough just to hold the position – the company must constantly develop and improve. In accordance with the changes in the business environment and consumer preferences, not only strategies, but also the existing business processes and business models should be constantly re-evaluated and improved.

As the world practice shows, in order to gain stability in the changing business environment under the influence of the global crisis, many companies are engaged in the search for adequate new economic situation business models. At the same time, innovative business models become particularly relevant, as overcoming the negative consequences of the crisis is associated with the transition to a new civilizational stage of development. This is due to the search for an economic model adequate to the modern stage of development of society, as well as technological breakthrough, which is based on the convergence of such areas of development of modern science as nanotechnology, biotechnology, information technology. The introduction of innovative business models contributes to the rapid growth of enterprises. However, in fact, it is very difficult to achieve it. As a rule, the reason is the lack of a single definition of what a business model is, and the vague representation of company managers about the current business model in the company at the moment. In particular, the lack of knowledge about what were the prerequisites for its creation, how its components are interconnected, what are its strengths and weaknesses. All this makes it difficult to understand whether the current business model has exhausted its potential or not and when it is necessary to update it.

The essence of the business model most successfully reflects its definition as a set of “actions of the company to select customers, develop product offerings and ensure their difference from the products of other firms, make decisions about what types of work will be performed by the company itself and what will be transferred to contractors, to ensure the effective use of available specialists and resources, the strategy of entering the market, providing benefits and amenities for its customers, making a profit” [3, p. 10]. The business model includes the strategic positioning of the company in the market, the business concept, specific product offerings, key internal resources and mechanisms, and the revenue model. Any business model implements two important functions: creating value and assigning a part of this value in the form of enterprise profits. It's possible if the business model of the enterprise allows the creation of unique resources, assets, or positions that give it a competitive advantage.

The success of a business model is determined by the extent to which it is able to meet the needs of real people who are interested in the fact that the new product contributed to the achievement of their (consumers, shareholders, employees) goals. In addition, the new business model should answer the question of how to meet the needs of stakeholders to the benefit of the company.

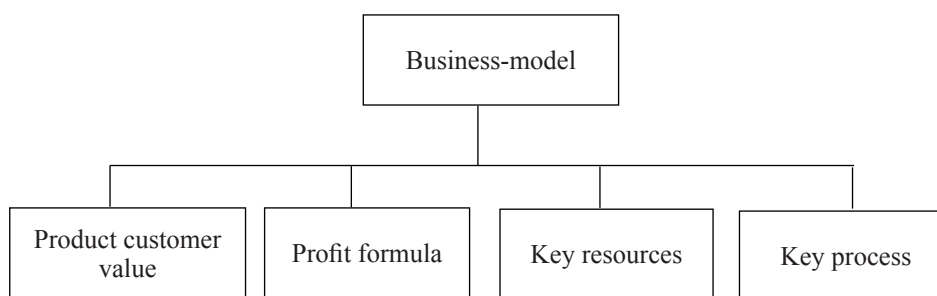


Figure 1 – Business model elements [3]

The basis of the business model consists of four elements: the consumer value of the product, the formula for profit, key resources and processes that must be defined in accordance with the strategy of positioning the company in the market (Figure 1).

1. The Consumer value of the product. To calculate the consumer value of a new product, the company must determine its target audience (consumers), to which this product will be oriented, its functional characteristics and how it will be sold.

2. The Formula of making a profit. The most reliable indicator of the viability of the model is the profitability of the business. The profit formula reflects the scheme by which the company generates its income by producing the goods or services necessary for the consumer. It includes: the cost structure, the model of gross profit, showing what should be the revenue from each transaction to obtain the planned profit; income model, as well as the speed of turnover of resources, which should adhere to the company to produce such a number of products that are in demand by consumers.

3. Key resources are the company's assets such as employees, equipment, technology, infrastructure, products, brand, partnerships, alliances, distribution channels focused on specific consumers. The main thing here is to understand what resources will be the key point in creating a new product or service and how they will interact in this process.

4. Key processes. The identification of key processes allows to provide conditions for the production of a new product in the amount necessary for the potential consumer. The key processes for a particular product can be product development, production, procurement, planning, budgeting, marketing, implementation of computer technology, training of personnel. The key processes also include the company's rules, performance systems and norms: requirements for profitability of investments, terms of execution of the order, terms of delivery, standards of access to buyers and distribution channels, the minimum allowable potential of the product for the company to justify investing in it, etc. The interrelation of the described elements provides the company with the creation of new products and services with unique consumer properties. Determining the customer value of the product and the profit formula will answer the question of what benefits the new business model brings to customers and the company itself and the definition of key resources and key processes clarify how the product will be created to meet the needs of all stakeholders.

The need to create an innovative business model is explained by the fact that enterprises often manage to create a new product, but it does not bring the desired income. Moreover, it may even be unprofitable, and the enterprise postpones the invention to better times. However other companies, offering a similar product later may become commercially successful. This may be due to the fact that, firstly, the company did not think about creating a market for a new product, which turned out to be too expensive or too complicated for potential buyers at that time. Therefore, when it comes to creating a new product, the company should carefully think about ways to promote a new product to potential consumers.

Secondly, we need to move to a new business model, which is the possibility of using technology in a completely new market, for example, military technology in the production of goods for the population.

In addition, today many enterprises are under a real threat from innovative firms that are focused on the lower price segment. This has become particularly relevant in recent years, when Asian countries with cheap labor create cheap innovative products with an acceptable level of quality for such a price segment and thereby undermine the position of enterprises operating in long-established markets.

The business model should also be linked to in-house innovation processes. The choice of an adequate business model can significantly affect the ability of enterprises to successfully commercialize new products or services. The choice of the model will also determine how profits, risks and indirect benefits will be distributed among the participants in the innovation process.

A number of system initiatives of the Head of state – the State program of forced industrial and innovative development, the program on development of innovations and assistance of technological modernization in the Republic of Kazakhstan, and many others are directed to the solution of this problem.

First, despite the fact that the Government identifies as priorities the development of entrepreneurship and innovation, emphasizing their crucial importance for the diversification of the economy and improving the competitiveness of the country, the SPIID for 2015–2019 does not provide specific target indicators related to the increase in innovation activity in the business sector [4].

Secondly, a large number of innovative enterprises face barriers such as lack of knowledge and experience of staff, lack of investment in innovation, lack of risk capital for innovative projects, and lack of demand for new products among the local population.

Third, there are gaps in the area of innovation development, by the provision of venture capital to new innovative enterprises in the early stages of development. Venture funds are more likely to finance the expansion of production capacity of already operating companies, instead of financing innovative start-UPS.

In order to develop entrepreneurs with innovative potential, it is necessary to take a set of government measures. In the OECD's view, it is initially correct to assess the problems and needs of the SME sector in terms of R & d and innovation. At the same time, to carry out intensive and targeted activities (e.g. seminars, innovation exhibitions, innovation awards, media campaigns, etc.) in order to raise the level of innovation awareness among small and medium-sized enterprises. The President of the country in his Address to the people of Kazakhstan, this year instructed on the development of scientific and innovative potential on the basis of universities. Universities could also encourage innovative entrepreneurship on the part of students and graduates interested in developing their business ideas.

The OECD recommends that support be increased and diversified through the improvement of existing programmes and the development of new policies to promote R & d and innovation in small and medium-sized enterprises.

Thus, it is necessary to stimulate the development of the venture capital sector, which will finance innovative start-UPS, and not to finance the expansion of production capacity of existing enterprises. To this end, it is necessary to legislate venture financing in Kazakhstan, introduce medium-term tax incentives for funds and eliminate the requirement to repay public funding by improving the legislative framework.

The government was instructed to create on the basis of one of the objects of EXPO–2017 an international Technopark of IT-startups, which should become a platform for attracting entrepreneurs and investors from around the world. This requires appropriate infrastructure and favourable conditions, including tax incentives, simplified visa and labour regimes.

Today there are 16 commercialization offices, 3 technoparks and 4 business incubators in Kazakhstan, which have become a necessary step to maintain sustainable economic growth, creation or development of new sectors of the economy on the basis of close cooperation between the state, science and business [2].

And compliance with OECD standards will bring the level of innovative development to the level of advanced countries of the world, as well as a number of additional stimulating norms, the implementation of which will have a positive impact on increasing the level of innovation activity in the country and the formation of a favorable innovation environment. That is why the President of Kazakhstan Nursultan Nazarbayev initiated two programs of industrial and innovative development,

announced the Third wave of modernization. Figuratively speaking, this is the guiding star to which our economy should keep its course. The final point of the route is a qualitative economic growth and a working model of industrial and technological modernization in the conditions of the Fourth industrial revolution.

Despite the fact that the state invests a lot of money in the development of science, is not enough to achieve the goal set in the Strategic development plan of the Republic of Kazakhstan until 2025 – to bring the share of R & d expenditures in GDP to 1% by 2025. The situation where the share of expenditure in GDP is low is reflected in innovation, its structure and quality.

Business and innovation – they can't live without each other. According to the Committee on statistics of Kazakhstan, the innovative activity of Kazakh enterprises remains low.

In 2018, the innovation activity of Kazakhstani enterprises is 9,3%, which is on average 5–7 times less than the similar indicators in OECD countries (for comparison, in Sweden this figure is 57%, in Germany – 70%, Finland – 46%, Austria – 70%, Great Britain – 62%) [2].

Technological renewal in Kazakhstan's enterprises is largely based on the borrowing of foreign technologies and equipment. For these purposes, in the period from 2013 to 2018, enterprises spent up to 72% of all innovative investments. At the same time, research and production preparation for the production of new products, the introduction of new services or methods of their production account for slightly more than 5% [2].

These data indicate that “The Kazakh business“ prefers to purchase ready-made equipment, machines, mechanisms, and not to invest in the introduction of domestic scientific developments. At the same time, it is not spent on preparing for a new production. For example, there is no market research, production design, training of personnel to work with technological innovations. This is evidenced by the relatively low share of their costs, which did not exceed 7% over the past five years. By the way, in 2017 it decreased to 1%.

At the same time as the borrowing of technologies and equipment is reducing the already meager costs of domestic research and development. According to the statistics Committee of the Republic of Kazakhstan, in 2017 only 612 out of 30 854 enterprises were innovated on the basis of internal research and development, and at 205 enterprises scientific work is carried out constantly, and at 407 – at a problem occurs. At 252 enterprises technological innovations were carried out using the developments of scientific organizations [2].

Why innovation instead of becoming a factor of economic growth puts a heavy burden on the state budget. Armed with official statistics, we got interesting and indicative figures. Below we provide data on the level of activity in the field of innovation.

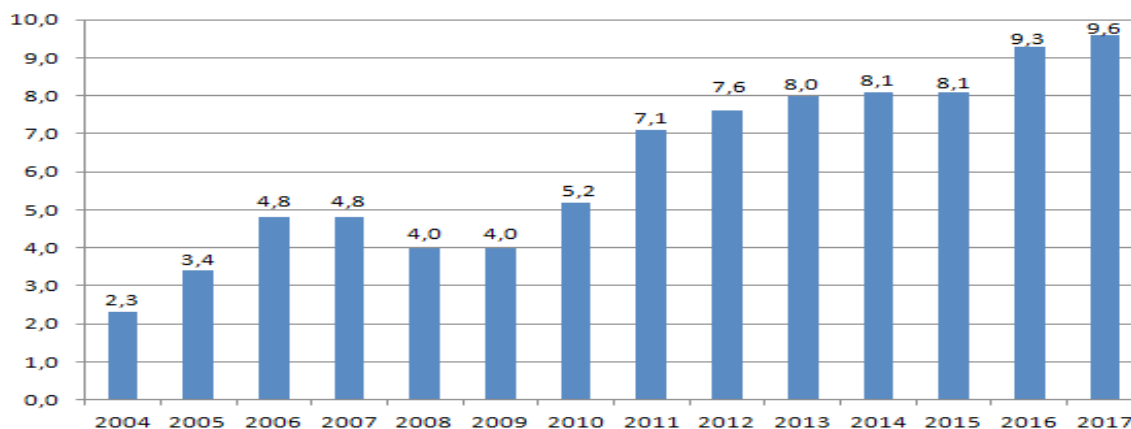


Figure 2 – Level of innovation activity, %

Note – Source: <http://stat.gov.kz/>.

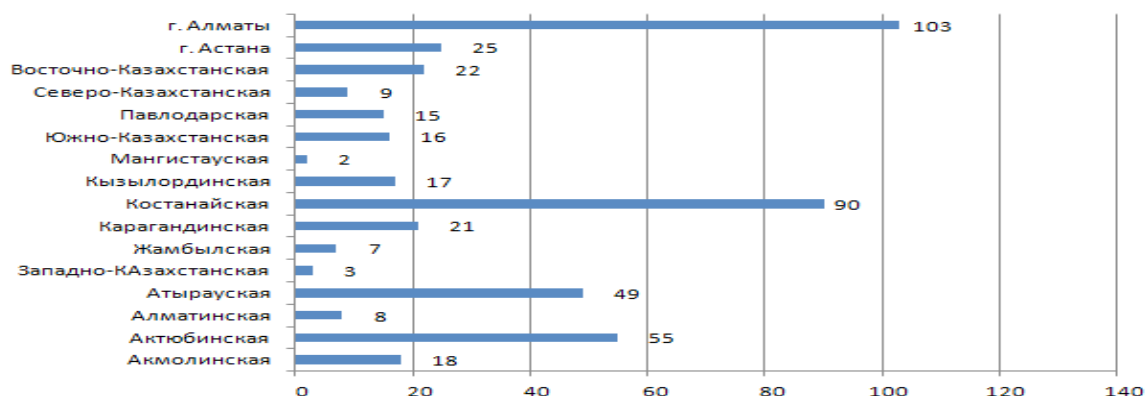


Figure 3 – The Number of enterprises using new technologies and objects of equipment, units

Note – Source: <http://stat.gov.kz/>.

The Presidential message to the people of Kazakhstan this year put forward a new initiative – the development of the “road map” business and science–2020”. The implementation of these programs will ensure the demand for competitive scientific results by the economy, will create the most important institutional elements of the connection between science and production.

At the Forum “Innovative Kazakhstan–2020” in the SEZ “information technology Park “Alatau” Almaty, President Nazarbayev noted that according to the latest report of the world economic forum on information technology, Kazakhstan is a leader among the CIS countries and occupies 55th place.

The President also noted that the share of spending on science in Kazakhstan is 10 times less than in developed countries, and the work of domestic scientists does not meet the needs of the innovative economy. It is necessary to create the most favorable conditions for the broad development of innovation in the small and medium-sized businesses. Considering the risky nature of innovation, the Government needs to work on the optimal organizational and legal form of innovation.

All measures taken to improve the implementation of the business model, for sure, have a positive impact on the development of innovation, but there are some drawbacks:

- ◆ lack of modern mechanisms for introducing technological innovations and bringing them to the market;
- ◆ insufficient development of infrastructure elements to promote innovative projects, such as technology parks and specialized business incubators, a network of risk Finance funds, special financial mechanisms to support firms at the stage of their rapid growth, certified appraisers of firms and intellectual property, etc;
- ◆ lack of effective demand for advanced technologies and industrial innovations in the domestic market, etc;
- ◆ insufficient level of personnel.

It is necessary to carry out state policy of stimulation in the following areas to raise the level of research and development:

- ◆ purposeful formation of the market for the products of innovative enterprises by placing a state order on them;
- ◆ provision of innovative enterprises, including small, production areas, preferential investment support, assistance in the development of business innovation centers, technology parks, technology support centers, providing legal, financial, marketing, economic, and other services; assistance in the legal and commercial protection of intellectual property;
- ◆ promotion of the formation and expansion of the network of leasing companies;
- ◆ implementation of a targeted policy for the development and production of new products by small enterprises on the basis of science-intensive technologies;
- ◆ in order to reduce the probability of loss of funds invested by investors as a result of the unsuccessful implementation of innovative projects, it is advisable to carry out their insurance, including through budget investments;

♦ preferential crediting of scientific and technical developments in equity financing of large projects.

Thus, the prospects for the development of the business model is considered as a long-term direction of structural policy in the field of science and business, and as well as to ensure the overflow of investment in innovation.

Improvement of work in these areas will enable the creation and active implementation of the business model in Kazakhstan, which in the future will allow Kazakhstan to participate in global competition.

#### LIST OF LITERATURE

1 Basics of building business models. Business model and strategy: <http://iiba.ru/business-model-design/> 10.05.2016.

2 [www.stat.kz](http://www.stat.kz).

3 Smailor R., Morris M., Shindgut M. Dynamic model of entrepreneurship education. US Center for Entrepreneurship. – Russia. 15–17 November 2007. – M., 2007.

4 The state program of industrial-innovative development for 2015–2019, approved by Decree of the President of the Republic of Kazakhstan dated August 1, 2014, № 874 (hereinafter – GPIID).

#### Аңдатпа

Мақалада бизнес-модельдердің инновациялық түрлері талқыланады. Авторлар корпоративтік басқарудың ажырамас бөлігі болып табылатын ашық бизнес-модельдердің инновациялық ұйымдастырушылық мәдениеті мен ойлау сипаты үшін кәсіпорынның бизнес-үлгісі мен басқару құрылымын өзгерту керек деген тұжырым жасайды. Инновациялық бизнес-модель құру қажеттілігі кәсіпорындардың жиі жаңа өнім жасай алатындығымен түсіндіріледі, бірақ ол қажетті табыс әкелмейді. Оның үстіне, ол тіпті пайдасыз болуы мүмкін, және компания өнертабысты жақсы уақытқа дейін қалдырады. Алайда кейінірек осындай өнімдерді ұсынатын басқа компаниялар коммерциялық табысқа ие болады. Бұл, біріншіден, компания жаңа өнімге арналған нарық құру туралы ойлаған жоқ. Сол кезде әлеуетті сатып алушылар үшін тым қымбат немесе тым күрделі. Сондықтан, жаңа өнімді құруда, компания ықтимал тұтынушыларға жаңа өнімді ілгерілету жолдарын мұқият қарастыру керек. Екіншіден, жаңа бизнес-модельге көшу қажеттілігі туындайды, яғни бұл технологияны мүлдем жаңа нарықта пайдалану мүмкіндігі, мысалы, халық үшін тауарлар өндірісіндегі әскери технологияларда. Бизнес-үлгі, сондай-ақ ішкі инновациялық процестермен байланысты болуы керек. Тиісті бизнес-модельді таңдау кәсіпорындардың жаңа өнімдерді немесе қызметтерді табысты коммерциализациялау мүмкіндігіне айтарлықтай әсер етуі мүмкін. Бизнес-модельді дамыту перспективасы ғылым мен бизнестегі құрылымдық саясаттың ұзақ мерзімді бағыты мен инновацияларға инвестиция құюды қамтамасыз ету ретінде қарастырылады.

Тірек сөздер: бизнес-модель, ресурстар, инновациялар, ұйымдастырушылық мәдениет, бәсекеге қабілеттілік, ақпараттық технологиялар.

#### Аннотация

В статье рассматриваются инновационные типы бизнес-модели. Автор обосновывает вывод о том, что бизнес-модель и структуру управления предприятий необходимо изменять так, чтобы инновационная организационная культура и мышление, свойственные открытым бизнес-моделям, становились неотъемлемой частью системы корпоративного управления. Необходимость создания инновационной бизнес-модели объясняется тем, что нередко предприятию удается создать новый продукт, но он не приносит желаемого дохода. Более того, он может быть даже убыточным, и предприятие откладывает изобретение до лучших времен. Однако случается, что другие предприятия, предлагая позднее аналогичный продукт, становятся коммерчески успешными. Это может быть связано с тем, что, во-первых, компания не продумала вопрос о создании рынка для нового продукта, который оказался для потенциальных покупателей на тот момент либо слишком дорог, либо слишком сложен. Поэтому, создавая новый продукт, компания должна тщательно продумывать способы продвижения нового продукта к потенциальным потребителям. Во-вторых, необходим переход к новой бизнес-модели, которая является возможностью применения технологий на совершенно новом рынке, например, военных технологий в производстве товаров для населения. Бизнес-модель должна быть увязана и с внутрифирменными инновационными процессами. Выбор адекватной бизнес-модели может существенно повлиять на способность предприятий успешно коммерциализировать новые продукты или услуги. Перспективность развития бизнес-модели рассматривается как долговременное направление структурной политики в области науки и бизнеса и обеспечение перелива инвестиций в сферы инноваций.

Ключевые слова: бизнес-модель, ресурсы, инновации, организационная культура, конкурентоспособность, информационные технологии.