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# Competitiveness of Kazakhstani National Economy: Problems and Prospects for Overcoming

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## Abstract

Kazakhstani foreign trade plays a key role in the progress of the country's national economy. Consequently, the industrial and innovative development of the foreign trade sector determines the competitiveness of the State, an indicator of which is the global competitiveness index.

This article discusses the level of competitiveness of Kazakhstani economy through the Global Competitiveness Index. Also, the article presents an analysis of this indicator changes and the main reasons for its dynamics. A study of the factors restraining the competitiveness of the State economy revealed that changes in inflation have a significant impact on the country's economic effectiveness. Prospects for overcoming the problem is seen in increasing the industrial factor and monitoring the technological support for the economy. Improvement of the State's position in the Global Competitiveness Index relies on the effective implementation of governmental programs, the ability to keep inflation at a constant level and on the effectiveness of foreign trade policies.

*Keywords:* global competitiveness index, inflation, national economy

## **Introduction**

The processes of globalization that were activated at the turn of the XX-XXI century bring both new opportunities and risks for the economies of countries. To overcome the risks that have arisen in the process of globalization, an important criterion for improving the country's economy is its competitiveness (Bondarenko, 2007).

Competitiveness of the national economy is a general indicator of how effective the national economy and its entities are functioning. Competitiveness is the basis of the rapid development of an industrial society, initially as a form of free competition of individual producers in the open market, and in the form of a price mechanism for its implementation in domestic and foreign markets.

## **Literature Review**

For three centuries now, the concept of competition has been changing dramatically. The literature provides various definitions for the notion of competitiveness. The theories and views of the most famous authors such as Porter (1993), Krugman (1994), Cho (1994), Reiljan, Henrikus, and Ivanov (2000), Cho and Moon (2005), Camagni (2002), Turok (2004), Gardiner, Martin, and Tyler (2004), Garelli (2009), Bienkowski (2009), Dunning (2013) - are mostly focused on the analysis of competitiveness at national level. T.A. Zavyalova (2010, p.42) interprets the concept of competition as «the ability to be a leader in a competitive environment». M. Porter (1993, p.45) introduces competitiveness as «the ability of an industry to constantly develop and innovate». According to L.S. Blyahman (2008), competitiveness is the ability to maintain and grow a value-added part of

a particular product or service in a particular segment of the national or world markets, as well as to use its competitive advantages more efficiently. Domestic scientist Academician K.A. Sagadiev considers competitiveness as an important analytical tool, as it allows to know the level of prosperity of each state, which provides high standards of living and democratic development in society. In his point of view, the competitiveness of each state is characterized by its ability to provide economic growth rates (Blyahman, 2008). Country competitiveness is the ability of one country's economy to compete with the economies of other countries in terms of effective use of national resources, increasing the productivity of the national economy and ensuring a high standard of living for the population (Mocherniy, 2000). National competitiveness refers to the economic performance of a nation measured as the ability to offer to its citizens high standards of living building on a strong and solid basement on the long term and a high possibility of choosing the work places for those who want to work (Balkyte & Tvaronaviene, 2010).

Competition is an economic law that is based on a market economy, which is governed by the laws of supply and demand, the law of value, the law of profitability and other market principles.

Since competitiveness is a prerequisite for the industrial-innovative development of foreign trade activities of the country, it plays an important role in advancing the national economy. Under the current conditions, the level of competitiveness, as an indicator of the welfare of the state and the prospects for the development of the economic system, is the reason for the state's participation in international labor distribution, a guarantee of economic security and the production of goods and services that meet the

needs of the population and the world market. This, in turn, improves the well-being of the population.

Competitiveness is determined by various complex factors. National resources, geographical position, country size and national culture are important determinants which make a country to be more competitive than another (Sachs & Warner, 2001). Competitiveness indexes are calculated by many international organizations that use different methods of calculation. The key indicator that determines the competitiveness of the state in the global environment, recognized by all the states is the index of global competition. When calculating the index, factors that are integrated into the 12 main groups are used to determine the competitiveness of the economy. These groups are : 1. Quality of institutions; 2. Infrastructure; 3. Macroeconomic stability; 4. Health and primary education; 5. Higher education and vocational training; 6. Efficiency of the market of goods and services; 7. Labor market efficiency; 8. Level of financial market development; 9. Level of technological development; 10. Volume of the domestic market; 11. Company competitiveness; 12. Innovation potential (World Competitiveness Report, 2019).

## **Methods**

The research methodology is based on general scientific methods of cognition, principles, and criteria of objectivity. The works of national and international scientists, statistical indicators of the economy and socio-political development of the country, the Global Competitiveness Index were considered in the study.

## **Discussions and Results**

The issues of determining the competitiveness of the national economy and organizing measures related to its improvement became more important, especially after the global economic and financial crisis. The economy of the Republic of Kazakhstan in this regard also showed the negative consequences of the crisis for the economy as an exporter of raw materials and dependent on its world prices.

According to the Global Competitiveness Index report the country has shown the best results in 2015-2016, taking 42nd place and reached its worst 72nd place in 2011 and 2012 (Table 1).

Table 1. Position of The Republic of Kazakhstan in the Global Competitiveness Index

Period	Position of the country in GCI	Technological development	Company competitiveness	Innovational potential
2006-2007	56	70	-	-
2007-2008	61	-	-	-
2008-2009	66 (+3)	75 (-5)	86	62
2009-2010	67 (-1)	82 (-7)	102 (-16)	101 (-39)
2010-2011	72 (-5)	82 (no changes)	102 (no changes)	101 (no changes)
2011-2012	72 (no changes)	87 (-5)	109 (-7)	116 (-15)
2012-2013	51 (+11)	55 (+22)	99 (+10)	103 (+13)
2013-2014	50 (+1)	57 (-2)	94 (+5)	84 (+19)
2014-2015	50 (no changes)	61 (-4)	91 (+3)	85 (-1)
2015-2016	42 (+8)	61 (no changes)	79 (+12)	72 (+7)
2016-2017	53 (-11)	56 (+5)	97 (-18)	59 (+13)
2017-2018	57 (-4)	52 (+4)	108 (-11)	84 (-25)

Note: created by author based on the World Competitiveness Report (2019)

Among these factors are the so-called industrial potential of the innovative potential of the state, level of technological development and competitiveness of the companies. As a result of improvement of this factor, the state shows positive results on the competitiveness index.

Although the level of technological development in the country has shown a positive result in recent years, in 2018 the competitiveness of companies has fallen by 11 positions compared to the previous year, and the innovative potential of the state by 25 positions.

According to the experts of the index, the lack of funding (14.5%), corruption (13.8%), low education (11.9%), inflation (9.7%), tax regulation(8.7%) are factors that hinder the competitiveness of enterprises in the country.

Inflation is a complex social and economic process, with its negative consequences. According to the inflation data for the last ten years in Kazakhstan, shown in Table 2, the highest inflation rate due to the devaluation of the national tenge in 2015 reached 13.53% and, accordingly, Kazakhstan has not changed its position in the competitiveness index that year. And in 2016, with the decrease in inflation and, accordingly, the state climbed up 8 positions in terms of the competitiveness index. This shows the effect of inflation on the index (Ministry of National Economy of the RK, 2019).

Table 2. Inflation rate in Kazakhstan during the 2009-2018 period

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Inflation rate, %	6,38	7,97	7,43	6,06	4,90	7,54	13,53	8,29	7,22	5,43

Note: created by author based on the Statistics of the Ministry of National Economy of the RK

Among the factors constraining the competitiveness of the national economy, as well as the slowdown in technological and innovative development, that is, the low involvement of the private sector in funding research and development activities; lack of close cooperation with universities and research institutions in the field of research and development; limited access of the population to the Internet; insufficient level of intellectual and material and technical potential of research organizations; The focus on obligatory procurement is based on the pricing factor, not on the technological and innovation of the offer; Government programs of various directions do not take into account (or completely ignore) plans to stimulate introduction and use of information and communication technologies, etc.

In order to raise the competitiveness of the national economy of the Republic of Kazakhstan to the world level, there is a need to address these issues at the state level.

Due to the fact that sustainable development is one of the key issues in the economy, it is commonplace in the research of domestic and foreign scientists. However, the development of the economic system, and the interaction of national economies, requires the search for new factors and conditions for economic growth. Among the positive trends in the economy are the following:

- Development of industry
- Increase in foreign trade turnover
- Decrease in unemployment rate and inflation
- Improvement of the investment climate
- Increased investment in production



- Reduction of overseas capital outflow, etc.

Under the conditions of global integration, the economic development of the state is dependent on the level of competitiveness of the economy. It, in turn, is impossible without raising the level of competitiveness of industrial and industrial complexes. The competitiveness of the national economy is the main priority of our state.

Formation and development of industry play one of the key roles in improving the nation's well-being, while laying the foundations for the economic infrastructure.

Analysis of the current state of the industry based on foreign trade indicators and the share of domestic production in the domestic market, showed a low level of competitiveness of the processing industry of Kazakhstan. The dynamics of foreign trade growth are shown in Table 3 (Ministry of National Economy of the RK, 2019).

Table 3. Foreign trade turnover of the Republic of Kazakhstan

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
Commodity circulation, billion USD	91,3	121,2	132,8	133,5	120,7	76,5	62,1	78,1	94,7
Export, billion USD	60,2	84,3	86,4	84,7	79,4	45,9	36,7	48,5	61,1
Import, billion USD	31,1	36,9	46,3	48,8	41,2	30,5	25,3	29,5	33,6

Note: created by author based on the Statistics of the Ministry of National Economy of the RK

The export of the Republic of Kazakhstan, at the end of 2018, amounted to \$ 61.1 billion, and imports - \$ 33.6 billion. However, despite the fact that the

export of products exceeds the import 1.8 times, at present the level of diversification of the domestic industry is still low. Exports of highly competitive goods account for more than 70% of total exports.

For the purpose of qualitative analysis of economic indicators there is a need for structural analysis of export and import relations of products. According to the main types of exported and imported products, the tendency of development of the industry and export orientation to raw materials continues.

In order to develop and improve the industry which is responsible for most of the competitiveness of the Republic of Kazakhstan, Departments of the Committee for Industrial Development and Industrial Safety of the Ministry of Investment and Development of the Republic of Kazakhstan carry out supervisory functions in the country. The Department has the following services to promote the sphere of industry:

- To monitor the implementation of industrial, investment and innovation policies
- Formation of a competitive market environment
- Strengthening product competitiveness
- Increasing profitability of industrial enterprises
- Creating additional jobs
- Attracting additional investments into the region, etc.

Most energy-exporting countries can increase their competitiveness by adopting special government programs and measures aimed at minimizing abrupt changes in the global commodity market. In particular, the production of competitive products and goods is carried out by improving

the innovative nature of the industry. Therefore, the increase in the competitiveness of the economy of Kazakhstan is associated with the industrial factor the level of development of industries in the country, including manufacturing.

The development of the Kazakhstan economy through the expansion of localization of production, increasing the level of processing and labor productivity in the industries, using the latest technology, will in fact lead to the creation of additional jobs, socio-economic and socio-political development of the population, and improvement of competitiveness. Improvement of the State's position in the Global Competitiveness Index relies on the effective implementation of government programs, the ability to keep inflation at a constant level and on the effectiveness of foreign trade policies.

The development of the competitiveness of the Republic in the world market should be carried out in the industrial direction. However, the number of leading countries in the economy includes countries that are capable not only to effectively use available natural resources, but also to produce final products. This is the reason, why in modern conditions the increase in the competitiveness of the economy of Kazakhstan is dependent on the industrial factor – the level of development of industries in the country, including manufacturing.

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# **Forming Strong Guest Loyalty: Sustainable Development of Hotel Industry on the Example of Small-Hotels**

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## **Abstract**

The study of customer loyalty is an important part of the activity of any enterprise, which allows achieving significant economic indicators. In modern economic conditions of development of the sphere of tourism and hospitality, consumer behavior is increasingly being evaluated as an indicator of competitiveness of the hotel. For effective development of mini hotels, the number of which is gradually growing, it is important to study the needs and wishes of potential customers. The formation of customer loyalty of hotel services is a difficult task, hotel managers have to analyze not only the needs of consumers, but also the behavior in the market of other hotel enterprises, as well as use the mechanisms of «individualization» of service. The object of the research in the article is consumer behavior in general, and loyalty of guests in particular. The subject of the study is the influence of guest loyalty on the development of mini-hotels. The theoretical side of the article is to study the preferences of hotel customers and identify groups of factors that influence the formation of customer loyalty of hotel services, as well as the needs of customers when visiting certain hotel enterprises. The article analyzes the theoretical and practical aspects of the formation of

motivation of potential and real customers of mini-hotels, focuses on the role of marketing management of mini hotels. Based on the conducted survey, groups of consumer preferences of mini-hotel clients were identified. The finding results from the article helped to identify the main motivation of potential customers to make the choice in favor of particular hotel. Customer preferences when choosing a mini-hotel include such variables as: favorable living conditions, comfortable psychological climate, level of service. The empirical main conditions of the article are to generalize the main factors of sustainable development of mini-hotels as one of the forms of development of the hotel industry and increase the tourist attractiveness of the region.

*Keywords:* consumer behavior, guest loyalty, small local hotels, mini-hotels, hotel service, forming guest loyalty as a part of marketing strategy.

## **Introduction**

In the current socio-economic conditions of the development of the hospitality industry, more and more attention is attracted to the development of small forms of accommodation, which is also reflected in the Kazakh legal regulation of this sphere. In 2010, Kazakhstan introduced the national standard ST RK EN ISO 18513 - 2010 «Services of small accommodation facilities. General requirements». This is the first regulatory document, establishing general requirements for accommodation facilities with a number of rooms of not more than 50 rooms. The following definitions are given in the standard:

«Small accommodation facility - premises used by organizations of various organizational and legal forms, individual entrepreneurs and individuals, equipped to provide temporary accommodation services with a maximum of 50 rooms. Small hotel, small hotel - a small accommodation facility with the number of rooms from sixteen to fifty rooms. Mini-hotel - a small accommodation facility with a numbering background - house from five to fifteen rooms» (Law of the Republic of Kazakhstan on Tourist Services, p. 1).

Although before the adoption of this standard the concept of «mini hotel» was widely used in the media and in the statements of professional hoteliers, but officially it did not exist, since it did not appear in any legislative document. But in the «Classification of hotels and other accommodation facilities» for all without exceptions for hotels with less than 50 numbers, the term was normatively fixed «Small hotels», so for a long time «Small» and «mini-hotels» were synonymous concepts, which was reflected in our review of literature on the subject issue and further analysis. A characteristic feature of any small hotel is the ability to create



a comfortable atmosphere for the guest, as well as the maximum personification of individual hotel services. Small hotels in the larger degrees allow you to optimize the volume and quality of services provided, while achieving an effective ratio between the number of staff and number of guests (Bitter, 2014).

At the same time, small hotels are faced with the task of promoting their services, which is impossible without studying the consumer behavior of their guests. In the current development of the tourism and hospitality industry the main character with increasingly degree becomes a specific consumer, characterized by the peculiarity of temperament, character, features of the motivational sphere. It is he and his inner circle who decide which travel services to buy, where and how to relax. The central figure of the consumer in the modern market required a detailed and in-depth study of the features of his behavior in the dialogue «product – buyer» (Glotova, 2015).

Hotel services are used by diverse consumer groups, with their individual preferences and wishes, different income levels. However, not all guests of the same hotel have the same taste and needs. Guests of the same hotel are completely different people with different motives and goals (Donskova & Dunec, 2008).

The modern scientific community has recently begun to pay attention to this problem. Having studied the role of customer needs in hotel services, we noted that in order to identify consumer preferences, it is necessary to use modern marketing research. There are also methods for assessing consumer values in hotels, allowing to identify customer preferences in the

qualitative and quantitative indicators of the service system. Some techniques used in assessing customer satisfaction can further enhance the competitiveness of hospitality enterprises (Duhovnjaja, Kobeleva & Shpagina, 2016).

So, the object of study in the article advocates consumer behavior in general and guest loyalty in particular, the subject of research is the effect of guest loyalty on the development of mini-hotels.

## **Literature Review**

As have already mentioned, the category of small accommodation includes hotels with less than fifty rooms. A number of authors highlight the external and internal factors of the development of small forms of hotels. Among macro factors include: economic trends, socio-cultural factors, development overall, deficit of balance payments, and import of services, state regulation (Kovaleva & Nikol'skaja, 2016).

At the present stage of development of the tourist and hotel industry, interest in small forms of hotels is due to the needs of the main consumers. Small accommodations quickly adapt to the requirements of their customers, create an atmosphere of home comfort. Analyzing the features of small hotels and their role in the development of the tourism and hospitality industry, it can be noted that the main advantages of mini-hotels are providing the client with the opportunity to choose accommodation not only taking into account price, but also location, aesthetic preferences. This allows you to control the quality of services and optimize the volume of services provided (Kovaleva & Nikol'skaja, 2015).

In this context, a methodology for assessing the quality of service, tested on the example of a hotel organization, has been formed. This involves holding marketing research (Kosheleva, 2012). In addition, the necessity of using a mathematical estimation model is substantiated activities of a small hotel, which helps to increase competitiveness (Levykin & Djevon, 2014). Small accommodation facilities with a view to attract and retain customers apply various loyalty programs. Of no small importance in building customer relationships are internet technologies: hotel business internet representations, internet marketing, internet CRM systems (Levykin & Djevon, 2015). In many ways, the behavior of consumers when choosing certain hotel services is associated with consumer expectations. These expectations are based on the use of the following key factors: personal needs, past experience in using services or goods, external communications, interpersonal communication, including assessments of loved people and even rumors. Customers make an assessment of the quality of service on an objective and subjective, quantitative and qualitative indicators (Nicol'skaja & Vahrina, 2015).

You can define consumer motivation as a person's motivation to meet recreational needs, depending on his individual physiological and psychological characteristics, belief systems, values, inclinations, education, etc. The focus and motives of the consumer affect the formation of his behavior as a buyer of services. Following the author, we believe that the hotel product should have its addressee (Chudnovskij, 2011).

Note that the formation of consumer motivation is influenced by increasing customer loyalty. When developing an effective loyalty program, it is necessary to take into account that the privilege should not only be

useful, but truly desirable, that is, give unique advantages that are valuable for a certain category of users (Chudnovskij & Palshkov, 2012).

All of the above allows mini-hotels to take a strong position in the hotel services market. However, the question arises of a more substantive study of consumer behavior and motivation customers in general, and the formation of their loyalty in particular as a factor in the development of mini-hotels (Shahovalov, 2007).

### **Plan and Methods of the Research**

Quantitative method of the research was chosen. It was made in the form of the questionnaire. The title of it is «Revealing consumer preferences of clients of small hotels». The questionnaire was prepared in Google forms and respondents were asked to answer it upon the check out. A survey of 145 respondents was conducted to evaluate consumer preferences and motivation for visiting mini-hotels of Almaty.

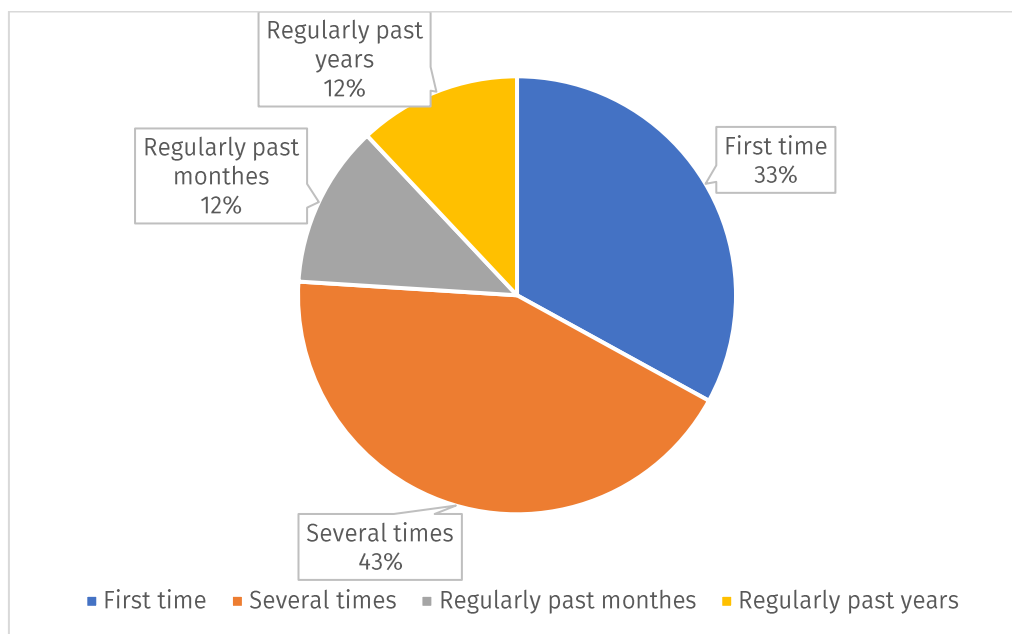


Figure 1. Frequency of visitors of mini hotel in % (based on the results of the survey)

## Empirical Findings and Discussion

Figure 1 shows the frequency of visits to the hotel. From the data presented it is clear that 77% of customers turn to mini-hotel services almost regularly.

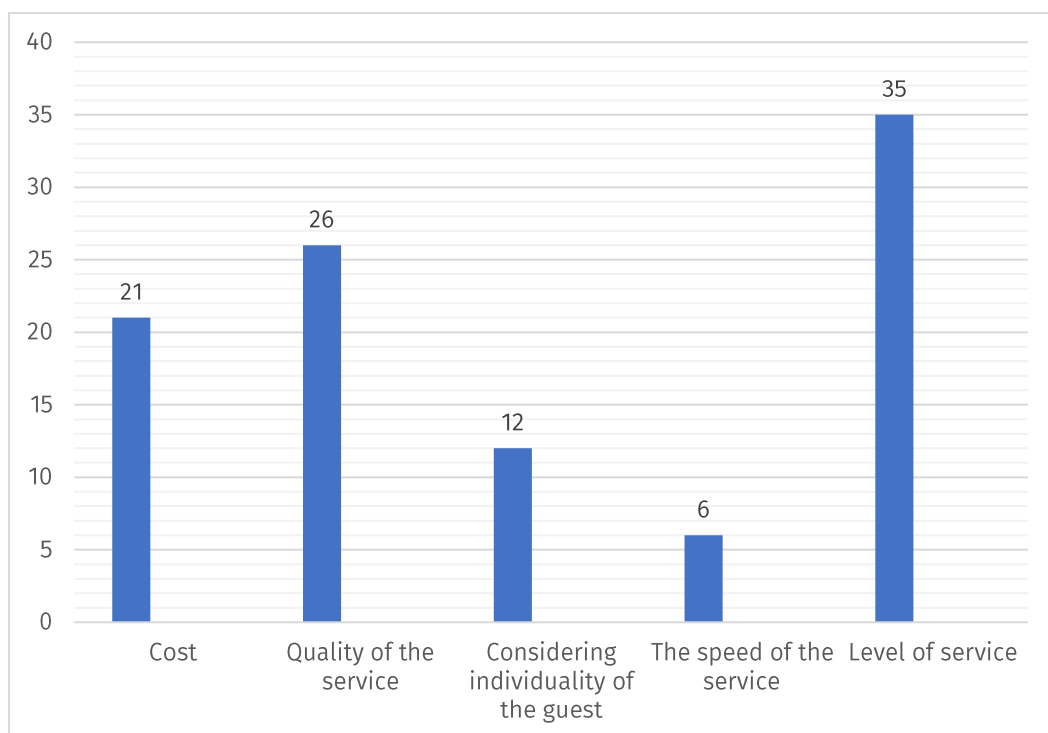


Figure 2. The most significant hotel selection factors, % (based on the results of the survey)

Figure 2 presents the most significant factors in choosing a hotel: 35% of respondents the most significant factor of choosing a particular mini-hotel is considered by the level of service, the second and third place in terms of importance is the quality of service (26%) and then its cost (21%).

Figure 3 represents the main motives for choosing a hotel. 55% chose «favorable living conditions» as the main motive, 31% identified a pricing policy, 14% - «good recommendations».

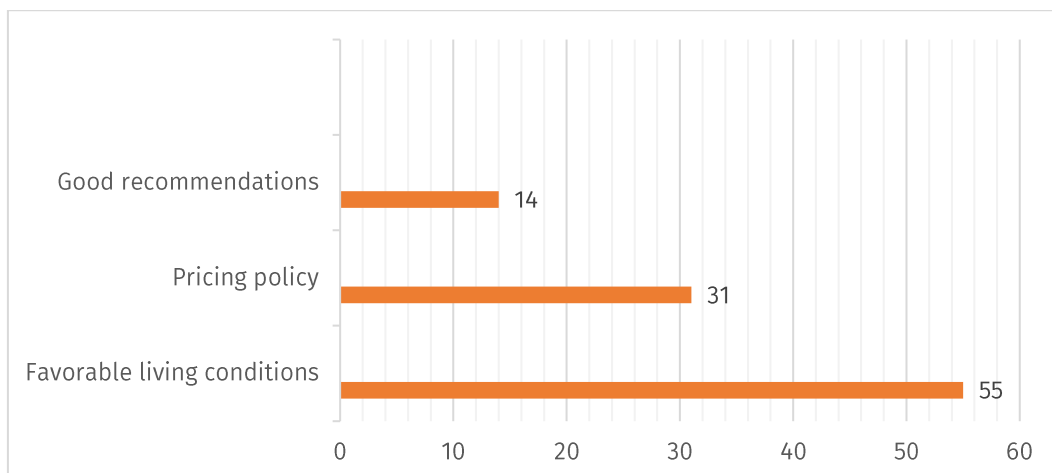


Figure 3 - The main reasons for choosing a hotel, % (based on the results of the survey)

According the figure 4, 83% of respondents noted that they are ready to visit a hotel in the future, 2% will not visit it again, 15% find it difficult to answer.

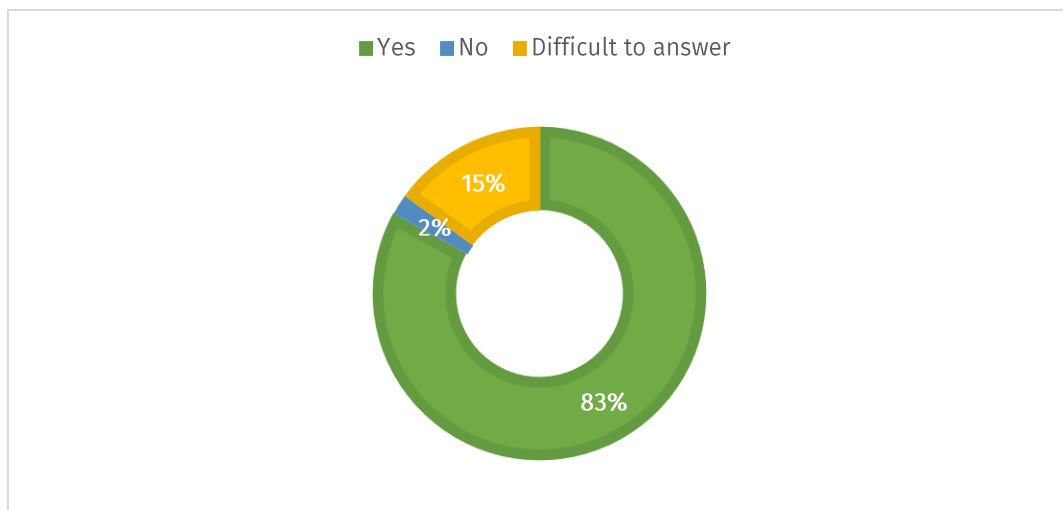


Figure 4. Readiness of customers to visit the hotel in the future, % (based on the results of the survey).

95% of customers surveyed said that the psychological climate in the hotel is comfortable. This indicator is a factor of hotel attractiveness. Thus, the study allows us to conclude that the main consumer preferences of customers when choosing a hotel include favorable living conditions, a

comfortable psychological climate of hotels, and the level of service. Of great importance is the cost of the service. Note that the development of mini-hotels is impossible without the use of strategic entrepreneurship in the hotel business (Bowie & Buttle, 2004).

Based on this, mini-hotels in order to build stronger relationships with consumers and best satisfaction of their needs the following tools can be used:

- providing consumers with hotel services additional financial benefits;
- use, along with financial benefits, additional social benefits. This can be achieved through marketing research and the personification of hotel services provided;
- for guests who often use the services of the hotel, the provision of any additional service that not available to other customers, e.g. opportunity to dine in the restaurant for free inns while free breakfasts are provided to the rest of customers (Carlbäck, 2015).

## **Conclusions**

The formation of guest loyalty as a factor in the sustainable development of small hotels. Hotel industry at the present stage of economic development is an industry with a high level of competition, which leads to the search new forms of organizing the hotel business, one of which is mini hotels.

They are created with the aim of fully satisfying the needs of customers, which are increasing every year. Survey data indicate that there is need customers in the services of mini-hotels. A correct understanding of consumer behavior and their value systems will allow the development of

new forms of mini-hotels. To achieve this goal, it is necessary to conduct market research on the needs of hotel customers; identify services most in demand; create a system of relationships with hotel service consumers. On the formation of a positive carrying consumers to hotel services also affects the quality of hotel services. Quality of service is a broad and volatile concept. To assess the level of quality provided hotel services, it is necessary to identify indicators and evaluation criteria (Zaltman & Coulter, 1995). Therefore, in my opinion, in the formation of consumer preferences customers, and therefore loyalty, hotels should pay attention to improving the quality of hotel services.

A survey of hotel services led to the conclusion that the main consumer preferences of customers when choosing a hotel include: favorable living conditions, comfortable psychological climate of hotels, level of service (Berezan, et al., 2013). Mini-hotels are more flexible in providing services and using discount systems than large hotels with a similar level of services. Note that the successful development of mini-hotels is impossible without building relationships with customers (Xu & Gursoy, 2015). Therefore, a distinctive feature and competitive advantage of mini-hotels is the individualization of service (Kleindorfer, Singhal & VanWassenhove, 2005).

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# Analysis, design, and software shells to develop interactive e-textbooks

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## Abstract

Goals and objectives of the research are to analyze operating digital platforms in Kazakhstan's education system and the models and tools for the development of electronic textbooks to integrate them with LMS.

As a research methodology it is used content analysis of scientific articles, academic sources, websites, online platforms and e-learning systems as well as ADDIE model for the development of electronic textbooks and their pedagogical design.

Results/Findings: different foreign and local educational digital platforms have analyzed as a research result. Also there were developed two types of electronic textbooks for 9th and 10th grade school students with Kotobee Author and iBook Author software, which can be also integrated with LMS and MOOC in further.

Novelty/Originality/Value of the study is the search for the most effective ways of applying digital technology in the learning process. The effectiveness of education primarily depends on digital educational content, including electronic textbooks. The article presents an analysis of the experience of developing school educational platforms in Kazakhstan and abroad to identify emerging trends and prospects for their development.

Theoretical research materials are used for analysis of scientific and pedagogical sources, synthesis, generalization and systematization. The practical significance is that materials and developed electronic textbooks can be used in schools as an additional supportive textbook for gaining in-depth knowledge.

*Keywords:* electronic textbook, e-learning, digital learning, digital platform, digital literacy

## **Introduction**

The modern period of the development of society is characterized by a strong influence of computer technologies on it, which penetrate into all spheres of human activity. An integral and important part of these processes is the computerization and digitalization of education. The educational process is increasingly being transformed under the influence of new technologies in order to provide the skills and knowledge that will be in demand in the future in a rapidly changing market. The learning process is becoming more dynamic, there are no more boring lessons with monotonous delivery. Learning process is served in a game format. All this happens due to gamification, personalization and digitalization of content.

The introduction and use of the latest multimedia and information and communication technologies in the learning process is the most necessary aspect in the modern 21st century. Recently, it has been observed that the majority of the population quickly adapted to the use of advanced technologies in the field of education all around the world. Moreover people started to use iPad, tablets and devices for reading electronic books as personal digital devices (Chiu, 2017). All of this is forced for the development of e-learning and e-textbooks. As Belenkova (2016) emphasizes «At present, there is no unambiguous definition of the term electronic book. According to the first, electronic textbooks are an electronic course that contains a systematic presentation of the discipline or its section, part, corresponding to the state standard and the curriculum and officially approved as this type of publication. Others believe that an e-book is a computer, pedagogical software tool designed primarily for the presentation of new information, supplementing print media, serving for individual and individualized training and allowing to test the acquired

knowledge and skills of a student to a limited extent. Third opinion, the electronic textbook is the main educational electronic publication created at a high scientific and methodological level, fully complying with the state educational standard of specialties and directions, determined by the didactic units of the standard and the program» (Belenkova, 2016, p.3).

The use of electronic books changes the main function of the teacher, turning him from a translator of educational information into an organizer of the process management of an effective learning manager. Traditional textbooks do not demonstrate the methods of active development of the presented educational information. In addition to information, new electronic textbooks include technologies for organizing productive cognitive activities that are placed in their methodological part in the form of didactic blocks where basic educational information and methods of studying and deepening it are combined. When working with traditional textbooks, students receive ready-made information. An electronic textbook directs students to an independent educational search for self-control and self-assessment of knowledge (Belenkova, 2016, p.4).

### **Theoretical basis for electronic textbooks**

The organization of effective e-learning involves providing students with both sources of information and necessary assistance. E-learning is implemented in a variety of forms: blogs, online discussion clubs, online games and simulations, online encyclopedias, online courses in the framework of Learning Management Systems (LMS), mass open online courses (MOOC), tablet apps, and more. A unified theory of e-learning does not yet exist. According to existing concepts the terms *«cognitivism»* and *«constructivism»* are widely used while creating and using e-learning

tools (Janelli, 2018). Furthermore, behaviorism, the theory of digital media, and the theory of active learning are also used. Some scholars, however, argue that e-learning requires a new concept of learning.

Cognitive scientist Mödritscher (2006) believes that learning is an internal process in which thinking, memory, reflection, motivation and metacognition are involved. Information is perceived by different senses, processed by RAM, whose resources are limited, and then transferred to long-term memory that has no limits. Long-term memory organizes complex material into circuits, thus reducing the load on RAM and increasing its potential. The performance of RAM can be affected by both the essential characteristics of the processed material and external conditions. If too much material is supplied so that it cannot be processed by RAM and transferred to long-term, cognitive overload occurs. The problem is that many educational information technology and e-learning tools are more likely to increase than they are less likely to be cognitively overloaded (Burke, 2013). This is one of those problems that need to be addressed when cognitivism is used as a theoretical basis for developing e-learning options (Janelli, 2018).

The constructivist approach in e-learning assumes that students are involved in active and interactive activities that foster collaboration. It is assumed that, in carrying out constructivist tasks, students control their own learning process, in the format of discoveries controlled by the teacher or with the help of prompts on the screen, as a result of which the student makes the decision himself. Koohang et al. (2009) formulated three main components of a constructivist approach in e-learning: *activities* involving cooperation and the adoption of different points of view, the use

of life examples, self-reflection, scaffolding, self-esteem and a variety of ways of representing ideas; *assessment*, including teacher assessment, group assessment and self-esteem; *teachers' functions*, including coaching, mentoring, recognizing students' efforts, providing feedback and student assessment. Subsequently, the authors expanded this model by identifying nine constructivist elements of e-learning, which included interdisciplinary training, self-reflection, the use of life examples and scaffolding to stimulate the zone of proximal development (Koochang et al., 2009).

There are three more theories that apply to e-learning, although much less frequently used rather than cognitive loading theory and constructivism. One of them is *behaviorism*. Behaviorists consider learning in the context of external stimuli or environmental stimuli. Knowledge is acquired through experience and interaction with and around the world (Schunk, 2011). Behaviorists recommend that course designers structure their e-learning materials as follows: for example, all material should be broken down into smaller pieces or segmented tasks to facilitate understanding of complex information and activities. You can also use the behaviorist approach in the e-learning system in another way: to provide students with more opportunities to manage their own learning process, allowing them to choose the next step in the sequence of training actions (Mödritscher, 2006).

The next theory used in e-learning is *Digital Media Theory*. This theory enriches e-learning with a variety of media formats that can be used for teaching and learning. The theory of digital media in relation to e-learning focuses on hardware, on technical means such as computers, mobile



devices, recording devices, etc., rather than on software type or content of the training. In addition, the theory of digital media addresses important issues related to access to information and its accessibility, which are not fundamental for cognitivism and constructivism (Andrews, 2011).

Finally, the theory of activity and the theory of *active learning* are applicable to e-learning (Pange et al., 2011). Active learning is any educational strategy that involves students to be more active. The more active the student, the better he learns the material. One of the popular ways to increase student motivation, which is based on the theory of active learning is a gamification.

### **Analysis of digital platforms in Kazakhstan's education system and abroad**

In connection with the development of information technologies in leading foreign countries where broadband Internet is developed, has been created national and regional educational networks to ensure access for teachers and students to the best educational resources. For example, in the UK, London Grid for Learning (LGfL) has been operating for almost 20 years. London learning network that provides broadband connectivity, network services, a common learning platform, online content and communication support for all 2600 public schools throughout London. Since 2007, a Norwegian digital learning arena (NDLA) has been operating in Norway, which is a government project aimed at ensuring free access to educational materials of guaranteed quality in all subjects in high school. Furthermore, in Singapore all public schools have access to the Singapore School Learning Space (SLS), an online platform that contains resources and learning tools that are aligned with the curriculum. The largest USA educational platform is Blackboard is used in every third USA school

district, including 70 out of 100 largest districts, and serves more than 20 million students (Tazhigulova et al., 2019).

The state program «Digital Kazakhstan» which is scheduled for five years from 2018 to 2022 is needed to raise the level of digital literacy of the population and provide all schools with computers, multimedia equipment and broadband access to the network. The creation of electronic textbooks and educational sites, in particular will allow children who cannot attend schools to receive quality education due to the reasonable facts. For that reason as Batrakova (2019) mentioned electronic textbooks are an opportunity to study at the same time with classmates and keep up with the school curriculum for children with special educational needs or those children who have not temporarily attended school.

Nowadays, the following educational digital platforms operate in our country where everyone can access all school books in three languages: [bilimland.kz](http://bilimland.kz), [twig-bilim.kz](http://twig-bilim.kz), [imektep.kz](http://imektep.kz), [opiq.kz](http://opiq.kz), [kitap.kz](http://kitap.kz), [openu.kz](http://openu.kz), [academia.kz](http://academia.kz), [budbeed.com](http://budbeed.com), [moocs.kz](http://moocs.kz), etc.

Furthermore, the paper-free principle has been given a special place in the digitalization of education. It includes magazines and diaries from the «Kundelik» system, according to which teachers, parents and schoolchildren look at lesson schedules, homework and monitor performance.

***Bilimland*** is a digital educational platform based on the cutting-edge achievements of world leaders in e-learning. This is the largest digital library of modern educational content, represented by a collection of 30

thousand electronic lessons, simulators, interactive exercises, educational videos and animated films, covering almost all subjects in Kazakh, Russian and English languages.

Bilim Media Group and British educational company Twig present a unique online training service *twig-bilim.kz* that has received worldwide recognition. An innovative platform, localized in 13 languages of the world, in more than 35 countries, has been recognized as the best learning resource at the BETT 2012-2013 and 2014 world educational technology exhibition. The complex consists of more than 1,500 fascinating short films, created on the basis of the school curriculum in chemistry, physics, biology, mathematics, geography and natural science. Each film is supported by additional materials in the form of illustrations, diagrams, tables and interactive test tasks.

*imektep.kz* is an online portal for controlling elementary school students. The portal allows quickly informing parents about the performance, attendance, homework of their children, view comments and notifications from teachers, and also create a centralized performance base for controlling state bodies. The author of School Electronic Control is the company Strategic Consultants & K. The system is implemented on the basis of industrial solutions of Microsoft Corporation.

***OPIQ digital platform.*** According to statistics of 2015, Estonian children showed a very good breakthrough in the field of scientific and mathematical literacy all around the world. The main reason for this good result was the digital platform OPIQ textbooks. Inspired by the success of the Estonians, nowadays, in our country available a digital platform *opiq.kz* on their technological base. Today, 75 textbooks in Russian and Kazakh are collected there. In addition, the textbooks of other publishers, such as

ArmanPV and EduStream, which are engaged in the production of school textbooks like Almaty Baspasy, are already presented on the opiq.kz platform. Over the past three months statistics in March 2020, the active user base has doubled and is now approaching one million (Batrakova, 2019).

## **Methods of creating multimedia electronic books**

Means of creating electronic textbooks can be divided into groups using a comprehensive criterion that includes indicators such as purpose and performed functions, technical requirements and application features. In accordance with the specified criterion, the following classification are widely used (Sun et al., 2017):

- high-level programming languages in combination with database technologies;
- multimedia tools;
- hypertext and hypermedia tools;
- special software for creating electronic textbooks.

*Programming languages.* Currently, most programmers use the languages HTML, PHP, JAVA, etc. to create an electronic textbook. HTML is a language for creating textbooks with hyperlinks and illustrations. It is possible to insert interactive demos created using Macromedia Flash, Java, and others. Advantages of the language: format universality, small amount of code, the ability to use under any operating system. Disadvantages of the language: functional limitation, lack of means of protecting information from theft and copying (Kazakov et al., 2015).

Also, Van et al. (2016) have mentioned other programming languages that are used to create ebooks. Ruby on Rails is an object-oriented software

framework for creating WEB applications written in the Ruby programming language. Ruby on Rails provides an architectural model of Model - View - Controller for WEB-applications, and also provides their integration with WEB-server and database server.

*Multimedia Tools.* Multimedia technologies combine several ways of presenting information: text, images, animated images and sound into an interactive product. Multimedia tools can significantly enrich the educational material by activating all methods of perception.

*Hypertext and hypermedia tools.* Hypertext is a method of nonlinear presentation of text material, in which the text contains in some way selected words that are associated with specific text fragments (Akimova et al., 2019). Thus, the user does not just leaf through the order of the page of text, he can deviate from the linear description by any link, that is, he controls the process of issuing information. In a hypermedia system, images can be used as fragments, and information can contain text, graphics, video clips and sound.

The use of hypertext technology satisfies such requirements for textbooks as structuredness, ease of use. If necessary, such a textbook can be published on the Internet and can be easily adjusted. Currently, there are many different hypertext formats such as HTML, DHTML, PHP, etc.

*Special software for creating electronic textbooks.* The creation and usage of intelligent educational platforms with a developed didactic interface helps to master the material in a deep and comprehensive way, and raise the professional training of students to the level of specialists. In the market of programs for creating electronic textbooks, there are both online and offline platforms that are available to everyone without knowledge of

the programming languages. Table 1 illustrates requirements and comparative analysis for both offline and online based electronic textbook creator software.

Table 1. Comparative analysis of e-textbook developer software types

Software type	Price	OS type	E-textbook formats	Integration with LMS
Kotobee Author	Free +Full functionalities starts at \$100	Windows, MacOS	Kindle, ePub, PDF, Word, SCROM, HTML 5	+
iBook Author	Free	MacOS	ePub, PDF, IBA	+
iSpring Suite	Available free version with limited toolboxes	Windows	pptx, HTML5	+
Adobe Captivate	Free with limited functionalities. Fully functional version starts at \$399	Windows, MacOS	PDF, Mobi, ePub, Amazon Kindle	+
CourseLab	Offers a free trial, pricing starts at \$199	Windows	PDF, .txt	+
Scribble	Starts at \$67	Windows	PDF, ePub, HTML5	-
Lectora Inspire	Starts at \$1595	Windows, MacOS	SCROM, ePub, HTML5, PDF	+
Kitaboo	\$99	Windows, MacOS	PDF, ePub, Mobi/KF8	+

## **Requirements for electronic books in education system**

While developing electronic textbooks there occurs not only organizational and structural problems, but also design and technological problems which leads to developing requirements for all issues. For example, Burch and Good (2014) raise the serious question of the fact that in many cases the content of e-textbooks is determined by the developers and does not correspond to the curriculum. In addition, they note that publishers have little motivation to spend money on developing high-quality content, and that as a result, the content in many digital curricula is poor. Moreover, Hernes (2001) emphasizes the need for each country to develop local digital products, since foreign electronic educational programs and books can pose a threat to the national education system, culture and language. The main important point is that we have to emphasize that any resource has not only a teaching content, but also an educational effect: digital content should be educational and educational systems consciously set educational tasks that focus on traditional domestic spiritual and national values. Gu X. et al. (2015), Pepin et al. (2017) believe that e-content developers often focus on the interface or technical aspects, but there are relatively few studies that focus on pedagogical design issues, such as structure, content, etc.

Furthermore, the first design criterion for electronic textbooks is the content and volume of the training material. The content directly depends on the reader's address. To fulfill this criterion, it is necessary to revise the training material, leaving there the most key and important points, additional information can be placed on the pages that can be opened according to the user's request.

Graphics, color, text, headings and the whole composition make up the information content of the page. The main percentage of information received by a person is perceived by sight. According to statistics, 83% of information is visually perceived and approximately 40% of it is remembered by a person. And the image can carry in itself no less, and sometimes even more information than text (Yakovlev et al., 2010).

There is also a spatial concept of perception of information. That which is closer (in the front side) is perceived earlier than that in the background. The background effect can be obtained with a fairly strong wash. An object with normal sharpness will appear to be in the foreground and be perceived first. Large and quite bright elements are also perceived before small, detailed ones.

Font design, like everything else, should be consistent. Mixed different headsets are not allowed. For electronic textbooks it is recommended to use the sans-serif font family (Yakovlev et al., 2010).

## **Findings**

According to a social survey among schoolchildren and students of the city of Almaty aged 15 to 20 years, it turned out that 45% of the respondents prefer a paper version of the book. Many justified this choice in the usual way of reading, while others explained that they needed direct contact with a «live» book. 48% preferred the e-book, mainly students, substantiating their choice with the compactness of the device and the capabilities of fast reading. 7% of respondents preferred an audiobook, citing the convenience of listening on the road, public places, etc., as well as the amount of



information that can be heard and received through audiobooks. Figure 1 illustrates the graphical result of this conducted social survey.

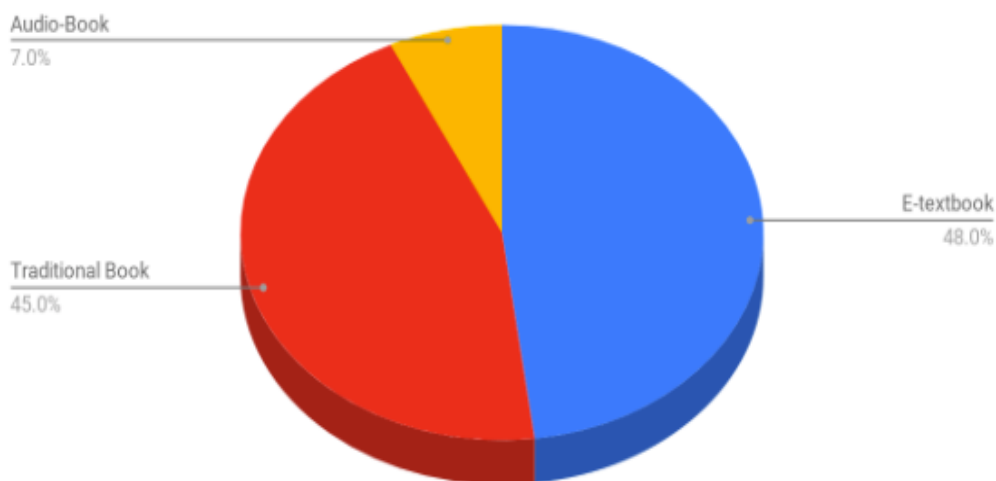


Figure 1. Book format preference chart

According to conducted survey among school teachers for the question «What e-book characteristics are important for you?» major part chose the renovated information.

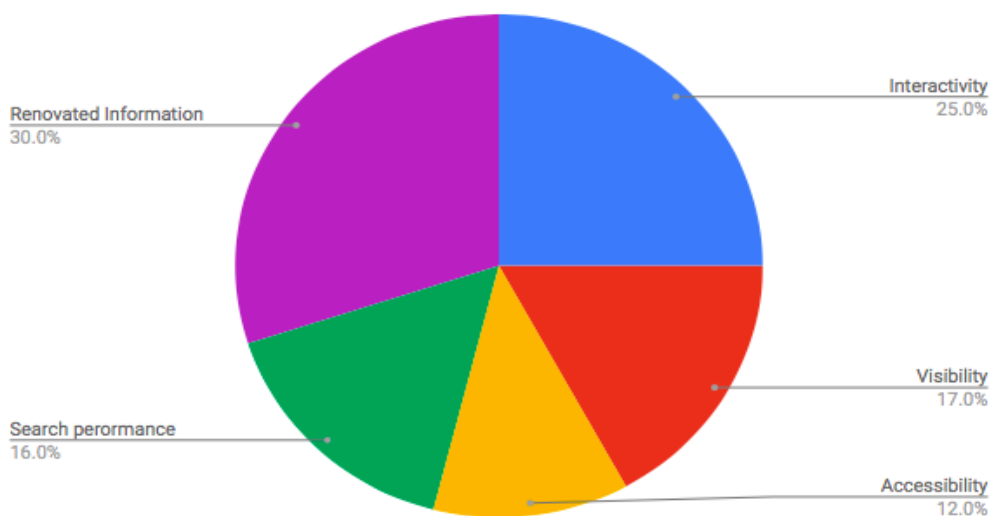


Figure 2. E-textbook characteristics

For the question «How well do you know e-book creator tools?» majority of them chose iSpring software, it is because iSpring available for everyone as an add-on for Microsoft Powerpoint.

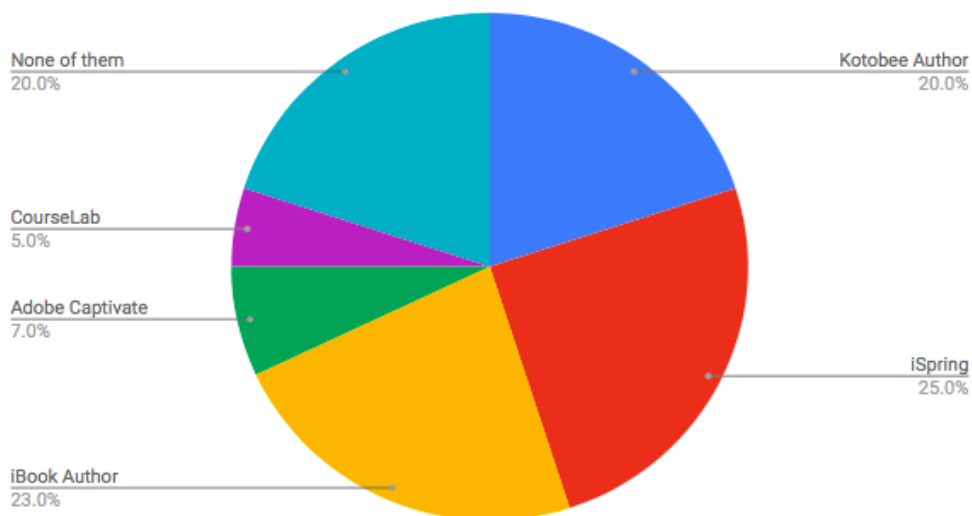


Figure 3. The popularity of e-textbook creator tools among teachers

## Conclusions

The educational process is increasingly being transformed under the influence of new technologies in order to provide the skills and knowledge that will be in demand in the future in a rapidly changing market. The learning process is becoming more dynamic, there are no more boring lessons with monotonous delivery. Learning process is served in a game format. All this happens due to gamification, personalization and digitalization of content (Andrews, 2011).

As Tazhigulova et al. (2019) emphasized the usage of digital educational environment will contribute to the active implementation of innovative educational technologies, the mastery of scientific and technological knowledge and the fundamentals of creating an educational information environment for school teachers and students. Taking into account all

these mentioned points this article covers various ways related to the design and development technology of an electronic textbook as a means of implementing effective learning activities.

The analysis of scientific and pedagogical literature and practice revealed that the trend in the development of digital educational content in Kazakhstan and abroad is sustainable, which corresponds to the challenges to educational systems from the digital economy. Abroad, there are prevailing trends in the development of e-learning systems that provide access to digital resources on specific topics, as well as open educational resources, massive open educational courses, tools for creating resources by consumers themselves. At present, in Kazakhstan, products of Bilim Media Group such as bilimland.kz, imektep.kz, twig-bilim.kz and itest.kz are considered more effective.

In conclusion, online textbooks, a cloud-based learning system, virtual laboratories, a personal ID for each student, open educational content - all this awaits the education of Kazakhstan in the very near future. The digitalization that the country has embarked on is one of the leading trends in the process of reforming this sphere. Furthermore, digital educational resources will reduce the gap in the quality of education between rural and urban schools and ensure equal access to education.

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# The Features of Management Accounting in Appraisal Companies

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## Abstract

The aim of the study is to determine the specificity of management accounting in appraisal companies. Appraisal activity is one of the aspects of the multi-faceted concept of «appraisal», which also means the process of professional appraisal implemented by the appraiser, and applied economics with its own methodology, terminology, research principles, and professional opinion of the appraiser regarding the value of a particular object of appraisal. Methodology. This study uses a historical, systematic and integrated approach to the transfer of material. Transmission logic, which is the original definition of the basic concepts and further description of fundamentals of management accounting, allows understanding patterns and modern trends of appraisal activity. Certain provisions were used in the practice of a Limited Liability Partnership engaged in appraisal services. Research results obtained allow us to understand the nuances of management accounting to improve the performance of appraisal companies in the Republic of Kazakhstan. The scientific novelty of the research is that because of a theoretical study of management accounting, possible directions for increasing the wellness of appraisal companies are justified. Theoretical and practical significance

of the study connect with the possibility of using the scientific results in the deals of the Ministry of Finance of the Republic of Kazakhstan and its structural subdivisions, the tax authorities at different levels, the Ministry of national economy of Kazakhstan. This fundamental research can be used as a basis for training specialists in the field of performance accounting.

*Keywords:* appraisal, management accounting, property, value, customers, costing.

## **Introduction**

In a market economy, management accounting and performance analysis based on its data are objectively necessary. Analysis using management accounting data is one of the main conditions that allow management to make the right management decisions, so the survival and success of any organization in a market economy with its inherent high competition is largely determined by the degree of development of management accounting in it.

Functionally developed management accounting, focused on a competitive environment, will make it possible to identify information and technological processes that are a priori focused on making informed and optimal management decisions that will allow timely elimination of shortcomings characteristic of accounting and financial accounting. The effectiveness of management control leads to the guarantee of reliable information in accounting (financial) statements, reliability, stability and security of the organization's assets, allows you to explore the relationship between management and tax accounting, thereby contributing to successful and profitable activities. In this regard, it is very important to develop theoretical and practical recommendations that are aimed at strengthening the role and importance of management accounting, improving the methodology of its organization.

The main changes in the demand for management accounting information characteristic of modern manufacturing companies are observed in many organizations that provide services, the role of which in the economy has significantly increased in the late XX century. In Kazakhstan's economy, against the background of traditional services to the population, such as household, communications, transport, housing and utilities, culture,



tourism, medical, trade and public catering, new types of services are emerging: audit, consulting, insurance, trust, financial, freight and many others. The range of production services provided has a wide range: from the provision of electricity and communications to banking and appraisal services.

Management accounting refers to the process of measurement, identification, analysis, accumulation, interpretation, preparation and provision of financial, marketing, production and other information on the basis of which the company's management makes strategic and operational decisions. The management accounting system generates data in both monetary and physical terms. Management accounting not only registers the company's activity data, but also interprets the information received, providing it to the manager, who makes management decisions based on it (Amey and Egginton, 1973).

Management accounting, defining only the company's internal activities, is based on such economic processes as regulation, planning and forecasting. The most important functions that management accounting is responsible for in an organization can be expressed in the simplest scheme: providing information — analysis — planning — motivation — coordination — control. They can be divided into two types: functions that are responsible for the exchange of information, and functions that guarantee its quality. The first is the implementation of an information exchange system, its provision, analysis, and planning of follow-up activities. To the second — motivation of personnel, coordination of activities of separate divisions and control over the proper implementation of the plan.

Management accounting provides management with information: profit calculation; income and expenses; inventory estimation; cost formation; justification of sales prices. Once the information has been received, it is carefully analyzed and prepared for decision-making. In the course of the analysis: the ways of the most appropriate use of resources are determined; investment policy is developed; information about the current assortment, output or sales volumes is prepared; the ability of the organization to further growth and development is identified. The received and analyzed information is the basis for the next function of management accounting — planning (2013). In accordance with it, the following activities are carried out: development of tactical and operational plans; preparing data for the formation of long and short term strategic development plans; developing projections.

Having a good understanding of the key value of the category «price» for the characterization of processes in the economic system, we come to the conclusion that the concept of «appraisal» as a complex indicator of the measure of significance, profitability, expediency of obtaining a particular result of activity, as well as the resources that provide this result (2003).

## **Literature Review**

Analysis of the works of domestic and foreign authors indicates that the theoretical aspects of the impact of the role of management accounting on appraisal activities are not sufficiently explained and developed. In addition, there are no principles for proper management accounting in appraisal companies.

Issues of management accounting for appraisal activities were considered by Russian and foreign researchers as Demich and Buglova (2018); Ripoll-

Zaragossky (2001); Allaverdyan (2014); Katsman, Kosorukova and Rodin (2008); Safaryan (2012); Helfert (2005); Grigoriev (2000); Zimin (2010); Popova (2011); Artemenkov and Artemenkov (2013).

In Kazakhstan, the specifics of appraisal activities are mainly reflected in «The law on appraisal activities of the Republic of Kazakhstan» (2018), in «The Rules on the application by entities of appraisal activities of requirements for methods of appraisal of real estate (with the exception of enterprises as property complexes)» approved by a joint order of the Minister of justice of the Republic of Kazakhstan (2018).

These works have made a significant contribution to the review of the theory, methodology and practice of formation and development of appraisal activities and proper management accounting. At the same time, many theoretical, methodological and practical aspects of developing and justifying the activities of appraisal companies in our country and in the world remain poorly studied.

## **Methods**

The research methodology is based on General scientific methods of knowledge, principles and criteria of objectivity in their versatility and inconsistency, based on the totality of works of domestic and foreign scientists, statistical indicators that correspond to the truth and General laws of state and socio-political development at the historical stage under study.

## **Sample**

The study used statistical sources of the statistical Agency, Ministry of Finance, Ministry of national economy of Kazakhstan, legislative acts of

Kazakhstan, normative-legal documents regulating management accounting monographs and Internet sources on this issue.

## **Data collection**

The database of the research consists of legislative and regulatory acts of the Republic of Kazakhstan; data from statistics Committee of the Ministry of national economy; materials of scientific and research conferences and seminars; statistical information contained in scientific publications.

## **Results and review**

Appraisal activities are an essential component in creating a developed infrastructure that is necessary for further economic transformation in our country. For a decade, the results of appraisal of various properties have been the basis for most decisions in the private and public sectors. Appraisal has become an integral tool in the arsenal of a modern businessman, financier, and manager. In a market economy, it is difficult for an ordinary citizen, a government official, a politician, and an entrepreneur to do without ideas about appraisal activities.

The appraisal objects include:

- All types of real estate.
- Means of transport.
- Securities.
- Intellectual property.
- Business.
- Machinery and equipment.

The purpose of the assessment for the appraiser is to prepare an opinion on a particular type of value to the customer, while acting as an

independent, disinterested party to develop an unbiased opinion on the value of the object being appraised. Thus, from the point of view of the appraiser, there is only one goal, namely, to set the required value for the client. However, the appraiser must be familiar with the intended use of the appraisal report, since he must apply the theoretical and practical knowledge and techniques of appraisal relevant to this particular function in order to obtain a reasonable conclusion. Although the appraiser may choose a certain type of value (for example, market value, liquidation value) and apply various research methods, this choice should be based on knowledge of how the appraisal report will be used in the future and why the owner needs to know the value of their assets (Table 1).

Table 1. The main goals of appraisal companies.

Conducting contests, auctions
Reporting, purchase and sale, exchange
Lease, lease rights, leasing
Pledge
Division, inheritance, donation
Insurance
Privatization, confiscation, nationalization, liquidation
Formulating a marriage contract
Calculation of taxes, duties, and fees
Determining the share of property rights
Storage
Resolution of property disputes
Commercial concession
Transfer of ownership
Transfer to trust management

Like any system, the appraisal system must have integrity (all elements are interconnected), structure (each element is necessary in the system),

purposefulness (there must be a goal for the functioning of the system as a whole), relationship with the external environment (the appraisal system does not function by itself, but in various connections with other subsystems of the economy).

Elements of the appraisal system include:

- legal entities and individuals (individual entrepreneurs) engaged in business activities (appraisers);
- individuals who are specialists in an appraisal;
- consumers of assessment services (public authorities, individuals and legal entities of all forms of ownership);
- educational and research organizations in the field of appraisal;
- self-regulating organizations of appraisers;
- organizations that provide information support for appraisal activities.

A clear understanding of the appraisal system, its main elements, the relationship between them, their functions and principles of operation are directly related to improving the functioning of the appraisal system as a whole. The features of appraisal activities that affect the organization of management accounting depend on the specifics of its technological process and organizational structure.

Technological features define two main components of accounting:

- direction of information collection;
- the method of cost accounting and calculating the cost of production (Safaryan, 2012).

Features of the organization of accounting in the field of appraisal activities are primarily due to the fact that the appraisal service can be considered as a general production process, in which it is possible to

distinguish its components. They are technological processes that are pre-planned operations. In this case, the organization determines how business processes will be the objects of planning and accounting activities. This will allow to identify the responsibility centers in the context of which information is collected (Hopper, 1980).

All the technological processes shown in the figure 1 are part of the overall technological process, so it can be noted that auxiliary activities are not represented in the appraisal business. The results of the analysis of the company's organizational structure help to determine the main directions of the company's economic activity, the cost structure, the list of responsibility centers, their structural composition and budgeting features, as well as the responsibilities of managers. For example, the budgeting feature of the management cost center is the preparation of cost estimates, and for the sales department, when forming the sales budget, revenue planning is used.

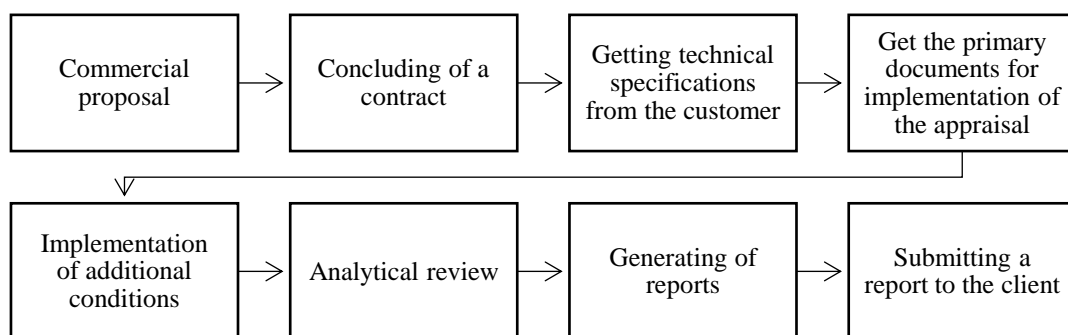


Figure 1. Technological processes that make up the appraisal service.

An important component of reflecting the characteristics of the appraisal activity is the applied methods of cost accounting and calculating the cost of production, in particular:

- cost accounting object;

- completeness of recorded costs;
- efficiency of cost accounting and control (accounting for actual and standard costs).

The object of cost accounting directly depends on the characteristics of the production process. For example, the features of appraisal activities serve as the basis for applying the order-based method of cost accounting. Accordingly, the object of cost accounting in the appraisal activity is an order, i.e. a specific appraisal service (Rutgizer, 2005).

Initially, the planned cost price is calculated for each order (project, contract), which is formed by calculating the average cost rates for the service provided. Here, the choice of the calculation unit that will characterize the individual cost of this service is of great importance. In relation to appraisal activities, it is customary to choose units of time as the calculation unit, namely, the man-hours of specialist appraisers. Working time of employees is the main resource of an appraisal company, and the ability to manage it effectively can be a competitive advantage, a way to reduce the cost of services. This is the main feature of the appraisal activity, on which the entire organization of management accounting depends.

Other units, such as the number of reports, regardless of the time spent on them, cannot be used in the analysis of the performance of the appraisal company. In companies that provide assessment services, it is advisable to organize the accounting of employees' working hours in a special program, in which employees will daily enter data on the work they have done during the day.



Currently, such programs are already widely represented on the market of the country. In addition, a major appraisal of the company independently develops similar programs tailored to business. There are also special primary accounting documents that reflect the specifics of accounting, such as time sheets, which are filled in if the information is entered into the program not by each specialist appraiser, but by one employee based on the accounting sheets presented to him by appraisers, statements of the structure of working hours, calculation of additional remuneration and bonuses, and based on such information collected from all departments (appraisers) for a certain period of time, it is possible to: analyze the structure of the appraisers ' working hours, their effectiveness; calculate the standard hour of the appraiser, which will help to determine the planned cost of the appraisal service.

The incomplete actual cost (direct costing) of the service rendered is formed based on the calculation data after completion of all work for each specific order, so until the order is completed, all costs related to it are considered as work in progress.

## **Conclusion**

In general, the management accounting system for production costs should allocate costs to two main groups of objects: divisions and products. Within the framework of budget planning, planned (budget) and actual indicators are recorded. The completeness of the recorded costs and the efficiency of accounting and control over them characterize the degree of detail of information about costs for the purposes of management accounting and analysis.

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