# ASTUDY OF THE SOCIO-ECONOMIC BACKGROUND IN THE MODERN MANAGEMENT OF CULTURAL SERVICES

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# 1. Introduction

In 2020, the coronavirus pandemic, changed the lifestyle and activities of billions of people around the world. The restrictions and measures adopted in many countries to curb the pandemic spread have been reflected in almost all spheres of human activity. At the same time, private and public organizations have had to introduce new approaches and management solutions to urgently prevent the spread of coronavirus, which has affected various services. The cultural sphere, which has been seriously damaged, is one of these.

Since the announcement of a global pandemic and the closure of most cultural institutions and industries, the consumption of cultural services has markedly changed. While direct and physical access to art and culture has been temporarily suspended, indirect online access has greatly increased due to the growing demand for cultural content in situations of anxiety and isolation [1]. In the first few months, governments, as well as private and public foundations, quickly developed a range of measures to mitigate the negative economic and financial impact of the COVID-19 crisis in the cultural sector [2].

ICTs have brought about changes in the usual functioning of museums [3]. Digital innovation and virtual environments such as social media platforms can significantly increase the competitiveness of museums and their ability to attract new visitors. This became especially relevant during the crisis associated with the pandemic. Besides, tourists highly appreciate the introduction of digital technologies at exhibitions and art galleries [4].

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With the growing role of digitalization, digital competition, and diminishing financial support, one of the main tasks of the leaders of state-subsidized cultural organizations will be to promote an entrepreneurial spirit among their employees and develop new innovative business models and sources of income. It is not enough to simply digitize existing cultural services. New management solutions and services will need to be developed that will also help overcome the constraints caused by the COVID-19 pandemic [5].

# 2. Literature review

Globally, the development of cultural services contributes to reducing inequalities, protecting the environment, promoting gender parity, and building peaceful and inclusive societies. There are also indirect benefits from the dissemination of cultural services.

Culture is an important factor in people's lives. It is part of the development of the intellectual, emotional, and moral aspect of people living in a certain area [6].

Management in the field of culture can be interpreted as a set of decisions aimed at the effective use of all types of resources in cultural activities (social, creative, financial, symbolic, material, and others). At the same time, a cultural service is primarily an intangible service, which can satisfy spiritual and intellectual needs, and ensure the allround development of the personality.

# 2.1. Culture and sustainable development: an ecosystem approach

On the international agenda, adopted by the UN in September 2015, culture is seen as a factor in sustainable development. Supporting and promoting culture is not only a stand-alone challenge but also a way to achieve a range of Sustainable Development Goals (SDGs).

In the modern world, cultural and biological diversity are the most important components of the ecosystem approach, which implies the need to manage resources taking into account their balanced conservation and development. The ecosystem approach involves managing the delivery of services based on their true values, in a fair and equitable manner, with the goal of generating both tangible and intangible human benefits to achieve SDGs. The ecosystem approach is based on the necessity of an economic, social, and ecological evaluation of the cultural assets in museums to achieve sustainable development. The activity of museums should be evaluated not only from an economic (income) and social (number of visits) point of view, but also ecological (spiritual education of respect for nature and preservation of the environment, the number of created archaeological open-air museums).

Cultural sustainability is increasingly perceived as a fourth dimension of sustainable development. So far, several studies [7-10] have discussed the ways in which cultural sustainability can lead to economic, social, and environmental benefits in the context of ecosystem service development. Other authors [11-13] have noted how traditional elements of cultural sustainability can help museums fulfill their core cultural mission.

The COVID-19 pandemic has brought many changes to people's lives. Extended quarantine periods and social distancing have made it impossible to physically interact with people and explore different places. On the other hand, this disruption of one's comfort zone has provided an opportunity to question one's way of life and think about its impact on nature and others around the world [11].

The connection between culture and sustainable development has been on the public agenda since the twentieth century. Nevertheless, although programs for global SDGs have not yet recognized the role of culture, an attempt in the early 2000s to officially add "culture" to the trilogy of pillars of environmental sustainability (economic, social and environmental) has mobilized a new discourse to rethink cultural policy. This, in turn, requires a reassessment of how culture is managed. The perceived role of sustainability and culture in securing the future of society and human development has gained support among cultural professionals, policymakers, and practitioners seeking to implement these principles, locally and globally [10].

#### 2.2. Culture as a strategic goal and priority for the sustainable development of the Republic of Kazakhstan

Traditionally, culture has been viewed as a sphere that develops according to its own rules and laws. However, in recent years, culture has become a subject of scientific interest not only among culturologists, but also among economists. Culture is currently the most important national development priority of many countries, including the Republic of Kazakhstan [14].

According to the Concept of Cultural Policy of the Republic of Kazakhstan by 2030 [15] it is planned to create a network of virtual museums and digitize all museum exhibits, records of concerts, significant elements of tangible and intangible historical and cultural heritage. Access to information can be provided by creating a new virtual portal "E-culture.kz", which will focus on the country's cultural life. This is the most accessible format for the promotion of Kazakhstan culture and art in the world space and the opportunity to make them widely recognized [15]. This Concept is an officially documented set of tasks, views and ideas on the further cultural development of Kazakhstan. It is based on the ideas of preservation and spiritual modernization of the national culture. Practical implementation of the main provisions of this Concept is defined by the corresponding official state document - the Decree of the Government of the Republic of Kazakhstan from February 2, 2021, № 32 [16].

#### 2.3. Adapting cultural services management to the constraints of COVID-19

One of the most characteristic effects of the COVID-19 crisis on the cultural sphere is that it has narrowed the global space to the size of computer screens and made local events sound worldwide. The digital or intangible has become tangible, replacing the physical and immediate [17]. In the post-pandemic world, one cannot discard the lessons learned from remote participation just because able-bodied people will no longer need it [18].

The social distancing initiated in response to the pandemic affected almost all areas of life - work, travel, free time. In addition, all cultural events were cancelled or postponed. Consequently, museums and theaters had to be closed to the public. Although it was not possible to visit these institutions, their services were still widely available. Almost every major museum, gallery, theater, or library allowed virtual tours. This was made possible by digital technology. Available virtual tours ranged from those of the Metropolitan Museum of Art in New York to the Louvre in Paris and the Rijksmuseum in Amsterdam [5]. The direct link between cultural tourism and the vitality of cultural institutions is important for museums to effectively develop digital platforms. However, as museums work with private and public partners to revitalize global cultural tourism, as institutions gradually open around the world, these stakeholders must remember that in promoting cultural heritage, the role of digital technology is primarily informative, not revolutionary [19].

Museums are now using social media to reach a wider online audience; they post virtual tours, interviews with their directors, and descriptions of works of art, as well as quizzes. These initiatives have transformed social media from channels of communication into tools for the dissemination of cultural services. The current situation has led to speculation about whether such initiatives are an effective way to increase cultural participation. It also opens the way to other considerations about the role that social media will play and, more broadly, about the importance of digital technology in spreading cultural values in the transition to the post-COVID-19 phase [20].

#### 2.4. Social effectiveness of museums under COVID-19 conditions

Museums have an important spiritual and educational mission, providing cultural services that are an important benefit to both society and state as a whole. Therefore, it is important to assess the social significance and effectiveness of museums from this perspective when determining and analyzing the financial rationality of their activities.

As a cultural and educational institution, museums have undergone significant changes in recent decades. Many museums have adopted innovative approaches that use technology to improve the interpretation, presentation, and display of their collections [21].

Museums should create safe, inclusive, and welcoming physical spaces together with an enriching and stimulating digital environment. This will be beneficial to people with and without disabilities, as it creates cultural practices that foster more efficient and financially sustainable measures appropriate in normal times and in times of crises [18].

Based on the above, one can argue about the need to introduce new management tools based on the ecosystem approach of understanding cultural services management as a socially effective and financially rational way to preserve and sustainably provide a set of spiritual, material, and intangible values.

Thus, the article aims to study, based on empirical research, how new management tools in the COVID-19 pandemic have affected cultural services in Kazakh museums.

#### 3. Materials and methods

#### 3.1. Research design

This study's methodology is based on an ecosystem approach to understanding cultural services management as a socially effective and financially rational way to preserve and provide the set of spiritual, tangible, and intangible values to achieve SDGs. A new theoretical ecosystem model of cultural services management in Kazakh museums was developed. This model is based on the conceptual hypothesis of cultural ecosystem services development proposed by Fish et al. [8].

Each museum has its own ecosystem. This is the external territorial space that surrounds it and the internal one, consisting of buildings, collections and storages, as well

as exhibits. Using social and financial opportunities, museums should build their own effective model of providing cultural services. The model should be created on the basis of analyzing the existing approaches that do not contradict the SDGs of the cultural and educational sphere.

#### 3.2. Research limitations

This study focused on an in-depth study of cultural services management in a pandemic in Kazakh museums. The social efficiency and financial rationality of museums in the period 2018-2020 were considered. At the same time, it was possible to investigate these issues taking into account the limited number of indicators available for study.

#### 3.3. Statistical analysis

The study used data from the Bureau of National Statistics of the Kazakh Agency for Strategic Planning and Reforms. The information is compiled on the basis of summarized data contained in the annual report in the form "1-museum". This form is used for national statistical observation of the activity of museums, which are cultural organizations created for storage, study and public presentation of museum objects and museum collections. They are called to perform cultural, educational, research functions and provide popularization of the historical and cultural heritage of the Republic of Kazakhstan.

The form contains the following indicators:

- the number of museums by type;
- the number of exhibits at the end of the year (all exhibits that were in the museum at the end of the year, including those that arrived during the year);
- the number of scientific auxiliary exhibits (part of the museum's holdings, consisting of items that are not cultural property);
- the number of exhibits requiring restoration;
- the number of visitors (total visitors to museums);
- the number of tours (visiting historical and cultural monuments, natural landmarks, museums in a particular area);
- the number of lectures (the total number of lectures held in all the museums);
- the number of digitized exhibits (all exhibits available in electronic format);
- the number of museums with Internet access;
- the number of computers in museums (characterizes the level of information and communication technical support of museums);
- the accessibility of the website (characterizes the level of digital technology implemented in museums);
- the number of exhibitions.

Modern museums cannot do without the use of scientific auxiliary exhibits. By definition, it is a separate part of the museum's collections, consisting of items and materials that do not belong to the primary sources of knowledge about nature and culture. For example, they may be reproductions of a museum item (object), diagrams, maps, charts and other materials, which are acquired or created to enhance the information capacity of the existing collection of museum exhibits and are combined into a special scientific auxiliary collection.

Statistical indicators were analyzed using Microsoft Excel.

#### 4. Results

The coronavirus pandemic has had a significant impact on the sustainable development of the cultural services sector in the Republic of Kazakhstan. The negative consequences can be observed in various spheres of cultural leisure, where attendance in theaters and museums, as well as amusement parks and other institutions, has decreased significantly. At the same time, thanks to timely measures taken at the state level, it was possible to stabilize the situation.

As of 2020, 65 professional theaters were operating in Kazakhstan, of which 35 were drama theaters; 10, puppet theaters; 6, young spectator's theaters; 4, musical comedy theaters; and 3, opera and ballet theaters. Kazakh theaters held 6381 events, of which 5% (296 units) were held outside theaters. In 2020, the theater repertoire amounted to 1834 performances, of which 266 were new.

In 2020, the number of museums in the Republic of Kazakhstan was 253 units, an increase of 3 units compared to 2019. The number of historical and cultural monuments in museums in 2020 amounted to 1394 units. The total number of exhibits was 2580.3 thousand items, of which 313.7 thousand items or 12.2% were exhibited during the year. The number of exhibits in electronic format amounted to 1001.1 thousand units. The number of exhibitions held by museums of the Republic in 2020 amounted to 4058 units, of which 7 exhibitions were held abroad.

In general, a comparative analysis of the activities of cultural and entertainment institutions before the onset of the coronavirus and during its active spread revealed significant changes in their attendance. These changes were characterized by multiple sharp declines in attendance at cultural and entertainment events. At the same time, the level of decline in certain cultural services differed significantly. The number of visitors to entertainment institutions in 2020 was 18.0% in relation to the level of 2019, museums 34.4%, libraries 65.1%. The main trends and features of development in the cultural and entertainment sphere in the period before and after COVID-19 are shown in Table 1.

The sphere of cultural and leisure facilities (centers of folk art, which are centers of everyday communication, personal development, amateur artistic folk art, etc.) and concert activities suffered the most. Attendance at recreational facilities fell to 18% of the 2019 level, and the number of spectators at concerts fell to 25.2% of the 2019 level. This may indicate a difference in the social effectiveness and financial rationality of management decisions that were made to reduce the negative impact of restrictive measures related to the pandemic.

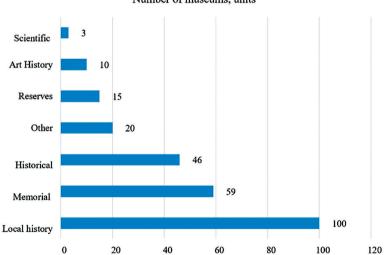
In the first half of 2020, museums were hit hard by restrictions imposed by governments around the world due to the COVID-19 pandemic. However, any crisis means not only losses but also new opportunities. As a result, museums have been forced to promote a wide range of digital projects and activities to continue to maintain access to cultural heritage. The example of Kazakh museums shows how effective these measures have been.

There were 253 museums in the Republic of Kazakhstan during the pandemic (Figure 1). These included: scientific (e.g. the Geological Museum of the Republic of Kazakhstan) (Figure 2); art history (e.g. the A. Kasteyev State Museum of Arts) (Figure 3); historical (e.g. the state historical-cultural and literary-memorial museum of Abai "Zhidebai-Borili" (Figure 4), the National Museum of the Republic of Kazakhstan (Figure 5)); memorial (e.g. the Memorial Museum of Mikhail Sholokhov) (Figure 6); and local history (e.g. the Kostanay Regional Local History Museum) (Figure 7).

	2018	2019	2020	2020 (in % in relation to 2019)
The number of amusement and recreation parks	150	154	156	101.3
The number of leisure facilities	3160	3581	3203	89.4
The number of visitors to leisure facilities	20909.1	21173.1	3803.1	18.0
The number of theaters	68	65	65	100.0
The number of spectators (numbers in thousands)	2833.6	2942	894.0	30.4
The number of scientific, universal, special, and other libraries	4054	3962	3925	99.1
The number of library users (numbers in thousands)	5263.8	5401.3	4232.0	78.4
The number of library visits (numbers in thousands)	53360.6	52396.7	34109.6	65.1
The number of museums	245	250	253	101.2
The number of visitors (numbers in thousands)	6716	6829.30	2351.3	34.4
The number of cinemas	96	101	-	-
The number of cinema visitors (numbers in thousands)	17840.7	19880.5	-	-
Total concerts held	7046	6882	79	1.1
Total viewers at concerts (numbers in thousands)	5350.5	5549.3	1397.7	25.2

Table 1. Development of cultural leisure in the Republic of Kazakhstan

Source: compiled by the authors based on data from Culture statistics. Bureau of National Statistics of Kazakh Agency for Strategic Planning and Reforms [22].



# Number of museums, units

Figure 1. Number of museums in Kazakhstan by type in 2020 (source: compiled by the authors based on data from Culture Statistics, Bureau of National Statistics of Kazakh Agency for Strategic Planning and Reforms) [22].



Figure 2. Geological Museum of the Republic of Kazakhstan.





Figure 4. State historical-cultural and literary-memorial museum of Abai "Zhidebai-Borili".







Figure 6. Memorial Museum of Mikhail Sholokhov.

Figure 5. National Museum of the Republic of Kazakhstan.



Figure 7. Kostanay Regional Local History Museum.

Compared to 2019, in 2020 the number of tours (type of cultural and educational activities of the museum, based on a group viewing of the objects of the museum exhibition under the guidance of a specialist on a pre-agreed topic and route) conducted by museums in Kazakhstan was 34.6% (3 times lower); the number of lectures was 49.8%; the number of exhibitions held in museums was 49.1% (Table 2).

	2018	2019	2020	2020 (in % in relation to 2019)
The number of tours, units	168004	181431	62762	34.6
The number of lectures, units	13486	13990	6972	49.8
The number of historical and cultural monuments of museums, units	1346	1393	1394	100.1
The number of other events held at museums, units	-	8523	4669	54.8
The number of exhibitions (all exhibition activities of museums, including exhibitions in other places and institutions)	9737	9496	4058	42.7
The number of exhibitions held in museums	6272	6334	3111	49.1
incl. of their own exhibits	5616	5770	2943	51.0
with the involvement of other exhibits	656	564	168	29.8
The number of exhibitions held outside museums	3465	3162	947	29.9
of which - abroad	38	43	7	16.3
young museum visitors (children and adolescents under 18), %	44.3	44.4	37.3	-7.0
The share of visitors on a paid basis, %	27.1	30.3	27.2	0.1

Table 2. Main indicators of museum activity in the Republic of Kazakhstan

Source: compiled by the authors based on data from Culture Statistics. Bureau of National Statistics of Kazakh Agency for Strategic Planning and Reforms [22].

The crisis associated with the COVID-19 aftermath clearly demonstrated that, in current conditions, state funding is not enough to ensure the sustainable development of museums in Kazakhstan. On the other hand, it is impossible for museums to quickly switch to self-sufficiency and self-financing since museums, as well as the state and society, are not yet ready for this. On average, in recent years the share of paying visitors to museums has fluctuated between 27% and 30%. At the same time, almost half of the visitors (in 2018-2019 - 44.4%, in 2020 - 37.3%) are children, for whom visiting museums is an important stage of exposure to culture and history, as well as knowledge about human beings, nature, and the surrounding world, which contributes to their socialization and development as full-fledged individuals and citizens of their country.

Therefore, there is a dilemma between social efficiency and financial rationality. It is known that museums in any society, and Kazakhstan is no exception here, play an important spiritual and educational role for people of all generations. Therefore, a purely market approach to the organization of their activity in this case is unacceptable because their cultural services are an important benefit both for society and state as a whole.

An analysis of the museums' activities during the period of restrictions related to the coronavirus showed that if market approaches were applied in the sphere of cultural services, museums would suffer significant damage since they could not ensure the necessary social effectiveness of their services and could not have enough income to

be self-sufficient. This can be explained by the fact that there has been a decrease both in the physical number of visits to museums and in the volume of cultural services themselves.

At the same time, the introduction of new management tools based on the provision of cultural services in electronic format has become more important. For example, in 2020, the number of exhibits from the main collection in electronic format increased by 107.2% (Table 3).

	2018	2019	2020	2020 (in % <i>in relation to</i> 2019)
The number of museums, units	245	250	253	101.2
The number of exhibits from the main collection at the end of the year	2464368	2551037	2580 277	101.1
of which the number of exhibits from the main collection in electronic format	837382	933685	1001109	107.2
The number of exhibits in digital format	356795	427780	403350	94.3
The number of scientific auxiliary exhibits	1383399	1413345	1433817	101.4
The number of exhibits exhibited during the year	426632	452788	313673	69.3
The number of exhibits to be restored	55222	57570	55912	97.1
The number of exhibits received per year	62730	104398	55767	53.4
The number of exhibits withdrawn during the year	-	1048	1909	182.2

Table 3. Availability of exhibits	from the main	collection of Kazakh museums
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Source: compiled by the authors based on data from Culture Statistics. Bureau of National Statistics of Kazakh Agency for Strategic Planning and Reforms [22].

The digitalization of cultural services through the expansion and renovation of the material and technical base has become the most effective management tool introduced in 2020 to overcome the challenges posed by the COVID-19 pandemic and the adaptation of museums to its consequences. The number of museums with Internet access increased in 2020 (in relation to 2019) to 101.3%, among them, 112.9% of museums had wi-fi technologies (Table 4).

	2018	2019	2020	2020 (in % in relation to 2019)
The number of museums, units	245	250	253	101.2
The number of museums with Internet access	213	224	227	101.3
Museums with wireless technologies (Wi-Fi)	78	101	114	112.9
No. of computers	2518	2648	2823	106.6
Museums with websites, units	155	165	167	101.2

Source: compiled by the authors based on data from Culture Statistics. Bureau of National Statistics of Kazakh Agency for Strategic Planning and Reforms [22].

The way out of this situation is seen in a new model of museum development based on the ecosystem approach. Cultural services management is understood here as a social, effective, and financially rational way to preserve and familiarize people with the set of spiritual, material, and non-material values of Kazakhstan. This should contribute to the achievement of SDGs in the cultural field.

The proposed model of ecosystem development of cultural services management in Kazakh museums is based on 3 postulates. They are the ecosystem approach, achievement of SDGs and fulfillment of the tasks set in the Concept of Cultural Policy of the Republic of Kazakhstan (Figure 8).

Cultural services provided by museums should contribute to the achievement by 2030 of the educational goals needed to promote sustainable development, including through education on:

- sustainable development and sustainable lifestyle;
- human rights;
- gender equality;
- culture of peace and non-violence;
- global citizenship and respect for cultural diversity;
- the contribution of culture to sustainable development.

According to the Concept of Cultural Policy of the Republic of Kazakhstan, some of the most important criteria for success are:

- the level of cultural development;
- availability of effectively working infrastructures of cultural institutions and mechanisms providing preservation and enrichment of the national and world cultural heritage;
- creation, transmission, and consumption of quality cultural products;
- fruitful cultural exchange and spiritual and creative self-fulfillment of the personality.

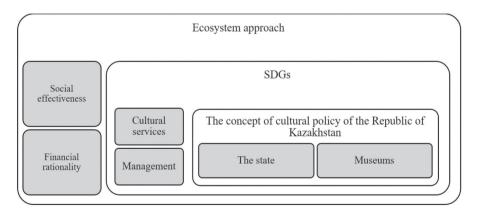


Figure 8. The model of ecosystem development of cultural services management in Kazakh museums (source: compiled by the authors).

Effective implementation of the model of ecosystem development of cultural services management is possible if a new paradigm of museums as supporting centers of science and research activities is formed. According to the concept of cultural policy in the modern world, a museum is a center of science, education, communication, cultural information, and creative innovation. As part of the museum reform, it is planned to expand museum functions to cultural, educational, and promotional; it is also important to create conditions for the development of research activities, and cooperation within multidisciplinary initiatives and projects involving historical science, archaeology, restoration, art history, and ethnography.

# 5. Discussion

A comparative analysis of the results obtained in this study with those of other authors confirms the fact that COVID-19 has significantly affected the provision of cultural services in many countries of the world. At the same time, new management tools amid the pandemic have had an impact on the effectiveness of cultural services in museum activities.

The new measures taken in response to the COVID-19 have had a significant impact on museums and the cultural sector in the UK and around the world. The current crisis has sparked conversations about access to museum collections both physically and digitally. Museums are reviewing their accessibility policies and looking for new ways to engage audiences with and without disabilities [18].

The crisis is likely to change the view of digitization as cultural organizations realize that they are vulnerable to unpredictable disruptions associated with physical access to their services. This will encourage investment in technology and hedging operational risk by building digital capacity. Many cultural institutions have only had projects in this direction, but the crisis will strengthen their interest in building digital audiences [17].

The popularity of these efforts demonstrates that digital platforms can help engage mainstream audiences in museums. However, it is unclear whether these measures have contributed to an increase in visitors. Furthermore, there is no evidence that this trend would have been sustainable had museums not been closed during the first global wave of the pandemic [18].

Social media promotes the concept of the "digital social museum" as one that uses the power of digital technology to make a museum truly approachable and expand the target audience. However, it is unclear whether museums use Facebook to educate and communicate culture to users or simply as a promotional tool [23].

Traditional tours in museums in Poland are the dominant form of sightseeing. However, many museums have introduced technical solutions to support their work. Many museums plan to develop in this area (e.g., the Silesian Museum, Polish History Museum, National Museum), especially by increasing the availability of audio guided tours (40% of museums are to include audio guided tours in the near future) and developing their own mobile applications (20% of museums are expected to have their own mobile apps) [24].

Most museums in Israel (e.g., the Israel Museum, Bloomfield Science Museum, Rockefeller Museum, Israel National Museum of Science, Technology and Space) have expanded their repertoire, technical expertise, and audiences as a result of the pandemic, primarily through online offerings. Many have posted online versions of exhibitions and an unprecedented number of free educational resources [25].

It is worth emphasizing that the study by Rivero et al. [26] argues that COVID-19 has in some cases become a kind of catalyst for the intensification of actions taken by

Spanish archaeological museums in social media. Not only have many institutions increased their activities, but they have also published materials of great educational value [27]. However, many institutions still follow a unidirectional model of knowledge transfer. The following archaeological museums in Spain showed the highest Internet activity on Twitter during January-July 2020: Conjunto Monumental Alcazaba de Almeria, Museo Arqueológico de Alicante, Museu d´Arqueología de Catalunya, Museo de la Evolución Humana, Museo Arqueológico Nacional.

# 6. Conclusions

The restrictions and measures taken to contain the spread of coronavirus have affected almost all spheres of life, including the provision of cultural services. There were 62762 tours and 6972 lectures in Kazakh museums in 2020. The total number of visitors amounted to 2351.3 thousand people, including children - 877.2 thousand people or 37.3%. The number of lectures, museum exhibitions, and guided tours was 49.8%, 49.1%, and 34.6%, respectively, in relation to 2019. Besides, the number of exhibits of the main collection in electronic format amounted to 107.2%, in relation to 2019; the number of museums equipped with ICTs also increased.

The theoretical model of ecosystem development of cultural services management in Kazakh museums was developed according to the research data. Studying the main trends of cultural and educational activities in Kazakhstan during the period 2018-2020, it was found that this sphere has been significantly affected by the effects of the COVID-19 pandemic (more than 3-5 times lower in the cultural services provided) and requires a change in approaches to development, based on the ecosystem approach. Analyzing the study results and the world experience in developing management systems of cultural services, an ecosystem model is proposed.

The model is based on 3 important postulates. They are the ecosystem approach, achievement of SDGs, and fulfillment of the tasks set in the Concept of Cultural Policy of the Republic of Kazakhstan. According to this model, the cultural services provided by museums should contribute to the achievement of educational goals that promote sustainable development by 2030. For this purpose, it is important to carry out educational work in the areas of sustainable development and sustainable life-styles; human rights; gender equality; promotion of a culture of peace and non-violence; global citizenship and respect for cultural diversity; and the contribution of culture to sustainable development.

Future research will examine, separately, the impact of digital technologies introduced in the post-pandemic era on the social effectiveness and accessibility of cultural services provided by museums in different regions of Kazakhstan.

#### Authors' contributions

Gulnaz Kasbayeva, Almira Zhurkobayeva, MarijaTroyanskaya, and Raushanlman-zhussip contributed equally to the experimentation. Gulnaz Kasbayeva wrote and edited the article. Almira Zhurkobayeva and MarijaTroyanskaya equally designed and conducted the experiment. Raushan Imanzhussip studied the scientific literature about the topic. All authors have read and approved the final manuscript.

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#### Summary

Based on empirical research, the article aims to study the impact of new management tools on cultural services in Kazakh museums in the COVID-19 pandemic. An ecosystem development model of cultural services management in Kazakh museums was developed in the research. The model is based on the conceptual hypothesis of the development of cultural ecosystem services. According to the research carried out in 2020, 62762 tours were carried out in Kazakh museums, and 6972 lectures were presented for listeners. The total number of visitors was 2351.3 thousand people, of which children – 877.2 thousand people or 37.3%. The number of lectures, exhibitions, and tours in museums amounted to 49.8%, 49.1%, and 34.6%, respectively, in relation to 2019. Besides, the number of digitized exhibits amounted to 107.2%, in relation to 2019, and the indicators of providing museums with information and communication technologies (ICTs) also increased. This study proposes new management tools and approaches in the post-pandemic era to increase social efficiency and accessibility of cultural services provided by museums in various regions of Kazakhstan.

# Riassunto

L'articolo, fondato su ricerche sperimentali, si prefigge di studiare l'impatto dei nuovi strumenti di gestione sui servizi culturali nei musei kazaki nel corso della pandemia di COVID-19. Nella ricerca è stato messo a punto un modello di sviluppo dell'ecosistema per la gestione dei servizi culturali nei musei kazaki. Il modello si basa sull'ipotesi concettuale dello sviluppo dei servizi ecosistemici culturali. Secondo la ricerca svolta nel 2020, sono state effettuate 62762 visite guidate nei musei kazaki e sono state presentate 6972 conferenze per gli ascoltatori. Il numero totale di visitatori è stato di 2351,3 mila persone, di cui 877,2 mila bambini pari al 37,3% del totale. Il numero di conferenze, mostre e visite nei musei è stato rispettivamente del 49,8%, 49,1% e 34,6% rispetto al 2019. Inoltre, il numero delle mostre digitalizzate è stato del 107,2%, rispetto al 2019, e gli indicatori dimostrano anche un incremento per quanto riguarda la fornitura di tecnologie dell'informazione e della comunicazione (TIC) ai musei. Questo studio propone nuovi strumenti e approcci di gestione sociale nell'era post-pandemica per aumentare l'efficienza e l'accessibilità dei servizi culturali forniti dai musei in varie regioni del Kazakistan.