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DIGITALIZATION STRATEGY IN SPORTS AND ACTIVE TYPES OF TOURISM IN THE REPUBLIC OF KAZAKHSTAN

Abstract

The purpose of the article is to consider the issue of digitalization strategy in the sphere of sports and active tourism in the Republic of Kazakhstan. In developing countries there is a low efficiency of management of the industry of sport and physical culture. This industry has a low level of communication with the population and weak promotion of a sports lifestyle. In these republics the level of development of IT-technology and communications are poorly used the possibilities of digitalization and social networks for the active promotion of mass sports, active types of tourism and the formation of a sports lifestyle among young people and the population of the country. At the same time, communication, if it is mass, but impersonal, not personalized. In many developing countries there is a shortage of modern and diverse methodological materials, modern training programs and accumulated international experience, and as a consequence there is a shortage of highly qualified coaches and methodologists. According to the authors, the solution to the existing problem lies in the development of digitalization of sports, physical culture and sports and health tourism, as artificial intelligence allows technology to bring real benefits in all sectors of the economy, improves the quality of life of the population, and creates conditions for the transition of the economy to a fundamentally new trajectory. With the help of digital technology it is possible to popularize sports, because this is the age of information space, and therefore the digital PR, meeting the demands of the modern advanced and progressive generation. By covering sporting events, conducting online training sessions and consulting professional coaches through the World Wide Web, it is possible to promote sports and physical culture for the benefit of the Kazakhstani nation in the most effective way.

Key words: management, sports, tourism, physical education, digitalization, artificial intelligence, health, internet, education.

Introduction

In developing countries, which includes Kazakhstan, the coverage of the population involved in physical culture, active tourism and sports is low and amounts to 30–35%, and in developed countries 50–60%, including 10% of people with disabilities and 15% of children and adolescents [1]. In the Republic of Kazakhstan, the level of development of IT technologies and communications is insufficient, and the possibilities of digitalization and social networks are poorly used for active promotion of mass sports, active types of tourism and the formation of a sports lifestyle among the youth and population of the country. At the same time, communications, if they are mass but impersonal, not personalized, that is, without taking into account individualities (regional, national, physiological and psychological characteristics).

Speaking at the annual international technological forum “Digital Bridge” in October last year, President of the Republic of Kazakhstan Kassym-Jomart Kemelevich Tokayev noted that practical, applied digitalization is our strategic task and state priority [2]. In Kazakhstan, as in many developing countries, there is a shortage of modern and diverse methodological materials, modern training programs and accumulated international experience, and as a result, a shortage of highly qualified trainers and methodologists. At the same time, modern digital technologies are one of the leading

prospects for humanity. A separate system that relies on encoding methods along with information transmission has found its place for use. This system makes it possible to carry out numerous tasks in a short period of time. Monitoring and analysis of the athlete's actions are based on the recent idea achievements in sciences ranging from nanoelectronics to molecular biology. This makes it possible to obtain accurate results in everything from the organization of training and competition to the process of treating and recovering athletes from injuries, including doping tests. Digital transformation covers more and more companies around the world in a variety of industries – including sports, where Kazakhstan is no exception [3].

Literature review

Digitalization permeates all layers of sports and health tourism – from mass to elite sports, as noted, in a study (Anagnostopoulos, Parganas, Chadwick, & Fenton, 2018) of social networks, the issue of the potential of platforms as a brand management tool was considered (Thompson, Martin, Gee&Geurin, 2018; Geurin&Burch, 2017), as well as in studies (Tsordia, Papadimitriou, &Parganas, 2018; Gillooly, Anagnostopoulos, &Chadwick, 2017; Delia, 2017) on the relevance of social media as a marketing communication tool for sports sponsors. Modern works of researchers (Hallmann&Giel, 2018; Funk, Pizzo, & Baker, 2018; Cunningham, 2018; Heere, 2018) of esports in particular and in the approach to the ratio of esports to classical sports. In demanding a broader approach to a holistic understanding of the digital transformation in sports (Vial, 2019).

Materials and methods

During the study, the authors considered the potential contribution of all methodological approaches that promote research and practice of digital transformation in sports and sports tourism. In particular, the methods used in scientific knowledge were used: general scientific and special, that is, a systematic approach, in terms of the methodology of soft systems (BeerS.), the concept of a self-learning organization, the concept of humanitarian management and the study of the method of reflexive reconstruction of innovative experience (G.N. Prozumentov) [4], abstract analysis, theoretical analysis and synthesis, external direct observation method, comparative analysis of management precedents, etc.

Main provisions

A specific feature of the sports, tourism and physical culture industry is that the professional work of the workers employed in it is distinguished by a special pedagogical technology. Since it is based on coaching and teaching activities, which takes into account the gender and age of the trainees, along with their current health condition and physical fitness. The main element of any sports and physical culture organization is people such as managers-organizers and performers. The job of managers – managers is to manage and control the performers. And the work of the performers is trainers, physical education teachers and the like, they produce a pedagogical effect on objects of labor, which are persons engaged in physical exercise and sports. In order to move to the digitalization of the sports industry, it is necessary that specialists are adequately trained in digital literacy and are informed about the availability of programs that will allow innovations in daily training.

Nowadays, automated systems are increasingly being used to control the actions of an athlete in team sports. All the information obtained with the help of diagnostic equipment makes it possible to optimize the activities of athletes, allowing you to select the best means and methods for restoring and improving the results of sports performance. Today, digital technologies are increasingly used in non-professional (amateur) sports and tourism, which greatly motivates the younger generation to join an active lifestyle.

Artificial intelligence (AI) automates repetitive learning and discovery processes through the use of data. However, AI is different from robotics, which is based on the use of hardware. The goal of AI is not to automate the manual processes performed by a man, but to executive a variety of large-scale tasks in a continuous and reliable manner. To automate, human intervention is required for an

initial setup of the system and correct formulation of questions. AI also allows computers to learn from experience, adapt to given parameters, and perform tasks that were previously only possible for humans. Natural language processing methodologies and deep learning techniques are critical in the majority of AI implementations that range anywhere from smart assistants to manufacturing robots. With the assistance of such technologies, it is possible to "teach" computers to be able to process vast amounts of data and identify patterns in data sets. Half of working Kazakhstanis believe that they have a low level of knowledge and skills in the field of information technology, and this prevents them from getting better-paid jobs. At the same time, additional training in the field of digital literacy is more often carried out by those who already have it at a fairly high level. The uneven distribution of the Internet creates an inequality of opportunity. The pandemic, which required the transfer of a significant part of everyday life to a remote format, literally exposed this "imbalance" in Kazakhstan.

Results

Reach of Internet users in Kazakhstan. It showing in the table 1, more than 5 recent years in Kazakhstan there has been an increase in the share of Internet users, in general, the share of the increase was 15% [5]. However, the share of Internet users aged 6–15 years increased by 37%. In order to find out what is the further prospect of the development of the number of Internet users, we have calculated a forecast for the next 5 years, and also determined by how many percent the number of Internet users will grow/fall annually.

Table 1 – Share of Internet users for 2016–2020 (%)

Age category	2017	2018	2019	2020	2021	Growth rate, 2020. By 2016, %
Percentage of Internet users aged 6–74 years	76.8	78.8	81.3	84.2	88.2	15
percentage of Internet users aged 6–15 years**	62.1	67.9	72.9	75.0	85.3	37
Percentage of Internet users aged 16–74 years	80.2	81.5	83.4	86.6	89.0	11
Note – Source [5].						

This is obvious, the more Internet users there are, the more likely digitalization is to develop in the country and, accordingly, in physical culture and sports.

The linear trend equation is $y = bt + a$.

1. Find the parameters of the equation by the least square's method.

The system of least squares equations:

$$an + b\sum t = \sum y$$
$$a\sum t + b\sum t2 = \sum y*t$$

Table 2 – Calculations in search of least squares parameters

t	y	t2	y2	t y
2016	80.2	4064256	6432.04	161683.2
2017	81.5	4068289	6642.25	164385.5
2018	83.4	4072324	6955.56	168301.2
2019	86.6	4076361	7499.56	174845.4
2020	89	4080400	7921	179780
10090	420.7	20361630	35450.41	848995.3
Mean	84.14	4072326	7090.082	169799.06
Note – Compiled by the authors based on the source [5].				

For our data, the system of equations has the form:
5a + 10090b = 420.7
10090a + 20361630b = 848995.3
Express a from the first equation and substitute it into the second equation.
We get a = -4496.72, b = 2.27
Trend equation:
y = 2.27 t – 4496.72

The empirical trend coefficients a and b are only estimates of the theoretical coefficients βi, and the equation itself reflects only the general trend in the behavior of the variables under consideration.

The trend coefficient b = 2.27 shows the average change in the effective indicator (in units of measurement y) with a change in the time period t per unit of its measurement. In this example, with an increase in t by 1 unit, y will change by an average of 2.27.

Mean values:

$$\overline{y} = \frac{\sum y_i}{n} = \frac{420.7}{5} = 84.14$$

$$\overline{t \cdot y} = \frac{\sum t_i y_i}{n} = \frac{848995.3}{5} = 169799.06$$

$$\overline{t} = \frac{\sum t_i}{n} = \frac{10090}{5} = 2018$$

Dispersion:

$$D(t) = \frac{\sum t_i^2}{n} - \overline{t}^2 = \frac{20361630}{5} - 2018^2 = 2$$

$$D(y) = \frac{\sum y_i^2}{n} - \overline{y}^2 = \frac{35450.41}{5} - 84.14^2 = 10.5424$$

Standard deviation

$$\sigma(t) = \sqrt{D(t)} = \sqrt{2} = 1.4142$$

$$\sigma(y) = \sqrt{D(y)} = \sqrt{10.5424} = 3.2469$$

The use of interval enlargement and moving average methods in the analysis of time series makes it possible to identify a trend to describe it, but it is impossible to obtain a generalized statistical assessment of the trend using these methods. The solution of this higher order problem – by measuring the trend – is achieved by the method of analytical alignment. The main content of the method of analytical alignment in time series is that the main development trend yi is calculated as a function of time yt = f(ti)

The theoretical (calculated) levels are determined on the basis of the so-called adequate mathematical function, which best reflects the main trend of the dynamic's series. The selection of an adequate function is carried out by the least square's method – the minimum deviations of the sum of squares between the theoretical yti and empirical yi levels.

To assess the quality of the parameters of the equation, we will build a calculation table (Table 3).

Table 3– Parameter quality assessment

t	y	y(t)	(yi-ycp)2	(yi-y(t))2
2016	80.2	79.6	15.524	0.36
2017	81.5	81.87	6.97	0.137
2018	83.4	84.14	0.548	0.548
2019	86.6	86.41	6.052	0.0361
2020	89	88.68	23.62	0.102
		420.7	52.712	1.183
Note – Compiled by the authors based on the source [5].				

3. Testing hypotheses regarding the coefficients of the linear trend equation.

2) F-statistics. Fisher's criterion.

Determination coefficient.

$$R^2 = 1 - \frac{\sum(y_i - y_t)^2}{\sum(y_i - \overline{y})^2} = 1 - \frac{1.183}{52.712} = 0.9776$$

$$F = \frac{R^2}{1-R^2}\frac{n-m-1}{m} = \frac{0.9776}{1-0.9776}\frac{5-1-1}{1} = 130.6737$$

We find from the table Fkp(1;3;0.05) = 10.1

wherem is the number of factors in the trend equation (m = 1).

Since F > Fkp, the coefficient of determination (and the trend equation as a whole) is statistically significant.

The time dependence of Y on time t has been studied. At the specification stage, a linear trend was chosen. Its parameters are estimated by the least square's method. The statistical significance of the equation was verified using the coefficient of determination and Fisher's test. It was found that in the situation under study, 97.76% of the total variability of Y is explained by a change in the time parameter. An economic interpretation of the model parameters is possible – with each time period t, the value of Y increases on average by 2.27 units.

Point forecast, t = 2025: y(2025) = 2.27*2025 -4496.72 = 100.03

$$K_5 = 4.177 \cdot 0.63\sqrt{1 + \frac{1}{5} + \frac{3(5+2\cdot5-1)^2}{5(5^2-1)}} = 6.48$$

100.03 – 6.48 = 93.55; 100.03 + 6.48 = 106.51

Interval forecast:

t = 2025: (93.55;106.51)

The time dependence of Y on time t has been studied. At the specification stage, a linear trend was chosen. Its parameters are estimated by the least square's method. An economic interpretation of the model parameters is possible – with each time period t, the value of Y increases on average by 2.27 units.

Thus, on average, the share of Internet users in Kazakhstan will increase annually by 2.27%, however, the point forecast for the next 5 years, according to our calculations, will be 6.48%. That is, the share of Internet users will have a small growth dynamic.

Discussion

Today, the sports community is increasingly leaning towards digital technologies. Digital sports and sports tourism, based on specialized technical measurement tools, provides not only a safe rational training process and objective refereeing, but also an increase in the number of people who are increasingly involved in a healthy lifestyle.

An unstructured database of sports lifestyle and the lack of a system for collecting and updating it, not to mention the use of various data for analysis and decision making in management and in the training process.

In the post-information age, the configuration of every sector of the world economy is determined by technology. They are a source of shocks and, together with a dark impetus for development and achievement of singularity (and not only technological, but also sports). The emerging integration of human and machine technologies marked the beginning of the so-called third wave of business transformation (the first wave is process standardization, the second is automation). From our point of view, the management of the sports industry must be built through the formation of new adaptive systems and teams capable of quickly assimilating new information and adapting to rapidly changing external conditions. The artificial intelligence system will independently rethink the business processes of managing the industry, through recognition, comprehension, action, that is, it will do what is necessary at any level of complexity.

The scientific method – the most understandable and widely used research approach in the world, which is a series of steps – asking questions and observing, proposing hypotheses, experimenting, generalizing information and formulating a theory – will not be used in this article in its classical sense for two main reasons that fundamentally break the effectiveness of this approach, namely:

- Colossal amounts of data that cannot be effectively analyzed enough to make sense to rely on them. At least, this cannot be done without the use of technology and, in particular, artificial intelligence. In 2009, researchers from the University of Ottawa noted that more than 50 million scientific papers had been published since 1965, and today more than 2.5 million are published annually, and that's just articles.
- Unpredictable events, which, as N.N. Taleb in his writings "The Black Swan [6]. Under the sign of unpredictability" take place everywhere in our lives, and we believe that Black Swans are especially relevant for the sports industry, in which the success of an athlete or manager in the field of sports and active tourism under some historical conditions is less indicative of us in the current conditions. The most effective tool for dealing with unwanted Black Swans and bringing out the desired Black Swans is the ability to think outside the box, to be anti-fragile.

To solve the above problems of the industry and for a qualitative leap in the field of sports and sports and health tourism, both in terms of achieving sports results and effective management, from our point of view, it is necessary to transform the sports and physical culture industry towards digitalization and artificial intelligence systems.

In this case, the transformation should be carried out through the following principles:

- Proper thinking of industry participants – a fundamentally different approach to sports management and the training process through the rethinking that data management systems and artificial intelligence can give a person superpower, and people should develop and improve such systems;
- Experimentation – participants in the sports industry should understand that this is a new industry and it is necessary to actively search for opportunities to test artificial intelligence, as well as to explore the scaling of rethought processes;
- Leadership – responsible use of automated systems and AI. In fact, at the stage of the technological transformation of the industry, people become key players and investment in personnel should become the main part of the strategy for the introduction of artificial intelligence in the field of sports management, and in a separate training process by discipline.
- Data – it is necessary to build a supply chain of information to ensure the operation of intelligent systems.
- Skills – it is necessary to actively develop skills in working with artificial intelligence systems. In the era of adaptive processes, people not only design, develop and train artificial intelligence systems, but also interact with them, filling in the missing areas and reaching a new level of performance.
- Personification – the introduction of AI systems should eventually personalize the service of sports education and physical education to the maximum, taking into account the needs of each person and taking into account his physiological and psychological characteristics. This is very similar to the medical industry, whose futurists promise that in a few years it will seem absurd to us that doctors treated different patients according to the same protocol. An individual course of treatment will be selected for each person, and an individual course of training for each athlete [7]. And if we talk about sports pharmacological drugs, then personalized methods for solving actual problems in clinical trials are as follows: about 80% of such trials fail due to individual incompatibility between the patient and the drug. The economic effect of the introduction of AI systems as personalized as possible is also achieved at sports events, for example, during testing during the 2016 Summer Olympics, creative content that takes into account the mood of users (this information was collected using AI) increased people's willingness to view such content by 26% or share it [8].

In modern conditions, it will be possible to achieve the maximum development of the sports industry and high-performance sports in particular only with the deep integration of people and machines, when they take advantage of each other and can lead to a synergy effect. Something that people can do playfully (like folding a towel) can be very difficult for a machine. And it is extremely difficult for us to do things that are easy for machines (for example, to discover hidden patterns in large amounts of data).

The stages of launching an artificial intelligence system can be systematized step by step:

First step: plan for the digitization of the sports industry;

Second step: creation of an automated data management system;

The third step: the introduction of artificial intelligence, starting with elementary processes and moving on to more complex ones (as machines learn).

The automated information system will allow systematizing all processes and structuring sports management indicators in accordance with the country's sustainable development plans. In particular, if we talk about the above problems of the sports industry, then it will allow us to qualitatively measure the number of people involved in sports and sports tourism, rank them, "read" their preferences, influence them and communicate with them both individually and through chats and social networks. .

The information system will serve as a source for the formation of a database and the introduction of Data Science technologies in sports management. Over time, the knowledge base created in the system will allow solving the problems of methodologists with the lack of modern materials and testing new methods of sports training. A unified information system will allow sports management to turn from a focus on processes towards performance and evaluation of KPIs (eng. Key Performance Indicators – key performance indicators) at all levels [9]. After all, the system will collect all the data on the time and results of the accomplishment of certain actions in the field of sports, compare them with the planned indicators and set appropriate grades.

It is supposed to create in the Automated program a system of balanced performance indicators (BSC) of a particular sports facility or event and decomposition of these goals into all levels [10]. From a technical point of view, it can be a Unified system or a Pool of information systems integrated with each other and introduced in stages or in parallel. The second option will allow you to gradually implement processes and achieve goals so as not to "dig in" in the amount of information and plan your budget.

Conclusion

A logical continuation of the digitization of sports management and the development of an automated system should be a social platform in the form of a mobile application and an Internet portal that combines all data and collects information and communicates with the population. This is an excellent start for the introduction of artificial intelligence and machine learning systems in the national sports system.

REFERENCES

1 На заседании правительства Премьер-министр РК поручил увеличить охват детей бесплатными спортивными секциями. URL: https://primeminister.kz/ru/news/premer-ministr-rk-poruchil-uvelichit-ohvat-detey-besplatnymi-sportivnymi-sekciyami-5336

2 Касым-Жомарт Токаев принял участие в международном технологическом форуме «DigitalBridge».URL:https://www.akorda.kz/ru/kasym-zhomart-tokaev-prinyal-uchastie-v-mezhdunarodnom-tehnologicheskom-forume-digital-bridge-2794543

3 Постановление Правительства Республики Казахстан от 23 апреля 2020 года № 242 «Об утверждении Комплексного плана по развитию физической культуры и массового спорта на 2020–2025 годы».

4 Прозументова Г.Н. Реконструкция инновационного опыта освоения и преподавания методики. – 2020. – С. 105.

5 Информация по отраслям Министерства цифрового развития, инноваций и аэрокосмической промышленности Республики Казахстан (по итогам 2020 года). URL: https://www.cnews.ru › asia2010 › articles › articles8

6 Талеб Н.Н. Черный лебедь. Под знаком непредсказуемости. URL: https://www.litres.ru/nassim-nikolas-taleb/chernyy-lebed-pod-znakom-nepredskazuemosti/otzivi/

7 Закон Республики Казахстан № 228-V «О физической культуре и спорте» (с изменениями от 29.09.2014 г.) от 3 июля 2014 года.

8 Стратегии цифровых гигантов. URL: https://econ.hwikireading.ru › hMPZaVXTsj

9 Система KPI (Key Performance Indicator) // Business Studio Интернетресурс: https://www.businessstudio.ru › articles › article › siste.

10 Система сбалансированных показателей Uplab: как перейти от стратегии к действию? URL: https://www.uplab.ru ›

REFERENCES

1 Na zasedanii pravitel'stva Prem'er-ministr RK poruchil uvelichit' ohvat detej besplatnymi sportivnymi sekcijami. URL: https://primeminister.kz/ru/news/premer-ministr-rk-poruchil-uvelichit-ohvat-detey-besplatnymi-sportivnymi-sekciyami-5336. (In Russian).

2 Kasym-Zhomart Tokaev prinjal uchastie v mezhdunarodnom tehnologicheskom forume «DigitalBridge». URL: https://www.akorda.kz/ru/kasym-zhomart-tokaev-prinyal-uchastie-v-mezhdunarodnom-tehnologicheskom-forume-digital-bridge-2794543. (In Russian).

3 Postanovlenie Pravitel'stva Respubliki Kazahstan ot 23 aprelja 2020 goda № 242 «Ob utverzhdenii Kompleksnogo plana po razvitiju fizicheskoj kul'tury i massovogo sporta na 2020–2025 gody». (In Russian).

4 Prozumentova G.N. (2020) Rekonstrukcija innovacionnogo opyta osvoenija i prepodavanija metodiki. P. 105. (In Russian).

5 Informacija po otrasljam Ministerstva cifrovogo razvitija, innovacij i ajerokosmicheskoj promyshlennosti Respubliki Kazahstan (po itogam 2020 goda). URL: https://www.cnews.ru › asia2010 › articles › articles8. (In Russian).

6 Taleb N.N. Chernyj lebed'. Pod znakom nepredskazuemosti. URL: https://www.litres.ru/nassim-nikolas-taleb/chernyy-lebed-pod-znakom-nepredskazuemosti/otzivi/. (In Russian).

7 Zakon Respubliki Kazahstan № 228-V «O fizicheskoj kul'ture i sporte» (s izmenenijami ot 29.09.2014 g.) ot 3 ijulja 2014 goda. (In Russian).

8 Strategii cifrovyh gigantov. URL: https://econ.hwikireading.ru › hMPZaVXTsj. (In Russian).

9 Sistema KPI (Key Performance Indicator) // Business Studio Internetresurs: https://www.businessstudio.ru › articles › article › siste. (In Russian).

10 Sistema sbalansirovannyh pokazatelej Uplab: kak perejti ot strategii k dejstviju? URL: https://www.uplab.ru ›. (In Russian).

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ҚАЗАҚСТАН РЕСПУБЛИКАСЫНДАҒЫ СПОРТ ЖӘНЕ ТУРИЗМ САЛАСЫНДАҒЫ ЦИФРЛАНДЫРУ СТРАТЕГИЯСЫ

Аңдатпа

Мақаланың мақсаты-ҚР-дағы спорт және белсенді туризм түрлерін цифрландыру стратегиясы туралы мәселені қарастыру. Дамушы елдерде Спорт және дене шынықтыру саласын басқару тиімділігінің төмендігі байқалады. Бұл салада халықпен қарым-қатынас деңгейі төмен және спорттық өмір салтын насихаттау әлсіз. Бұл республикалар IT-технологиялар мен коммуникациялардың даму деңгейіне ие, цифрландыру және әлеуметтік желілердің мүмкіндіктері бұқаралық спортты, туризмнің белсенді түрлерін белсенді насихаттау және ел жастары мен тұрғындары арасында спорттық өмір салтын қалыптастыру үшін нашар пайдаланылуда. Сонымен қатар, коммуникациялар, егер олар жаппай болса, бірақ тұлғалық емес, жекелендірілмеген. Көптеген дамушы елдерде заманауи және әртүрлі әдістемелік материалдардың, заманауи оқыту бағдарламаларының және жинақталған халықаралық тәжірибенің тапшылығы, соның салдарынан жоғары білікті тренерлер мен әдіскерлердің тапшылығы байқалады. Авторлардың пікірінше, орын алған мәселенің шешімі спорт, дене шынықтыру және спорттық-сауықтыру туризмін цифрландыруды дамыту болып табылады, өйткені жасанды интеллект технологияларға экономиканың барлық салаларында нақты пайда әкелуге мүмкіндік береді, халықтың өмір сүру сапасын жақсартады, сондай-ақ экономиканың түбегейлі жаңа траекторияға көшуіне жағдай жасайды. Цифрлық технологиялардың көмегімен спортты танымал етуге болады, өйткені қазір ақпараттық кеңістік, демек, заманауи озық және озық ұрпақтың сұранысын қанағаттандыратын цифрлық PR дәуірі. Дүниежүзілік желі арқылы спорттық іс-шараларды көрсету, онлайн тренингтер өткізу және кәсіби жаттықтырушыларға кеңес беру арқылы сіз қазақ елінің игілігі үшін спорт пен дене шынықтыруды барынша тиімді насихаттай аласыз.

Түйін сөздер: менеджмент, спорт, туризм, дене шынықтыру, цифрландыру, жасанды интеллект, денсаулық сақтау, интернет, білім.

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СТРАТЕГИЯ ЦИФРОВИЗАЦИИ В СФЕРЕ СПОРТА И АКТИВНЫХ ВИДОВ ТУРИЗМА В РЕСПУБЛИКЕ КАЗАХСТАН

Аннотация

Цель статьи – рассмотреть вопрос о стратегии цифровизации в сфере спорта и активных видов туризма в РК. В развивающихся странах наблюдается низкая эффективность управления отраслью спорта и физической культуры. Данная отрасль имеет низкий уровень коммуникаций с населением и слабую пропаганду спортивного образа жизни. В этих республиках уровень развития IT-технологий и коммуникаций позволяет слабо использовать возможности цифровизации и социальных сетей для активной пропаганды массового спорта, активных видов туризма и формирования спортивного образа жизни у молодежи и населения страны. При этом коммуникации если и носят массовый характер, но обезличены, неперсонифицированы. Во многих развивающихся странах наблюдается дефицит современных и разнообразных методических материалов, обучающих программ и накопленного международного опыта, а как следствие – дефицит высококвалифицированных тренеров и методистов. По мнению авторов, решение имеющейся проблемы заключается в развитии цифровизации сферы спорта, физической культуры и спортивно-оздоровительного туризма, так как искусственный интеллект позволяет технологиям приносить реальную пользу во всех отраслях экономики, улучшает качество жизни населения, а также создает условия для перехода экономики на принципиально новую траекторию. С помощью цифровых технологий можно популяризировать спорт, поскольку сейчас век информационного пространства, а значит, и цифрового PR, отвечающего запросам современного передового и прогрессивного поколения. Освещая спортивные мероприятия, проводя онлайн-тренировки и консультируя профессиональных тренеров через Всемирную сеть, можно максимально эффективно продвигать спорт и физическую культуру на благо казахстанскому обществу.

Ключевые слова: менеджмент, спорт, туризм, физкультура, цифровизация, искусственный интеллект, здоровье, образование.