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# IMPROVING THE EFFICIENCY OF MANAGEMENT OF DOMESTIC FITNESS CLUBS IN MODERN CONDITIONS OF FUNCTIONING

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**Purpose:** to develop practical recommendations to improve the efficiency of management of domestic fitness clubs in modern conditions of functioning.

**Material and methods:** to solve this goal, a set of scientific research methods was used: analysis of literary sources; analysis of documents; system analysis; organizational analysis; expert method, methods of mathematical statistics. The study was conducted on the basis of 10 fitness clubs in Kharkov. The group of experts included 50 clients of fitness clubs: 25 women and 25 middle-aged men.

**Results:** using the expert method, we determined the importance of the criteria for choosing a fitness club for clients. In the course of our research, it was found that the "most important" for clients when choosing a fitness club is the cost of the subscription and the location of the fitness club, "medium" are the quality of equipment and the range of services; and the "least important" is the professionalism of the trainers and the quality of service.

Conclusions: based on the results of the study, the authors have developed practical recommendations for the management and managers of fitness clubs, the

implementation of which will ensure an increase in competitiveness and strengthening of positions in the fitness services market, as well as an increase in profits. Practical recommendations are aimed at enhancing marketing activities, expanding the advertising campaign and improving the pricing policy of fitness clubs, as well as improving management efficiency in order to introduce modern scientific developments and high-quality customer service, etc.

**Key words:** management, efficiency, fitness clubs, expert method, fitness services.

## Introduction

In modern economic conditions, the management of domestic fitness clubs needs to determine the ways to improve the efficiency of their management and the development of their activities in modern conditions of functioning. To ensure effective management of fitness clubs, it is also necessary to develop effective methodologies and apply effective tools.

The activities of fitness clubs are aimed at solving a whole range of tasks, among which the following are of great social importance: attracting city residents to physical education and health activities; raising the need for physical exercise; striving for a healthy lifestyle [4].

The analysis of recent studies and publications shows that until now scientists have considered only certain aspects of the problem of managing organizational, managerial and marketing activities of fitness-oriented organizations. In particular, modern scientists have characterized the process of providing fitness services in Ukraine (Rusinovich S. [3], Chekhovskaya L. [5], Leonova Yu. Bondar A. [2]) and in the world (Bairner A. [6], Crouhy M. [7], Damodaran A. [8], Jarvie G. [9], Williams J. [10]); analyzed various areas of management and marketing activities of fitness-oriented organizations (Stadnik S., Sereda N. [4], Chekhovskaya L. [5]) investigated the features and disadvantages of managing fitness clubs (scientists Chekhovskaya L. [5], Azhippo A., Bondar A., Petrenko I., Sereda N. [1]) and others. The relevance of this work is justified by the need for scientific substantiation of

increasing the efficiency of management of domestic fitness clubs in today's conditions and the introduction of scientific foundations of management into the practice of their work.

**Purpose of the work:** to develop practical recommendations to improve the efficiency of management of domestic fitness clubs in modern conditions of functioning.

## **Material and methods**

To solve this goal, a complex of scientific research methods was used: analysis of literary sources; analysis of documents; system analysis; organizational analysis; expert method, methods of mathematical statistics. The study was conducted on the basis of 10 fitness clubs in the city of Kharkov. The expert group included 50 clients: 25 women and 25 middle-aged men. In our study, each expert was asked to assess the importance of the 6 criteria for choosing a fitness club proposed by us on a five-point scale, taking into account that 1 is the highest mark, and 5 is the lowest mark, then the rank, place and weight of each criterion are given (Table 1) and were determined:

• criterion significance factor ( $C_{sf}$ ) according to the formula 1:

$$C_{sf} = \frac{\sum_{i=1}^{\varepsilon} P_{ij}}{P_{j_{\text{sum}}}} \tag{1}$$

• coefficient of concordance (W) according to the formula (2):

$$W = \frac{S}{\frac{1}{12} * (m^2 * (n^3 - n) - m \sum_{j=1}^{m} T_j)},$$
 (2)

where S – sum of the squares of the deviations;

m – number of experts;

n – number of factors;

 $T_i$  – rank matching metric [7; 8].

• rank matching metric  $(T_j)$  according to the formula (3):

$$T_{j} = \sum_{k=1}^{m} (t_{k}^{3} - t_{k}), \quad (3)$$

where  $t_k$  the number of repetitions of rank k when ranking factors by the j-th expert [7; 8].

# Revealing the degree of agreement of experts' opinions on the importance of each of the assessed criteria and the definition of standardized ranks

															Експ	ерти <sup>2</sup>														
Criteria <sup>1</sup>	1-5		1–5		6–10		11–15		16–20		21–25		26–30			31–35		36–40		41–45		46–50		0						
	rank	place	significance	rank	place	significance	rank	place	significance	rank	place	significance	rank	place	significance	rank	place	significance	rank	place	significance	rank	place	significance	rank	place	significance	rank	place	significance
$\mathbf{P}_1$	3	3	3	3	3	3	3	3	3	4	4	4	5	5	5,5	3	3	3	5	5	5,5	5	5	5,5	4	4	4	3	3	3
$P_2$	5	6	5,5	5	6	5,5	5	5	5,5	5	6	5,5	4	4	4	5	5	5,5	5	6	5,5	4	4	4	5	6	5,5	5	6	5,5
$P_3$	13	1	1	1	1	1	2	2	2	1	1	1	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	2	2	2
$P_4$	2	2	2	2	2	2	1	1	1	2	2	2	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	1	1	1
P <sub>5</sub>	4	4	4	4	4	4	5	6	5,5	3	3	3	5	6	5,5	4	4	4	4	4	4	3	3	3	3	3	3	4	4	4
P <sub>6</sub>	5	5	5,5	5	5	5,5	4	4	4	5	5	5,5	3	3	3	5	6	5,5	3	3	3	5	6	5,5	5	5	5,5	5	5	5,5
All	X	X	21	X	X	21	X	X	21	X	X	21	X	X	21	X	X	21	X	X	21	X	X	21	X	X	21	X	X	21
$t_k^4$	$t_1=2$	•		$t_2 = 2$			t <sub>3</sub> =2			t <sub>4</sub> =2			t <sub>5</sub> =2			t <sub>6</sub> =2		•	t <sub>7</sub> =2	•		t <sub>8</sub> =2		•	t <sub>9</sub> =2			t <sub>10</sub> =2	2	

#### Remark:

#### 1. Criteria:

 $P_1$  – quality of equipment;

 $P_2$  – quality of service;

P<sub>3</sub> – subscription cost;

P<sub>4</sub> – location of the fitness club;

P<sub>5</sub> – range of services;

P<sub>6</sub> – professionalism of coaches.

- 2. Experts: 1–5 clients 1–5; 6–10 clients 6–10; 11–15 clients 11–15; 16–20 clients 16–20; 21–25 clients 21–25; 26–30 clients 26–30; 31–35 clients 31–35; 36–40 clients 36–40; 41–45 clients 41–45; 46-50 clients 46–50.
- 3. Highest score -1, lowest score -5.
- 4.  $t_k$  number of repetitions of rank k when ranking criteria by j-th expert.

The probability of the concordance coefficient was checked according to the Pearson criterion, the calculated value of which ( $\chi^2_{calc.}$ ) is 38,78. At a 1% significance level (that is, with a probability of P = 0.99) and the number of degrees of freedom  $\gamma = n - 1$ , where n - number of factors (that is,  $\gamma = 6 - 1 = 5$ ), tabular value of Pearson criterion  $\chi^2_{tab.} = 15,1$  [7; 8]. If the calculated value  $\chi^2_{calc.}$  exceeds the tabular value  $\chi^2_{tab.}$  then the hypothesis about the presence of agreement of the thoughts of fifty experts when ranking six criteria is accepted. In our case  $\chi^2_{calc.} > \chi^2_{tab.}$  that is 38,78 > 15,1.

### **Results of the research**

In modern conditions of functioning of fitness clubs, we consider it expedient to use the expert method in order to determine the degree of importance of the criterion for choosing a fitness club for clients. After all, each client has his own list of criteria for choosing a fitness club, from which the most important ones stand out [2; 4; 5].

Using the expert method, we determined the importance of the criteria for choosing a fitness club for clients (Table 1), where: P1 - equipment quality, P2 - service quality, P3 - subscription cost, P4 - fitness club location, P5 - range of services (including the presence of a swimming pool, SPA salon, sauna, healthy food cafe, children's room, etc., P6 - the professionalism of the trainers (Table 2).

Table 2
The results of a survey of experts on the degree of importance as a criterion for choosing a fitness club for clients

№	Evaluation experts	C	$P_{j \text{ sum}}[7; 8]$						
145	Evaluation experts	$P_1^2$	$P_2$	$P_3$	$P_4$	$P_5$	$P_6$	1 j sum [ / , 0 ]	
1	Clients 1-5	3	5	1	2	4	5		
2	Clients 6-10	3	5	1	2	4	5		
3	Clients 11-15	3	5	2	1	5	4		
4	Clients 16-20	4	5	1	2	3	5		
5	Clients 21-25	5	4	2	1	5	3	X	
6	Clients 26-30	3	5	2	1	4	5		
7	Clients 31-35	5	5	1	2	4	3		
8	Clients 36-40	5	4	1	2	3	5		
9	Clients 41-45	4	5	1	2	3	5		
10	Clients 46-50	3	5	2	1	4	5		
11	$\sum_{i=1}^{\varepsilon} P_{ij} [7; 8]$	38	48	14	16	39	45	200	

In the course of our research, the coefficient of significance of the criteria for choosing a fitness club was calculated, presented in the form of table 3. As can be seen from Tables 2 and 3, among the above criteria, the most important criteria for clients when choosing a fitness club are the criterion for the cost of a subscription (P3) - 0.007 and the criterion location of the fitness club (P4) - 0.08. The next most important criteria are taken by the following criteria: equipment quality (P1) - 0.19 and range of services (P5) - 0.195. The least important, according to the survey results, are the professionalism of the coaches (P6) - 0.225 and the quality of service (P2) - 0.24.

Significance coefficients of criteria

Table 3

No	Criteria	Significance coefficients of					
745	Criteria	criteria					
1	Equipment quality (P <sub>1</sub> )	0,19 (38 / 200)					
2	Service quality (P <sub>2</sub> )	0,24 (48 / 200)					
3	Subscription cost (P <sub>3</sub> )	0,07 (14 / 200)					
4	Fitness club location (P <sub>4</sub> )	0,08 (16 / 200)					
5	Range of services (P <sub>5</sub> )	0,195 (39 / 200)					
6	Professionalism of the coaches (P <sub>6</sub> )	0,225 (45 / 200)					
Σ	X	1,00					

Assessment of the relative importance of directions (factors, parameters) is not limited to the processing of data from questionnaires. An equally important issue for the scientific substantiation of the forecast is the assessment of the indicator of the degree of agreement of expert opinions using a system of indicators. To assess the generalized degree of consistency of opinions by all criteria, we calculated the concordance coefficient (W) equal to 0,776, so we can talk about good consistency of expert opinions. Checking the probability of the coefficient of concordance by Pearson's criterion showed that there is no coincidence in the agreement of experts' opinions.

In the course of our study, it was found that the criteria we defined in terms of the degree of importance in general coincide with the statistics generally established in Ukraine according to official data [3], which is presented in table 4.

Author's	s research	The importance of the criteria for choosing a								
Criteria for choosing a fitness	Importance of the criterion	fitness club according to official data is generally established in Ukraine [3]								
club	importance of the criterion									
Subscription cost	Most important	Subscription cost								
Fitness club location	Most important	Fitness club location								
Equipment quality	Medium importance	Range of services								
Range of services	Medium importance	Professionalism of the coaches								
Professionalism of the coaches	Logat immontant	Equipment quality								
Service quality	Least important	Service quality								

As you can see, the most important criteria are the cost of the subscription and the location of the fitness club. The medium important criteria in our study were the quality of the equipment and the range of services, and according to official data, the professionalism of the trainers, and the quality of the equipment is the least important. However, we believe that these differences are not significant and simply reflect the right to their opinion of clients of fitness clubs, who were experts in our study.

In the course of our research, we have also developed and presented such practical recommendations for the management and managers of domestic fitness clubs:

- firstly, in order to improve the efficiency of managing fitness clubs and improve the system of promoting services on the market, it is necessary to intensify marketing activities, expand advertising campaigns and improve the pricing policy of fitness clubs by developing a set of "viral" advertising events for promotion in social networks, blogs, information portals, forums, video hosting (for example, YouTube) creation of personal online pages of club clients on official websites, etc.;
- secondly, to increase the throughput and convenience of gyms in fitness clubs by opening new groups for training in English, using an online format of training with clients, using computer testing programs, electronic diaries and other fitness novelties in the training process, etc.;
- thirdly, to improve the efficiency of management of fitness clubs by developing and implementing a monitoring system for the physical condition of clients for optimal provision and forecasting of the training process, strengthening

control over the observance of sanitary and hygienic standards and safety regulations, establishing cooperation with educational and scientific institutions in order to introduction of modern scientific developments and high-quality customer service, etc.

## **Conclusions / Discussion**

The problematic area of the development of physical culture and sports, as well as the effective management of organizations in the fitness industry, require realizing the complexity of the tasks facing researchers at the current stage of development of physical culture and sports [4, 5, 7].

Research [4-6] has shown that economic problems slow the development of the fitness industry in the world. Market transformations and commercialization of the infrastructure of mass sports in the world receive new impulses for development and often has not only positive, but also negative consequences. Therefore, it is necessary to develop measures to improve the efficiency of managing fitness clubs and improve the system for promoting their sports and health services, expanding marketing activities, marketing planning strategies, advertising campaigns and pricing policies of fitness clubs. This, in turn, will improve the efficiency of management of domestic fitness clubs through the distribution of criteria for choosing a fitness club for clients according to the degree of importance established by the author.

The study confirmed the opinion of modern domestic scientists, in particular Stadnik S., Sereda N., Chekhovskoy L. and Rusinovich S. on the need to improve the efficiency of management of domestic fitness clubs. In this context, the authors have developed practical recommendations to improve the efficiency of their management by using the expert method.

Thus, using the expert method, among the studied criteria, it was found that the most important criteria for clients when choosing a fitness club are the cost of a subscription and the location of a fitness club. Practical recommendations were developed and presented for the management and managers of fitness clubs in order to improve the efficiency of their management, the implementation of which will

provide fitness clubs with an increase in competitiveness and strengthening their positions in the market of sports and health services, as well as an increase in profits.

**Prospects for further research** in this direction concern the development of a marketing program for improving the organizational and management activities of domestic fitness clubs.

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