

IDENTIFYING FACTORS FOR THE DEVELOPMENT OF SWIMMING IN IRAQ AND DRAWING FUTURE SCENARIOS

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Abstract:

The aim of this study was to conduct foresight for the development of swimming in Iraq by 2033 using the scenario planning method. This research is applied and forward-looking, conducted with a mixed-methods approach (qualitative and quantitative) and through a survey-case method. The participants of this study included all experts in the field of swimming in Iraq, including faculty members in sports management, professional swimmers, coaches and swimming experts, managers and organizers of swimming competitions, officials of the swimming federation and committees, as well as fans and audiences of swimming. The sampling method was purposive, and 16 swimming experts participated in the study. An environmental scanning process was carried out to identify the drivers for the future of swimming in Iraq. For environmental scanning, the PESTEL model was used, during which 56 drivers were identified, and after three rounds of Delphi, 20 drivers were selected with 70% consensus among the experts. These drivers were then analyzed using a cross-impact questionnaire and MICMAC software. The results showed that four drivers—"lifting sanctions and attracting international support," "developing the sports tourism industry related to swimming," "expanding sponsorships and advertising in swimming competitions," and "popularizing swimming"—are the key drivers in the future development of swimming in Iraq. Using Scenario Wizard software, six main scenarios for the future of swimming in Iraq were formed: the "Rise of a Golden Era for the Swimming Industry," "Progress on a Bright Path with Minor Obstacles," "Conditional Prosperity Under Advertising Restrictions," "Tourism as the Beating Heart of the Swimming Industry," "Fragile Balance Amid International Barriers," and "Limited Growth Under Global Pressures." Scenario 1, "The Rise of a Golden Era for the Swimming Industry," is the most ideal scenario due to its high compatibility and greater impact. Scenarios 2 and 3 face limitations in attracting international support and sponsorships, but they still maintain infrastructure development. Scenarios 4 and 5 show insufficient growth in tourism and restricted access to swimming sports. Scenario 6, "Limited Growth Under Global Pressures," despite its high weight, has the least potential due to severe inconsistencies among variables, representing the worst-case scenario where minimal advertising, restricted access, and economic challenges hinder the comprehensive development of swimming sports. Planning efforts should

focus on aligning factors such as lifting sanctions, developing tourism, and enhancing advertising to create more ideal conditions.

Keywords: Foresight, Scenario Planning, Swimming Drivers, Swimming Tourism, Cross-Impact.

Introduction

Today, organizations are forced to accept future events for their survival and growth and to predict future events, they undertake foresight in the path of events (Sanabria-Z et al., 2024; Rohrbeck & Kum, 2018). Therefore, sports organizations are exposed to environmental and global changes and developments and seek to predict and write the future path to achieve better results (Grigoryev et al., 2018). Predicting the future is not only difficult but even impossible in some cases. The methods and paths designed today are trying to predict the future and the category of foresight has had the greatest contribution to this category to date (Sanabria-Z et al., 2024).

The main importance of foresight is due to today's fast-paced world. Foresight studies are an interdisciplinary field (George Williams et al., 2024) and are related to a wide range of perspectives on probable, possible, and preferred futures (Lozano, 2024; Rohrbeck & Schwarz, 2013). More than 17 methodological perspectives have been identified in the field of foresight, often used in conjunction with each other. Time series, models, brainstorming, scenario writing, simulation, historical analogy, Delphi techniques, interaction analysis, causal modeling, genealogies, gamification, and text mapping are some of the foresight techniques (Poliakova & Mekhovych, 2024).

Sport is of vital importance and requires the identification of drivers and related scenarios (Ya, 2020; Rohrbeck et al., 2015). The driving factors in sport are classified into three areas: macro-level variables, meso-level variables, and micro-level variables. The macro or peripheral level includes macro-political, economic, socio-cultural, and technological factors. The meso-level includes sports organizations, federations, and National Olympic Committees, etc., while the proximate or micro-level includes factors that are directly related to the athlete (Karimzadeh et al., 2024; Mooney et al., 2016).

Among the research conducted in this field, Sohrabi et al. (1403) in analyzing the key players in the development of swimming in Iran found that the Ministry of Sports and Youth and the Swimming, Diving and Water Polo Federation have the highest direct and indirect impact among the key players in the development of swimming in Iran, with 187 impacts on other players. As a result, providing support and incentive packages for the federation, boards, coaches and swimming athletes, determining the criteria for selecting the president of the federation and boards, and the support and backing of the Ministry of Sports and the National Olympic Committee can be important factors influencing the development of swimming.

Rezakhani et al. (1400) aimed to design a model for the development of swimming in Iran and identified five economic, social and cultural, political, technological and sports axes, each of which is effective at the macro, medium and micro levels in the development of swimming in Iran. In a research study, Sotiriadou et al. (2023) examined the role of stakeholders in the development of elite surfing during its transition to an Olympic sport. The findings consider local clubs responsible for supporting talented surfers to progress to higher levels of competition, and their limited access to support from other stakeholders is problematic, as clubs lack sufficient capacity to provide surfers with the necessary opportunities for success. The success of surfers in the Olympics also

requires a new perspective in the framework of attracting, retaining, maintaining and developing athletes.

In a study by Uday Abed & Ali Husaien (2022), in analyzing the crisis management of the administrative offices of the Iraq Swimming Federation, they designed a scale for crisis management that was used in this issue. The results of data analysis showed that the reality of crisis management at the level of the Iraq Swimming Federation shows a great weakness, which has led to an increase in the negative effects and impact on the activities of the federation. Mukkey (2020) stated in the proposed concept for the processes of the Egyptian Swimming Federation that rapid changes and developments in various directions are among the most important features of our world today, where change and development have become the norm and a dominant activity in sports, and therefore cooperation with them is the basis for progress and survival. Therefore, sports organizations, like other organizations and institutions, must think about and review the normal routines they are used to in order to be able to provide distinctive services and advanced methods to achieve their goals and ensure their survival.

According to recent research, it can be seen that foresight studies in the field of sports, especially the development and planning of the future of sports, have received attention (Ratten & Jones, 2018; Mooney, 2024). Ensuring the success of foresight depends on creating participation and interaction in a wide range of individuals and organizations in society, and creating such participation and interaction requires discourse and cooperation of the responsible organizations (Adib Roshan, 2017). In this regard, the Swimming Federation of Iraq should also pay special attention to strategic dimensions, including strategic budget, strategic coordination, and strategic organization, in order to develop itself in the long term. However, this path, namely predicting the future and examining the factors affecting the future environment at the level of swimming in Iraq, has not been proposed to date.

In general, the Swimming Federation of Iraq holds its competitions every year with the participation of more than 20 teams in the country's club swimming championships ¹in various disciplines, but the growth and development of swimming in Iraq is far more complex than other sports, because the growth of swimming in Iraq at the professional and championship levels is at the beginning (Salam et al., 2019). Undoubtedly, the development of efficient and effective programs and their correct adaptation to the developments that have occurred require the identification of their future trends. Although there are many talents and good capacities in the field of swimming in Iraq, it is obvious that presenting a comprehensive picture of the development of swimming in the future and recognizing the uncertainties in this field and presenting scenarios for better advancing goals depends on knowing the future. Knowing the future helps provide the information needed for the growth system, and the requirements for the development of swimming that must be considered, as well as integrating future information for the future of swimming in Iraq. Thus, this study seeks to answer the question, "What is the model and outline of future research on swimming in Iraq?" The results of this study, in addition to enriching the literature on the subject, help managers and planners to design and implement optimal swimming development programs by considering future changes.

¹ <https://shafaq.com>

Materials and methods

This research is theoretical-applied in nature; on the one hand, it develops knowledge on the subject under study and provides explanations related to it, and on the other hand, its results provide the possibility of effective planning for the development of swimming in Iraq. This study uses the scenario writing method to examine the future of swimming development in Iraq. The participants of this research included all experts in the field of swimming in Iraq, including professors of the sports management faculty, professional swimmers, swimming coaches and experts, swimming competition managers and organizers, and officials of the federation and swimming board. First, a list of expert characteristics and criteria in this subject was determined in consultation with the supervising professors and consultants. Some of the most important of these characteristics include a history of sports and executive activity in swimming, a history of scientific and research activity in the field of foresight and sports development. According to the specified criteria, since there was no accurate statistics of these people, a purposeful and deliberate sampling method was used to identify and refer to experts and continued until theoretical saturation. Finally, 16 experts were selected. The researcher used two tools: a study and review of the background and a semi-structured interview tool (16 interviews) to identify the drivers of the development of swimming in Iraq and the PESTEL² model to categorize them. After studying the background and obtaining information on the future development of swimming in Iraq, the researcher went to the experts on this matter. At this stage, the Delphi technique was used. In the first round of Delphi, a semi-structured interview was conducted with swimming experts. The researcher began the interview with the general question, "In your opinion, what are the drivers of the development of swimming in Iraq?" and, based on the information expressed by the interviewee, follow-up questions were asked by the researcher. After the first Delphi round and completing the list of drivers for the development of swimming in Iraq, a questionnaire was prepared to determine the importance of each driver and identify the key drivers and was provided to the Delphi group in the second round. After the second Delphi round, drivers whose consensus was less than 70 percent were removed from the questionnaire and provided to swimming experts for the third Delphi round. After the third Delphi round, 21 key drivers were subject to consensus by the Delphi group.

Triangulation, i.e., using different data sources including literature and interviews, was used to confirm the results and enhance the acceptability of the findings. The results were also presented to the participants to review and confirm that the findings were consistent with their experiences. To achieve transferability, a comprehensive and accurate description of the research environment, conditions, and processes was provided so that others could apply the findings to similar situations. The results were also compared with similar studies in different fields to determine whether the findings were generalizable to other cases. To achieve confirmability, complete documentation of the research steps, decisions, and reasons for choosing tools was done to provide the possibility of review and confirmation by others. Other researchers were also asked to review the data and tools to confirm that the findings were consistent with the data collected and that the results were not based on researcher assumptions or biases. Intra-subject agreement was used to calculate the reliability of the interviews. According to Table 1, the inter-coder reliability was 85%, which is higher than 60%, and the reliability of the codings is confirmed.

² Political, Economic, Social, Technological, Environmental, Legal

Table 1. Results of reliability of two coders

Interview number	Total number	Agreements	Disagreements	Reliability percentage
P5	22	9	4	81
P8	27	12	3	88
P14	19	8	3	84
Total	68	29	10	85

Interaction analysis and scenario writing techniques were used to analyze the data. In order to analyze the interactions and identify key driving forces, the interaction matrix was used, and mathematical calculations related to the interactions between influential and affected variables were performed using the MICMAC software. In the scenario writing step, the interaction matrix was used, and the Scenario Wizard software was used to create scenarios so that different and possible future combinations could be analyzed and evaluated more accurately.

Results

In order to answer the first research question, “What driving forces can shape the future of swimming in Iraq by 2033?”, research conducted in the field of swimming and sports foresight was reviewed. The Delphi method was also used to complete and determine the importance of driving forces. Table 2 reports the frequency and percentage of demographic characteristics of the Delphi group experts.

Table 2. Frequency of demographic characteristics of experts in the Delphi group

Feature	Sex		Education level		Field of study		Average sports-executive record		Age	
	Male	Female	Master	Ph. D	Physical education	Non-Physical education	Minimum	Maximum	Minimum	Maximum
Frequency	10	6	7	9	12	4	10	26	33	50
Frequency %	62.5	42.8	43.7	56.2	75	25	years	years	years	years

After reviewing the background, the Delphi technique was used to complete the list of drivers for the development of swimming in Iraq. In the first Delphi round, 16 semi-structured interviews were conducted with experts in the field of swimming, resulting in 56 drivers for the future of swimming in Iraq. In the second Delphi round, a semi-structured questionnaire was provided to the Delphi group to determine the importance of the 56 drivers for the future of swimming on a 5-point Likert scale. Drivers that received a consensus of less than 70% of the Delphi group in the second Delphi round were marked in red. Experts should be consulted at least twice on each component and given the opportunity to review their opinions at least once based on the responses of the entire group, which are presented in the form of statistical summaries; therefore, all drivers that received a consensus of more than 70% along with statistical summaries (Hasson et al., 2000)

on a 5-point Likert scale were provided to the experts in the third Delphi round. The results of the literature review and Delphi technique in Table 3 are remarkable.

Table 3. Future drivers for the development of swimming in Iraq

Number	Field	Drivers	Article	Interview	Second round of Delphi consensus assessment	Third round of Delphi consensus assessment
1	Political	Government support and investment in swimming	R4, R7	P2,P5,P7-P14	2.55	-
2		Supporting athletes through government budgets and subsidies	R1, R18	P5,P6,P8, P10	2.64	-
3		Strengthening sports diplomacy and establishing sports relations with world federations and neighboring countries	R22	P6,P7,P14	4.55	4.27
4		Lifting sanctions and attracting international support	R21, R18, R11, R10	P1, P8, P12,P14, P15	4.45	4.82
5		Developing comprehensive and national programs for the development of aquatic sports	R20, R16	P5, P7,P8,P10	4.27	3.73
6		Government investment in the development of swimming infrastructure	R16	P1, P8, P9,P14	3.64	-
7	Economical	Encouraging the private sector to invest in swimming	R1, R22, R19, R5	P3, P10	4.18	4.27

8		Developing a sports tourism industry related to swimming	R2, R21, R14	P1,P2,P3, P5, P7,P8,P10 P11,P12	3.73	3.64
9		Supporting the production of domestic swimming equipment and clothing	R20	P1, P12, P14	4.27	4.00
10		Providing financial facilities for the construction of swimming pools	R17	P2, P5, P8	2.55	-
11		Launching public pools with lower tariffs	R20	P1,P2,P3, P5,P7, P8,P9, P10,P11,P14,P16	2.73	-
12		Expanding sponsorship and advertising in swimming competitions	R4, R19	P1, P5,	4.64	4.64
13		Increasing financial support for professional athletes and swimming talents	R17	P5, P4,P8	3.09	-
14		Increasing demand for professional swimming coaches	R20	P5,P7,P14	3.18	-
15		Launching new businesses in the field of swimming equipment and supplies	-	P1-P5, P8	3.01	-
16	Social	Popularizing swimming	R3	P4,P5, P7, P8,P10, P12,P14	4.00	4.18
17		Growing the culture of water sports as a healthy pastime	R3	P1-P3, P5, P6, P8,P11	3.09	-
18		Expanding swimming training programs in	R20	P1-P5, P7, P8,P10 ,P14	3.64	3.73

		schools and universities					
19		Developing swimming academies and schools in underserved areas	R20	P1,P7, P8,	3.27	-	
20		Promoting swimming as a family sport	R22, R8	P1,P2,P3, P5, P7,P8,P10 P11,P16	3.02	-	
21		Improving training programs for disabled swimmers	R3	P1, P5,	3.18	-	
22		Promoting swimming for women and girls through special programs	R17, R13, R6	P2, P8,P14	2.64	-	
23		Supporting local and national swimming events	R5, R9	P1,P2,P3, P5,P7, P8,P9, P10,P11,P12	4.27	4.27	
24		Promoting swimming on social media and social networks	R3	P1, P8,P14	3.27	-	
25	Technology	Training professional and expert swimming coaches	R22	P5,P4,P8	3.73	-	
26		Identifying and nurturing young talents through schools	R3	P5,P7,P12,P14	3.73	3.64	
27		Cooperating with swimming federations in other countries	R22	P1, P8,P12	3.09	-	
28		Attention to swimming as a sport for all ages	R20	P4,P5, P7, P8,P10, P12	3.09	-	
29		Providing swimming facilities and opportunities for	R22	P1, P5,P3, P8, p12	3.15	-	

		all segments of society				
30		Online swimming coaching	R17	P5,P10- p16	3.02	-
31	Environmental	Using wearable sensors to measure swimmer performance	R12	P1-P12, P13, P15	4.27	4.55
32		Virtual and augmented reality for better training	R17	P1-P5,p7-12, P16	4.82	4.45
33		Improving pool materials and infrastructure	R20	P4,P5,P7- P10, P12	2.55	-
34		Simulator robots to teach aquatic movements	R12	P1-P8, P10-P12, P15	3.00	-
35		Swimmer biodata analysis applications	-	P1, P3 , P8, p12, ,P14	3.09	-
36	Legal	Personalized swimming training program software	R17, R15	p5,P8- p11	4.64	4.27
37		Increasing attention to water safety through new technologies	R12	P6, P8, P16	3.27	-
38		Advances in the production of waterproof and lightweight materials for swimwear	-	P5,P9-P12	2.36	-
39		Improvement in anti-mold and anti-algae technology for pool maintenance	R12	P6,P9, ,P14	3.27	-
40		Using the Internet of Things (IoT) to control the environment and equipment of pools	R17	P1-P4, P8,	3.02	-
41		Using advanced water purification	-	P5, P8,P14	4.18	4.64

	and recycling systems				
42	Purifying and monitoring the water quality of rivers and natural water resources in order to create a suitable environment for water sports	R17	P5,P7,P8, P10	3.91	-
43	Active diplomacy with neighboring countries to regulate water resources and better utilize the Euphrates and Tigris rivers	-	P6,P7,P14	3.06	-
44	Climate change and global warming and its impact on pools and aquatic environments	-	P1- P3, p8	4.73	4.18
45	Implementing environmental projects to combat desertification and the impacts of climate change on water resources	-	P5,P7,P8,P10	4.45	4.73
46	Using green technologies	R12	P5, P8, p13	4.45	4.45
47	Efforts to reduce carbon	-	P5,P4, P8,	3.27	-
48	Control and reduce energy consumption in pool purification equipment and systems	-	P1,P2,P3, P7,P8,P10 P11,P12, P16	3.01	-
49	Creating supportive laws for	-	P1,P12,P14	3.25	-

	professional athletes					
50	Pass laws allocating a percentage of the sports budget to aquatic sports	-	P2, P5, P8,	3.18	-	
51	Establish mandatory laws for swimming instruction in primary and secondary schools as part of the official curriculum	-	P1,P2,P3, P5,P7,P9, P10,P11,P12	4.45	4.45	
52	Establish supportive laws to attract private sector investment in pool construction	-	P1, P8,	4.27	4.27	
53	Enact laws to support women's participation in aquatic sports	-	P4, P5,P8,P14	3.20	-	
54	Stronger laws on pool safety	-	P5,P7, P8,P12, P15	3.18	-	
55	Strengthen health laws and supervision in public pools	-	P1-P3, P16	2.55	-	
56	Strengthen laws to combat doping in swimming	-	P2, P5, P6, P7-P12, P13,P14	3.14	-	

After identifying the 20 influential driving forces for the development of swimming, a 20 by 20 matrix was designed and provided to the expert group, based on which the drivers, relationships, and interactions between them were determined using numbers 0 to 3 (zero = no impact; one = weak impact; two = moderate impact; three = strong impact; and P = potential impact), according to the intensity of their impact on each other. In this way, the degree of impact of each driver on the other and the degree of their influence were determined. The results of the questionnaire were analyzed by the Miqmac software.

The MICMAC software, upon receiving data related to the input elements, separates them into two processes and two matrices: the Direct Impact Matrix (MDI) in Table 5 and its related graphs, and the Indirect Impact Matrix (MII) in Table 5 and its related graphs. These matrices express the

degree of influence between the drivers. The first output of this matrix is shown in Table 4, which reflects the general characteristics of the matrices in the research.

Table 4. General characteristics of the matrix

Matrix size	Number of repetitions	Number of zeros	Number of ones	Number of twos	Number of threes	Number of P	Total	Filling rate
20	2	230	60	43	57	10	170	42.50%

Table 5 shows the prioritization of direct and indirect impacts of drivers.

Table 5. Prioritization of direct and indirect impacts of drivers

Number	Drivers	Direct impact	Drivers	Direct impact	Drivers	Indirect impact	Drivers	Indirect impact
1	P1	1261	S4	914	P1	1176	E2	838
2	P2	1041	S1	820	P2	1044	S4	816
3	S1	1009	E2	788	E3	848	S1	746
4	P3	883	E4	788	E2	841	e1	745
5	E2	883	P2	662	S1	818	E4	703
6	E4	788	e1	630	E4	789	P2	662
7	E3	567	S2	504	P3	716	S2	547
8	E1	536	E1	441	E1	591	T2	512
9	T2	410	T2	441	e1	469	P3	451
10	S4	378	P1	410	S4	457	T3	447
11	e1	378	P3	410	e2	412	e3	440
12	e2	315	E3	410	e3	295	E3	431
13	S3	283	T3	410	T1	282	P1	409
14	T1	283	S3	378	T2	274	E1	391
15	S2	220	e3	378	S3	266	S3	333
16	T3	189	L2	378	T3	214	e2	329
17	e3	189	e2	347	S2	211	L2	324
18	e4	189	L1	347	L2	126	T1	302
19	L2	126	T1	283	e4	106	L1	283
20	L1	63	e4	252	L1	53	e4	281

Based on the results of the Miqmac software, the stability or instability of the system has been analyzed based on the impact and direct impact plan. According to the output of the Miqmac software and based on the experts' opinion, the future of swimming development in Iraq is predicted to be somewhat unstable and there is a possibility of changing the current conditions.

According to the results obtained from the MDI matrix map, the drivers of swimming development were placed in four areas of the table, which can be seen in Figure 1.

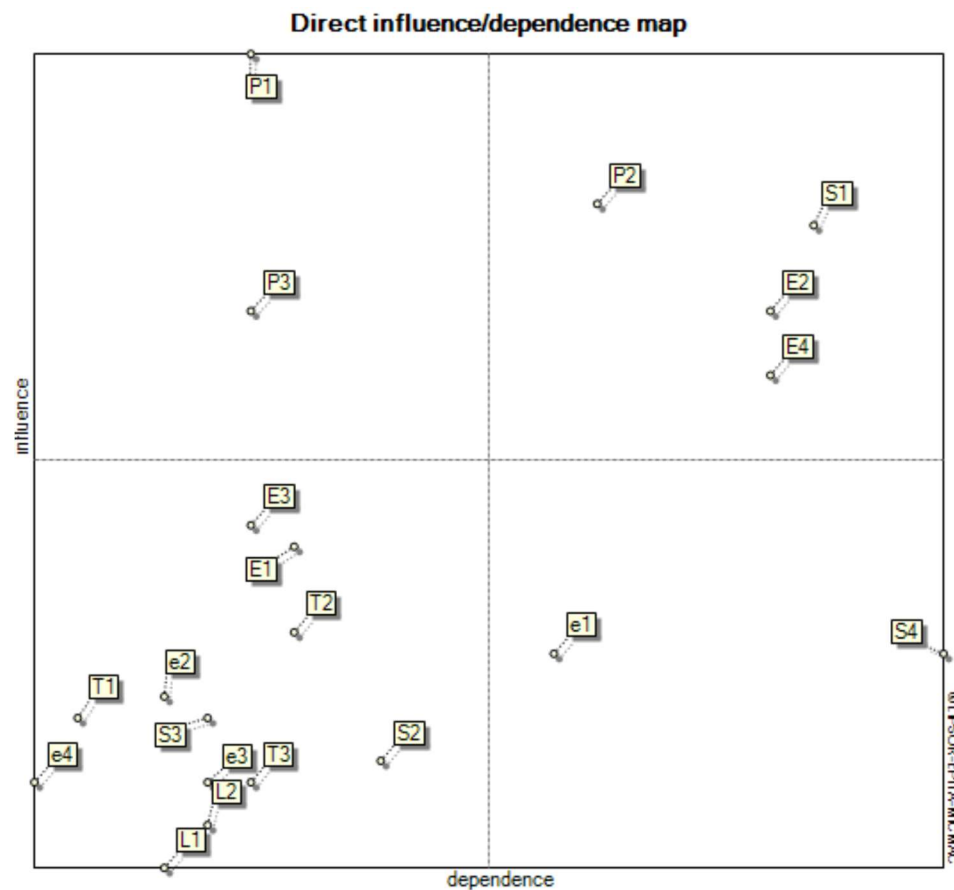


Figure 1. Status of influence and impact of drivers in the MDI matrix map

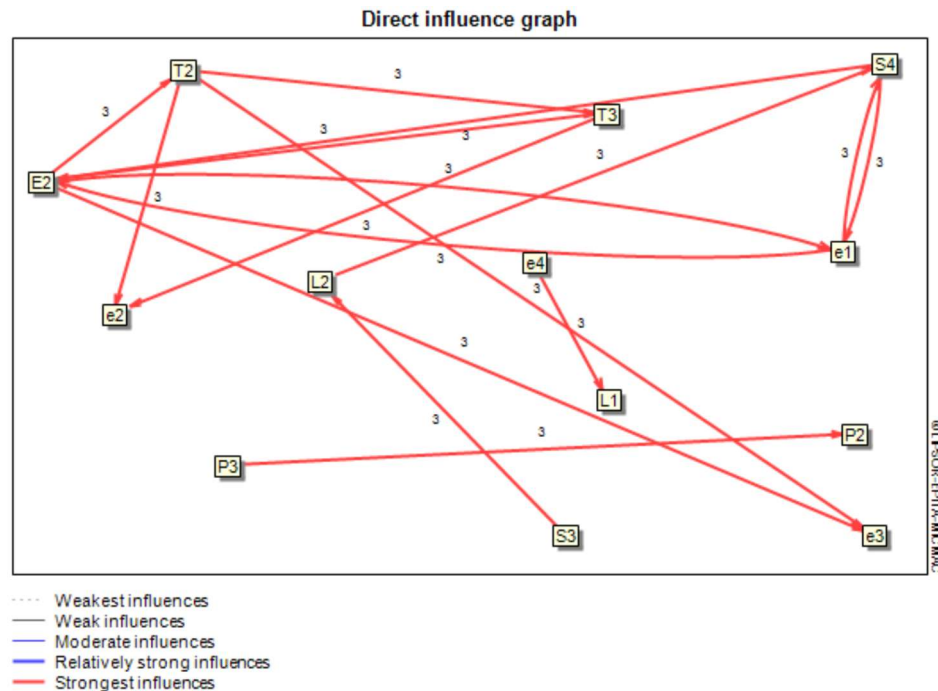


Figure 2. Graph of the direct impact of drivers in the MDI matrix map

The drivers of swimming development in Iraq are divided into four types based on their location, and each is located in one of the four areas of the impact-impact plan. Therefore, the status of the drivers in different areas of the plan is as follows: Drivers in area one (bimodal): Drivers P2, S1, E2, E4 are in the category of strategic drivers. Drivers in area two (influential): Drivers P1, P3 are located in this area, which indicates the high impact of these drivers. Drivers in area three (independent): Drivers T1, T2, T3, E1, E3, S2, S3, e2, e3, e4, L1, L2, L2, were identified as independent drivers. Drivers in area four (affectable): Drivers E1, S4 are located in this area. The drivers of the area of the coordinate grid, which were dichotomous variables, are key variables. Therefore, the four drivers of “lifting sanctions and attracting international support”, “developing the sports tourism industry related to swimming”, “expanding sponsorship and advertising in swimming competitions”, and “generalizing the sport of swimming” are the key drivers of the development of swimming in Iraq. The possible states include a range from a favorable to a critical situation, with three states considered for each driver. The possible states of the key drivers can be seen in Table 6.

Table 6. Possible status of key drivers

Key drivers	Optimum	Semi-Critical	Critical
Removal of sanctions and attraction of international support	Sanctions have been completely removed and Iraq has returned to international markets. Financial,	Some of the sanctions have been removed, but significant limitations remain in attracting	Sanctions have been tightened and there is no financial or technical support from global

	technical and educational support from global institutions such as the IOC is ongoing	international support. Limited connections with international sports bodies remain.	institutions. National teams are not allowed to participate in international competitions.
Development of the swimming-related sports tourism industry	Swimming infrastructure and standard pools have been established in tourist areas, and Iraq has become a major destination for sports tourists in the field of swimming.	Some tourist areas have limited infrastructure for swimming, but the lack of advertising and coherent planning has hindered the growth of the sports tourism industry.	There is no infrastructure or plan to develop sports tourism related to swimming. Natural capacities have also been destroyed due to poor management.
Expanding sponsorship and advertising in swimming competitions	Swimming competitions have become an attractive platform for sponsors and big brands. Extensive advertising and significant revenue generation have been formed in this area	Sponsorship and advertising only exist in major national competitions, and there is little participation from sponsors in local and provincial competitions.	No sponsors are willing to invest in swimming competitions and all costs are borne by the federation and the athletes.
Making swimming popular	Swimming has become a basic skill for all members of society, and access to standard pools is available to all segments of society	A portion of society has access to swimming pools, but economic constraints and a lack of infrastructure have prevented the popularization of the sport.	Swimming is considered only as a luxury sport and the general public is not able to learn and practice it due to financial reasons or lack of facilities.

Based on the possible situations for the four key drivers of the future of swimming in Iraq, a total of 12 situations were designed, from the desired to the critical. Based on the defined situations, the ScenarioWizard software designed a 12 by 12 matrix to evaluate the effect of different situations on each other, which was provided to the Delphi group. In response to this matrix, the experts had to determine what effect each of the 12 situations would have on the occurrence or non-occurrence of the other situations if they occurred. The questionnaire was scored in the range of positive 3 to negative 3, which indicated a continuum of reinforcing to weakening characteristics. Based on the calculations of the ScenarioWizard software, there are six scenarios with very high scores and a higher probability of occurrence in the future conditions of swimming in Iraq, which can be seen in Figure 3.

Figure 3. Compatible scenarios for the future of swimming in Iraq

Scenario No.1	Scenario No.2	Scenario No.3	Scenario No.4	Scenario No.5	Scenario No.6
Removal of sanctions and attraction of international support; Sanctions have been completely removed and Iraq has returned to international markets	Removal of sanctions and attraction of international support; Some of the sanctions have been removed, but significant limitations remain in attracting international support; Limited connections with international sports bodies remain		Removal of sanctions and attraction of international support; Sanctions have been completely removed and Iraq has returned to international markets	Some of the sanctions have been lifted, but significant limitations remain in attracting international support. Limited connections with international sports bodies remain	Removal of sanctions and attraction of international support; Sanctions have been completely removed and Iraq has returned to international markets
Development of the swimming-related sports tourism industry; Swimming infrastructure and standard pools have been established in tourist areas			Development of the swimming-related sports tourism industry; Some tourist areas have limited infrastructure for swimming, but the lack of advertising and coherent planning has hindered the growth of the sports tourism industry.		
Expanding sponsorship and advertising in swimming competitions; Swimming competitions have become an attractive platform for sponsors and big brands. Extensive advertising and significant revenue generation have been formed in this area		Expanding sponsorship and advertising in swimming competitions; Sponsorship and advertising only exist in major national competitions, and there is little participation from sponsors in local and provincial competitions			
Making swimming popular; Swimming has become a basic skill for all members of society, and access to standard pools is available to all segments of society					Making swimming popular; A portion of society has access to swimming pools, but economic constraints and a

	lack of infrastructure have prevented the popularization of the sport.
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Naming scenarios and analyzing the status of each scenario

Scenario No.1: The emergence of a golden age for the swimming industry

Features: Weight: 15 / Compatibility Value: 1 / Descriptor Incompatibility: 0 / Overall Impact Score: 29

Scenario No.2: Moving on a clear path with minor obstacles

Features: Weight: 14 / Compatibility Value: -1 / Descriptor Incompatibility: 1 / Overall Impact Score: 25

Scenario No.3: Moving on a clear path with minor obstacles

Features: Weight: 12 / Compatibility Value: -1 / Descriptor Incompatibility: 2 / Overall Impact Score: 20

Scenario No.4: Tourism as the beating heart of the swimming industry

Features: Weight: 10 / Compatibility Value: -1 / Descriptor Incompatibility: 2 / Overall Impact Score: 21

Scenario No.5: A fragile balance among international barriers

Features: Weight: 12 / Compatibility Value: -1 / Descriptor Incompatibility: 2 / Overall Impact Score: 18

Scenario No.6: Limited growth under global pressures

Features: Weight: 19 / Compatibility Value: -1 / Descriptor Incompatibility: 3 / Overall Impact Score: 18

Discussion

The present study was conducted with the aim of foresight and identifying scenarios that affect the development of swimming in Iraq. Using environmental scanning and analysis of the MiqMaq and ScenarioWizard software, this study identified six main scenarios, each of which had different

characteristics and effects on the development of this sport. The following is an analysis of the scenarios for the development of swimming in Iraq.

Scenario One: The Emergence of a Golden Age for the Swim Industry

The first scenario describes ideal conditions for the development of swimming. The complete lifting of sanctions and the country's return to international markets have provided access to extensive financial resources and the creation of modern infrastructure. In this scenario, swimming competitions have become an attractive platform for sponsorship and advertising, and the popularization of swimming has been achieved with universal access to related facilities. This scenario does not have any inconsistencies in the descriptions. By emphasizing the impact of economic variables on the development of sports, this scenario is consistent with the results of the study by Nazim Masiri et al. (1403), who consider the development of weightlifting clubs to be an economic issue and consider economic measures to be key.

Scenario 2: Moving on a clear path with minor obstacles

The second scenario depicts a middle ground. Some of the sanctions have been lifted, but there are still limitations in attracting international support. However, the development of sports tourism and the popularization of swimming have continued relatively well, and swimming competitions are still attractive to sponsors. The inconsistency of the descriptions in this scenario is that the limitations in attracting international support may reduce the ability to develop the necessary infrastructure. By focusing on social and cultural factors, this scenario is in line with the research of Gholamian et al. (1401), who have identified social and cultural factors as drivers of sports development. It is also in line with the analysis of Jafari et al. (1398) on the role of women in sports management.

Scenario 3: Conditional prosperity in the shadow of advertising restrictions

This scenario reflects a situation where sanctions have been lifted only to a limited extent and international support is low. Sports tourism infrastructure is only developed in specific regions and sponsorship is limited to major national competitions. Lack of infrastructure and economic constraints have also challenged the popularization of swimming. The incompatibility of the descriptions here is that the limitation of financial support and infrastructure contradicts the popularization of swimming and the development of sports tourism. In this scenario, attracting private sector participation is an appropriate solution that is consistent with the results of Pourzabih (1400) and Sarhamami et al. (1402). They emphasize that using the capacities of the private sector can help solve the problem of lack of financial support and infrastructure development. Therefore, private participation, along with government support policies, can lead to synergy in the development of swimming and sports tourism. The success of this solution depends on creating attractive incentives for private sector investors, such as tax breaks, guaranteed returns on investment, and creating transparent and sustainable conditions for their operations. Without these incentives, attracting private investors will be difficult and the contradictions in the scenario will persist.

Scenario 4: Limited progress focused on specific areas

The fourth scenario focuses on a situation where sanctions have been lifted on a large scale, but infrastructure and sports tourism development have only been implemented in specific areas. Sponsorship and advertising are still limited to large events, and universal access to swimming facilities has not been fully achieved. Inconsistency of descriptions This scenario's focus on specific areas may be at odds with the goal of generalizing swimming and widespread development that is consistent with the findings of Nazim Masiri et al. (1403) study.

Scenario 5: Slow movement towards development

The fifth scenario depicts a situation in which the lifting of sanctions has been limited and the development of swimming infrastructure and sports tourism has been carried out in a scattered and decentralized manner. Sponsorship and advertising are limited and the popularization of swimming faces serious obstacles. Incompatibility of descriptions This scenario states that economic constraints and the dispersion of infrastructure are not in line with development goals. This scenario focuses on development through institutional and political convergence, which is in line with the research of Chori et al. (1402) who have considered the need for a single and integrated management between sports and non-sports organizations. Also, the findings of Nateghi et al. (1401) have also identified organizational convergence as an independent variable.

Scenario 6: Continuous challenges in the shadow of limitations

The sixth scenario refers to a difficult situation in which sanctions have not been fully lifted and financial and economic constraints have affected all aspects of swimming development. In this scenario, sponsorship and advertising are very limited and sports tourism infrastructures have only been developed at a rudimentary level. The inconsistency of the descriptions indicates that financial and economic constraints are in conflict with the goal of comprehensive development of swimming and sports tourism. This scenario is consistent with the research of Ronaghi et al. (1403) who considered human resource development and educational programs as key in the sports tourism industry. Also, the research of Sohrabi et al. (1403) in analyzing the key players in the development of swimming sports highlighted the role of managers and key organizations in sports development.

Comparative analysis of the scenarios shows that the first scenario, as the most desirable situation, requires coordination between domestic and international policies. In the second scenario, there are challenges that may slow down the development process, but there is still hope for growth. Scenarios three to six face more constraints and require more efforts to achieve the development goals of swimming.

Practical suggestions for every scenario:

- Practical Proposal Scenario 1: The Emergence of a Golden Age for the Swimming Industry:

1. Establish and develop swimming training centers across the country with international standards.
2. Design and implement extensive advertising campaigns to promote swimming as a basic skill.
3. Use digital platforms to attract domestic and foreign tourists and promote swimming competitions.
4. Hold major international swimming events in Iraq to enhance the country's global standing.

➤ Practical suggestion for scenario 2: moving on a clear path with minor obstacles

1. Cooperate with international institutions to attract limited and targeted support.
2. Provide financial and technical facilities to the private sector to develop sports infrastructure.
3. Hold national swimming competitions with the aim of attracting domestic sponsors.

➤ Practical suggestion for scenario 3: Conditional prosperity in the shadow of advertising restrictions

1. Focus on national competitions to increase participation from domestic sponsors.
2. Create marketing campaigns to draw public attention to swimming, using local media.
3. Develop infrastructure in key tourism areas to enhance the attractiveness of the region.

➤ Practical proposal for scenario 4: Tourism as the beating heart of the swimming industry

1. Develop tourism infrastructure with a focus on swimming as the main attraction.
2. Design training courses for sports tourism staff.
3. Establish partnerships between the private sector and the government to develop swimming tourism programs.

➤ Practical suggestion for scenario 5: Fragile balance among international barriers

1. Prioritize areas for sports infrastructure development given financial constraints.
2. Provide government subsidies to reduce the costs of popularizing swimming.
3. Focus on holding national events to increase public participation and publicity.

➤ Practical suggestion for Scenario 6: Limited growth under global pressures

1. Strengthen regional cooperation to exchange knowledge and experiences in the development of swimming.
2. Create free or low-cost educational programs for the community with the aim of promoting swimming.
3. Focus on small, targeted projects to improve infrastructure in specific areas.

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