

Designing a sport performance evaluation model in Khuzestan Province, Iran, with Interpretive Structural Modeling

Diseño de un modelo de evaluación del rendimiento deportivo en la provincia de Khuzestan, Irán, con Modelización Estructural Interpretativa

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Abstract: Any sport organization intensively needs a performance evaluation system to ensure the desirability of its activities, particularly in dynamic and complicated environments. The objective of this study was to use interpretive structural modeling (ISM) to propose a performance evaluation model for the youth and sports offices in Khuzestan Province, Iran. This is a quantitative study of descriptive-analytical type. The statistical population consisted of 120 scientific and executive experts. 60 individuals were invited to participate, and finally, 30 individuals were selected as the final respondents by purposive sampling method. The data measurement tool was a researcher-made questionnaire. Its validity was confirmed by the experts. Descriptive and inferential statistics methods were used to analyze the data. MATLAB was employed to analyze the data concerning the interpretive structural model. The results showed that most of the strategies are in the linked area according to the analysis of the influence power and dependence (MICMAC Table). Moreover, the results of the strategy classification indicated that the most essential strategies were: strategies of sport preparation scheme, legislation, structural obstacles elimination, creation of the province sport strategic council, and strategic management approach. **Keywords:** performance evaluation, sports, Interpretive Structural Modeling, model design.

Resumen: Cualquier organización deportiva necesita un sistema de evaluación del rendimiento para garantizar la conveniencia de sus actividades, especialmente en entornos dinámicos y complicados. El objetivo de este estudio fue utilizar Modelización Estructural Interpretativa (ISM) para proponer un modelo de evaluación del rendimiento para las oficinas de jóvenes y deportes en la provincia de Khuzestan, Irán. Este es un estudio cuantitativo de tipo descriptivo-analítico. La población estadística estuvo formada por 120 expertos científicos y ejecutivos. Se invitó a 60 individuos a participar y, finalmente, se seleccionaron 30 individuos como los encuestados finales mediante un método de muestreo intencional. La herramienta de medición de datos fue un cuestionario elaborado por investigadores. Su validez fue confirmada por los expertos. Se utilizaron métodos estadísticos descriptivos e inferenciales para analizar los datos. Se empleó MATLAB para analizar los datos relativos al modelo estructural interpretativo. Los resultados mostraron que la mayoría de las estrategias se encuentran en el área vinculada según el análisis de influencia poder y dependencia (Tabla MICMAC). Además, los resultados de la clasificación de la estrategia indicaron que las estrategias esenciales fueron: estrategias de planificación deportiva, legislación, eliminación de obstáculos estructurales, creación del consejo estratégico de deportes de la provincia, y enfoque de gestión estratégica. **Palabras clave:** evaluación del rendimiento, deportes, Modelización Estructural Interpretativa, diseño de modelos.

Introduction

Today's organizations are facing numerous challenges in the current complicated and dynamic environments, including pressure for more transparency and responsiveness, limited and running-out resources, increased tasks and activities, very rapidly-changing technology and different management strategies to improve the organizations (Aparicio et al, 2016; Bolton, 2003; García et al, 2016). In such a space, it will be very complicated and difficult to evaluate and manage the performance since the financial evaluation of the organizations based on the profits and losses along with the financial balance sheets and cost-savings will alone mislead us (Medori and Steeple, 2000). Performance management is the evaluation of the organization's performance based on its strategic

plan and it will be impossible to use of acquired information to improve the strategic plan without taking into account the areas other than the financials (Kaplan and Norton, 2007). The factor preventing the strategies is that the strategies are not understood by those who should implement them and they have not yet become quantitative objectives (Manoj Kumar, 2015). Organizations have to adopt a central strategy to survive and grow in today's changing, competitive, and unstable environment. They need to rely on the strategic management proves to deal with this challenge (Boland and Fowler, 2000). Many researchers investigated the importance of the strategic planning from different viewpoints. They all agree on the correlation between the strategic planning and desirable performance of the organization (Mosafa, 2014). Such planning, if formulated properly, will lead to the selection of the strategies that result in the excellence and lead of the organization if implemented correctly in the right time.

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In general, the strategic planning plays the dual and inter-related roles of the organization construction and uniting in its activities. In this regard, Machado (2004) believes that the strategic planning is a key component for the organization's excellence. This process is focused on the strategic and operational objectives, organizational policy-based strategies and objectives, plans, and activities formulated to achieve the expected objectives and outcomes. It is a very important means of organizational effectiveness (Alian, 2013; Neely et al. 2000).

Thus, the senior managers in many profit and non-profit companies and organizations, including the managers of the sport organizations, spend considerable time, energy, and financial resources on formulating and determining and basic strategies of their organizations, but most of them report that their strategies were not implemented desirably. The perspective that these managers envision for their organizations are very clear to themselves but their employees' understandings of this perspective is very low (Fazlollahi, 2007). Hence, the senior managers are always looking for a strategy to ensure the implementation of their strategies. In such a situation, the performance evaluation is a leading light for all the management activities (Amiran, 2004). Individual and organizational performance evaluation is a means to control the quality from the strategic actions to the operational ones (Afarinesh, 2004).

At the same time, sports play an essential and increasing role in economic, political, cultural, and social system changes. In other words, the position and ever-increasing importance of sports and sport organizations, sport federations, and youth and sports offices as the executive levers of the sports in the country have brought up various discussions in the organizing, policy-making, planning, marketing, and performance evaluation (Parvin, 2011). But, performance evaluation has been neglected for the organizations, federations, and youth and sports offices to a great extent. In fact, despite high interests in the creation of the strategic structures and plans and formation of the regulations, systematic efforts have not been made to evaluate in these organizations and there are many ambiguities on the performance results and rooting their problems. At the same time, the youth and sports offices play an important role in the development and promotion of sports in the provinces and counties, responding to a part of the requirements of the communities, in particular the youth, and achieving the excellent social, psychological, emotional, and ethical objectives. Without investigating and knowing the progress and objective achievement level, it will not be possible to identify the challenges faced by the youth and sports offices, get feedbacks, know the implementation level of the formulated policies, and identify the items that need serious improvement. All the above-mentioned will be impossible without measurement and evaluation. Lord Kelvin

says: "Anything we cannot measure, we cannot control, and the more we cannot control, the more impossible it will be to manage." For rapid growth in the sport organizations, the performance evaluation in the organizations has to use the evaluation study in all the areas and the performance evaluation should be developed as a combination of individual and organization evaluation (Kaplan and Norton, 2001). With the increased competition in sports and the changed attitude toward the sports as an industry, sport organizations need indicators and patterns to evaluate their performance for dynamism and excellence in the sport programs and activities, and as the physical education programs and sports are mostly executed by the youth and sports offices, federations, and sport groups, the youth and sports offices have a great responsibility in the development of the sports and implementation of the physical education programs in the country (Parvin, 2011). Thus, the definition of the strategies and obtaining strategic preferences to make a roadmap and establish a performance management system based on the progress in achieving the strategies designed by the Ministry of Youth and Sports in the national level and youth and sports offices in the provincial level can fill the theoretical and practical gap to a great extent. Previously, Khanmoradi et al. (2015) evaluated the performances of the youth and sports offices in Kermanshah Provinces, Iran, based on EFQM model and found that excellence, community results criteria, commercial cooperation, and resources had the highest mean scores, respectively. The highest correlations were between resources and employees results and between process and customer. The lowest correlation was between the criteria of community results, commercial cooperation, and resources. Designing a performance evaluation model for the football pro league of Iran, Hoseyni Keshtan (2014) concluded that the indicators of costs, revenue, player's wages, club age, number of stadium audience, player's stability, management stability, number of titles, coaches' wages, coach stability, and finally league experience had the highest effect coefficients on the performance of the clubs by 3.83, 2.18, 1.95, 0.85, 0.68, 0.57, 0.42, 0.35, 0.18, 0.058, and 0.03, respectively. Nejadshajjadi et al. (2013) identified and prioritized performance evaluation indicators for the Iranian sport federations using AHP model. In their prioritization of four general criteria of federations' performance evaluation, support and planning affairs, development of sport infrastructure, technical and sport matters, and development of physical resources and equipment were ordered, respectively. Moreover, in an attempt to develop a performance management framework for the National Sport Organization of Australia, O'boyle (2015) emphasized the necessity of the performance evaluation in the sport organizations to provide quality-based services to the beneficiaries in a responsive and transparent manner. In all the performance evaluation means, key indicators, including strategic plan, excellence

culture, national team, player and coach development, expert services, beneficiaries, sustainable development, and the commercial aspects of sports were emphasized.

Any sport organization needs a performance evaluation system to ensure the desirability of its activities, particularly in complicated and dynamic environments (Mosafa, 2014). Evaluation system refers to subjects such as the evaluation of the tasks, methods, processes, inputs and outputs (Tolou and Joshaghani, 2014). Appreciating the works of the internal authors, the current study attempts to use the findings of the work of Marashian (2014), entitled as "Formulating a Strategic Plan for the Youth and Sports Office of Khuzestan Province" and ISM to propose a graded model of strategies to provide the sport managers of Khuzestan Province with fundamental priorities and work steps. Thus, both the work scheme and performance evaluation means will be presented to the sport managers in the province. It should be noted that Marashian (2014) introduced 17 strategies given in Table 1 as the strategic plan for Khuzestan Youth and Sports Office. The main question in this study is "which of the 17 strategies are fundamental and which of them are outcomes of the implementation of the fundamental ones?" In fact, the dependence and influence of these strategies are a question that was not answered in the study of Marashian (2014). This study aims to provide an answer by using the academic and executive experts' comments in sports in Khuzestan Province. Hence, the author is trying to answer the question "what is the relationship between Khuzestan Sport Performance Evaluation Model and ISM?"

Methodology

The current study is an applicable research in terms of methodology, which attempts to use ISM method and present a performance evaluation model for Khuzestan youth and sports office. This study is a quantitative one of descriptive-analytical type that used documentary and field methods to collect the data. For data collection, the strategies formulated in the treatise of Dr. Marashian (2014) were employed. The data required in the ISM were collected by a researcher-made questionnaire that was distributed online among experts using Google Form. The statistical population consisted of scientific and executive experts involving the director, assistant directors and masters in the youth and sports office of the province, heads of the youth and sports offices of the counties, and the professors of the physical education universities and faculties in Khuzestan Province. 120 individuals were identified as the statistical population, among which 60 were invited to participate in the conference. Ultimately, 30 individuals were selected as the final experts by the purposive sampling method. In the questionnaire, the experts determined positions for each strategy against other

ones. The questionnaire was designed in form of a 17*17 matrix in which the experts determined which strategy lays the ground for which one and if they are related. If a strategy in a row laid the ground for the strategies in the corresponding column, the expert gave the score 1, and if not, they gave the score 0. The validity of the questionnaire was explored by the information obtained from the related studies, supervisor, consultant, and experts in governmental management, industrial management, and sport management, gaining the required validity after collecting and applying the expert's comments. Moreover, given the nature of the questionnaires, referring to the experts, and providing retrospective statics, such questionnaire did not need validity investigation. This study employed descriptive and inferential method to analyze the data. SPSS software was used to describe the indicators of mean, standard deviation, and bounds as well as tables and graphs. Moreover, MATLAB was employed to analyze the data relating to the ISM.

ISM is a suitable technique to analyze the effects of a component on the other ones. This methodology examines the order and direction of the complicated relationships between the components of a system. In other words, it is a means by which a group can overcome the complications between the components (Azar and Ahmadi Kohan, 2008). For ISM, the following steps should be followed:

1. Identify the variables (influencing factors) relating to the problem in a certain social field,
2. Build a structural self-interacting matrix to investigate the problem variables in pairs,
3. Build an initial access matrix (in this step, the self-interacting matrix transforms into a money matrix),
4. Build the final access matrix by which different layers of the model can be recognized, investigating the dependence and influence coefficient of each variable (factor),
5. Level partitioning: in this step, the final access matrix is divided into different levels. Typically, in large systems, the network relationships between the system components increase its complication, which can be reduced by level partitioning of the model,
6. Draw the model: in this step, the final model of the variables is drawn according to the variable levels and final access matrix, and
7. Analyze the influence power and dependence (MIC-MAC Table).
 - (i) Autonomous variables: they have low influence and dependence, with a small effect on the relationships and dynamism of the system.
 - (ii) Dependent variables: they have high dependence and low influence.
 - (iii) Independent variables: such variables have high influence and low dependence. They are called key variables.

(iv) Link variables: these variables have high influence and dependence. In fact, any change in them will change the others (Ahmad and Siddiqui, 2013).

Findings

Descriptive findings showed that among 30 experts participated in the conference, 21 (70%) were male and 9 (30%) were female; 9 were 20-30 years of age (30%), 15 (50%) were 31-40 years of age, and 6 (20%) were 41-50 years of age. 21

(70%) individuals had PhD, 6 (20%) had master's degree, and 3 (10%) had bachelor degree. In terms of job position, 18 individuals (60%) had university positions and 12 had executive positions in the youth and sports office of Khouzestan.

The 17 strategies proposed by Marashian (2014) were employed to provide sport strategies for Khouzestan Province. After the questionnaires were completed by the experts and the matrix cells were summed up, the initial access table was obtained as follows:

Table 1. Structural Self-Interacting Matrix for Khouzestan Sport Performance Evaluation Model.

	1. Economy committee	2. Two-way communication	3. Sport village	4. Basic sports	5. Public relations	6. Sport ethics	7. Public participation	8. International relations	9. Events hosting	10. Organizational interaction	11. Preparation scheme	12. h.a.s obstacle elimination	13. Place management	14. Strategic council	15. Knowledge management	16. Strategic management	17. Human resources management
1. Building economy and marketing committee	27	29	22	27	24	24	29	20	25	24	20	22	25	20	25	24	
2. Two-way communication with commercial and industrial centers	25	20	15	21	14	25	22	27	25	9	12	15	10	15	15	10	
3. Building sport village	21	29	22	11	15	24	24	27	20	10	15	22	14	15	7	21	
4. Basic sports development	28	15	30	14	8	30	14	25	26	15	8	15	10	15	11	21	
5. Public relations development	28	27	25	26	24	26	30	24	22	25	27	20	15	19	11	16	
6. Sport culture and ethics development	15	10	15	13	22	23	20	27	21	14	15	7	15	9	11	23	
7. Public participation development	28	24	26	27	22	30	24	26	30	23	26	22	15	23	14	30	
8. International sport relations	19	28	26	21	25	15	23	18	30	13	15	10	15	19	14	20	
9. Event hosting system	30	27	22	26	20	15	18	25	21	27	14	20	15	26	14	22	
10. Inter-organizational interaction	23	24	22	27	21	15	23	29	23	30	20	29	28	26	22	26	
11. Preparation scheme	20	29	25	23	29	28	17	22	24	20	19	21	28	16	29	22	
12. h.a.s obstacles elimination	29	30	29	27	25	26	27	30	28	23	29	27	30	26	28	26	
13. Sport places management system	28	30	26	24	26	27	23	28	30	25	10	15	15	28	15	29	
14. Sport strategic council	22	30	24	23	29	19	21	24	22	28	18	29	23	16	28	30	
15. Knowledge management system	30	30	25	28	27	24	26	25	26	28	29	28	24	26	28	30	
16. Strategic management approach	23	21	24	27	19	30	24	29	23	29	25	17	28	25	21	19	
17. Optimized human resources management	28	29	25	30	29	28	24	26	27	26	24	26	27	25	30	30	

Mode Principle was employed to transform Table 1 into the initial access matrix. In the above matrix, mode is 15. Thus, according to mode principle, all the scores equal to or lower than 15 are taken as 0 and those greater than 15 are taken as 1. Therefore, the initial access matrix will be as indi-

cated in Table.... In Table -, the strategies are coded to summarize the data. Moreover, 1 is placed in the matrix diagonal cells, which means that each strategy also lays the ground for the realization of itself.

Table 2. Initial Access Matrix.

	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	Power of influence
S1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
S2	1	1	1	0	1	0	1	1	1	1	0	0	0	0	0	0	0	8
S3	1	1	1	1	0	0	1	1	1	1	0	0	1	0	0	0	1	10
S4	1	0	1	1	0	0	1	0	1	1	0	0	0	0	0	0	1	8
S5	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	15
S6	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	1	7
S7	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	15
S8	1	1	1	1	1	0	1	1	1	1	0	0	0	0	1	0	1	11
S9	1	1	1	1	1	0	1	1	1	1	1	0	1	0	1	0	1	13
S10	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	16
S11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
S12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
S13	1	1	1	1	1	1	1	1	1	1	0	0	1	0	1	0	1	13
S14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
S15	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
S16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
S17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
Dependency level	16	15	16	15	15	11	17	16	17	17	11	10	13	8	13	8	16	

According to the analyses of influence and dependence (MICMAC Graph), the model variables are classified into four groups in this stage as indicated in Fig. 1.

Fig. 1 shows that most of the strategies fall in the link variables group, which means that any action on these variables will change the others. In the following, the strategies are categorized into levels with respect to each other.

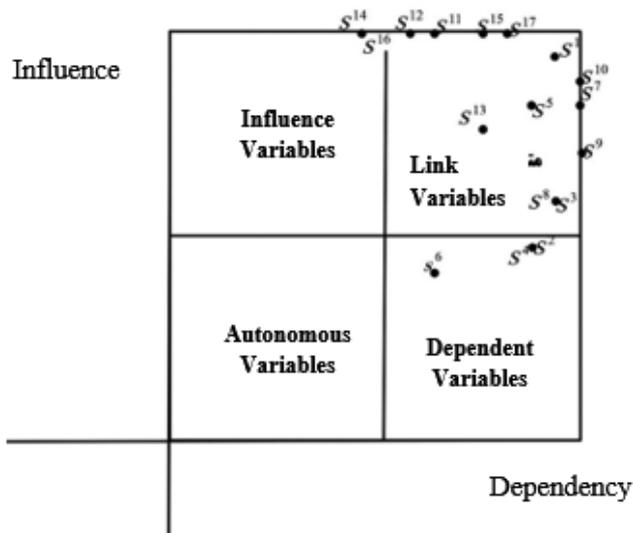


Fig. 1. MICMAC Graph.

Table 3. Strategies Levels, Step 1.

Strategy	Input Set	Output Set	Shared Set	Leveling
S1	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	
S2	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	level 1
S3	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	level 1
S4	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	level 1
S5	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	
S6	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	
S7	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	level 1
S8	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	
S9	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	level 1
S10	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	level 1
S11	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	
S12	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	
S13	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	
S14	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	
S15	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	
S16	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	
S17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, 13, 14, 15, 16,17	

According to Table 3, strategies 2, 3, 4, 7, 9, and 10 fall at level 1. In fact, to place each of the strategies at a certain level, the shared set has to fully match with the input set. Level 1 for the strategies means that those strategies have the highest dependence, being placed on the top of the model. Thus, other strategies have to lay the ground for the realization of the strategies at level 1. To determine the levels of the other strategies, the leveled strategies are removed and the process is repeated. This procedure continues until all the strategies are assigned levels. Given that the level assignment process is

repeated, we avoided presenting the tables to summarize the findings, only providing the results.

In step 2, given the data analysis, strategies 5, 8, and 18 were placed at level 2. Thus, these strategies were removed, starting step 3. In step 3, strategy 6 fell in level 3. In step 4, strategies 1, 13, and 15 took level 4. Finally, in step 5, strategies 11, 12, 14, and 16 fell in level 5. After the level assignment completed, the final model was obtained as shown in Fig. 2.

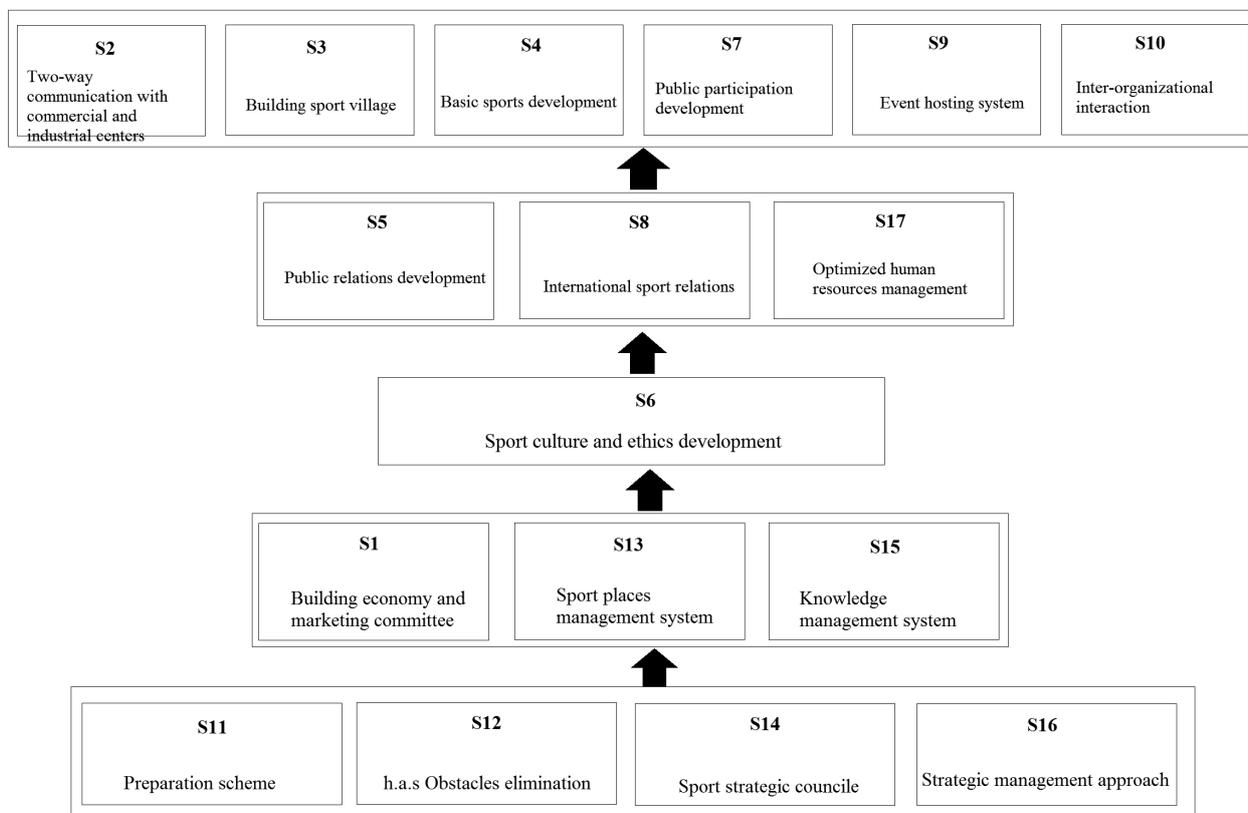


Fig. 2. Khuzestan Sport Performance Evaluation Model based on ISM.

Conclusion

Khuzestan sport performance evaluation mode based on ISM indicates the priorities required to evaluate the performance in the province and counties. It means that the strategies at the bottom levels are the most basic and fundamental ones that have to be correctly implemented to realize the strategies at higher levels. The findings demonstrated that the strategies of sport preparation, level, official, and structural obstacles elimination, building sport strategic council, and strategic management approach are the most basic and fundamental strategies that can lay the ground for the realization of the other ones. According to the ISM principles, all the variables (strategies) at the same level provide conditions for the realization of each other. Hence, it can be said that the sport preparation scheme, h.a.s obstacles elimination, and sport council will not happen until the strategic management approach is adopted in the province sports. The same argument holds for other strategies. These findings clearly remind the sport managers and executives of the fact that the sport plans and schemes have to be made primarily to implement the strategies at the fundamental level. O’Boyle (2015) emphasized the key indicators, including strategic plan, excellence

culture, national team, coach and player development, elite services, beneficiaries, sustainable development, and commercial aspects of sports, among all the performance management means. Part of the mentioned excellence culture is in fact the strategic management approach and building the sport council. At a higher level, the strategies of knowledge management system, sport places management system, and economy and marketing committee rest. These are basic strategies that should be implemented if the strategies at a lower level were already implemented. An interesting thing in this study is that the strategy of sport culture and ethics development rests in the middle level alone. In fact, this shows that, in contrary to what was thought before, ethics are a base for all the actions and plans of any organization. But, ethics needs the implementation of the previous requirements to be implemented. This means that, for example, ethical and cultural principles will not be implemented in sports strongly until the strategy of sport preparation scheme is implemented in Khuzestan Province and execution plans are based on real facts and figures. Therefore, no one is able to define the ethical and cultural principles in the sports of the province until a body is built acting under Khuzestan sport council. This finding proves to the managers that the implementation

of the strategy of sport ethics and culture is not a claim, but a scientific practice with logical support. If the previous strategies are implemented intelligently, the higher level of the strategies will be implemented, that is, optimized human resources management, international sport relations development, and public relations development. In spite of the fact that we are at level 4 of the strategies in Khouzesan province, the strategies seem to be laying the ground for the implementation of the last level of the strategies, that is, level 5. Thus, the strategies of public relations development, human resources optimization and international relation development need to be targeted and implemented properly. If all the strategies at the previous levels are implemented properly, the implementation of the final level strategies, including two-way communication with commercial and industrial centers, building sport village, basic sports development, public participation development, event hosting system, and inter-organizational interactions can be expected to be more possible and achievable. Khanmoradi et al. (2015) concluded that the mean

scores of excellence, community results, commercial cooperation, and resources were highest, respectively. Nejad-sajjadi and Soleymani (2013) prioritized four general criteria for the performance evaluation of the federations to be support and planning, sport infrastructure development, technical and sport matters, and physical and equipment resources, respectively. This was in consonance with the 17 strategies proposed by Marashian (2014). But the findings of the previous studies do not provide the managers and readers with such a hierarchy of the strategy implementation. In cases where we deal with various criteria, objectives, and strategies, utilization of ISM seem to be efficient for the identification and prioritization of the basic variables, laying the ground for the other variables and giving proper choice to the managers and decision makers. Hence, the sport managers in Khouzesan Province are required to provide situations for the growth and excellence of sports in the province using the roadmap they were given by Marashian (2014) and the current study.

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