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Database Management Model in Sport

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Review
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Abstract

Comprehensive issues such as the delivery of sports activities to the masses and the implementation of amateur and professional sports are related to sports management. Today's sports manager's task is to make the necessary decisions by making use of the current developments and technologies of the world in order to spread sports to the masses. In this context, technological developments in field of database software in the world of sports, provide very important opportunities to support and facilitate the decision stages of sports managers. Accordingly, with this review study, in the field of sports management for the solution of Turkey's national needs, national and international studies have been examined and tried to portray. In line with this goal, a new technology of database management model including Turkey's national needs, sports services and industry, have tried to be suggested. In our study, it was tried to present a new database social management model in sports, by merging sports industry elements and sports management duties through "Activities, Social Traceability and Communication".

Key words: Sports Industry, Sports Management, E-government, Database Management, FATIH model

Sporda Veri Tabanlı Yönetim Modeli

Öz

Spor faaliyetlerinin kitlelere ulaştırılması, uygulanması, amatör ve profesyonel sporun geliştirilmesi gibi kapsamlı konular spor yönetimini ilgilendirmektedir. Günümüz spor yöneticileri sporun kitlelere yaygınlaştırılması için dünyadaki güncel gelişmeler ve teknolojilerden de faydalanarak, gerekli kararları almak durumundadırlar. Bu bağlamda günümüz veri tabanlı yazılım alanında sağlanan teknolojik gelişmeler spor yöneticilerinin karar aşamalarını destekleyecek ve kolaylaştıracak oldukça önemli fırsatlar sunmaktadır. Bu doğrultuda, derleme niteliğindeki bu çalışma ile spor yönetimi alanında Türkiye'nin ulusal ihtiyaçlarının çözümüne yönelik, ulusal ve uluslararası çalışmalar betimlemeye çalışılmıştır. Bu amaç doğrultusunda, spor hizmet ve endüstrisini kapsayan, Türkiye'nin ulusal ihtiyaçlarına hitap edecek ve yeni teknolojilere dayanan, veri temelli bir yönetim modeli önerilmeye çalışılmıştır. Çalışmamızda, spor endüstrisi ögeleri ile spor yönetim görevlerini "Faaliyetler Aracılıyla, Toplumsal İzlenebilirlik ve Haberleşme" (FATİH) sağlayarak, sporda veri temelli sosyal bir yönetim modeli sunulmaya çalışılmıştır.

Anahtar Kelimeler: Spor Endüstrisi, Spor Yönetimi, E-devlet, Veri Tabanlı Yönetim, FATİH modeli

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INTRODUCTION

In the report dated 21.12.2018 (SHGM, 2019) published by the General Directorate of Sports Services of the Republic of Turkey, the number of active athletes compared to the population of the country is below 1%, this situation can be accepted as an indication that the sport is not spread to the masses in Turkish Republic. The fact that the current active mass sports is limited to 695,698 athletes on an annual basis among the population of 85 million is an indication that the mass sports is quite limited if there is no statistical problem. As a matter of fact, Özer and Çolakoğlu (2017) emphasized as well that sports could not be popularized in the society, and that is one of the main problems of sports in Turkey.

Today, spreading sports to the masses, directing the sports industry and organizing sports organizations is the main field of activity of sports management. To date, various managerial and conceptual issues have been studied separately in the sports industry or sports management task areas in Turkey. Additionally, looked from a global perspective, since the development of computer technologies and the importance of data collection are understood, many management models are derived. Here can be mentioned one of the first models developed by Pin and Chen in 1976 the "Entity-Relationship Model" (Pin & Chen, 1976), including "network model", "relational model" and "entity set model". Their study sheds light on today's data-based management systems. But the database management style that could derive from the interaction of the sports industry and task groups and its produce of solutions to statistical or mass problems in sports as mentioned above, has not been studied.

In order to be able to achieve all goals stipulated, it is extremely important for the people interested with sport to have an access to digital data and contents. Developing culture of mutual assistance and learning from each other is preferable. This particularly applies to cases when there are obvious unfavourable situations and imperfections, both in the very organization and in the sport grounds surroundings. Web portals and various types of databases with a diversity of information and knowledge can be used for realization of these commitments. This actually means creating grounds for the sport organization to be able to successfully face and overcome all the challenges it encounters (Manev & Jakimovski, 2017).

Today, in the world it is possible to come across some database sports management applications that contribute to speed, efficiency and quality increase in sports management. Accordingly, a "Sports Information System" which is established within the scope of e-government in Turkish Republic has taken some important distances, but an effective management model that will provide mass orientation to sports is still needed. It is thought that the researches on this subject will bring quality, effectiveness and efficiency in sports management.

In the current study, it is aimed to create a model that will contribute to the sports management of Turkish Republic in line with the database management systems that are becoming popular widespread in the world today. In this regard, in our current study, we aimed to suggest a database

sports management model for the needs of Turkish Republic in order to give momentum to sports management and to enable sports services to spread effectively to all levels of society. In this respect, first of all, it is necessary to get to know the sports industry, sports management tasks and current database management practices.

METHOD

Literature reviews are designed to provide an overview of sources that have explored while researching a particular topic and to demonstrate to the readers how the research fits within a larger field of study (Fink, 2014). In this line various database management practices and successful examples in the world and Turkish Republic that organize sports from the bottom and produce useful data for sports management were examined. With the current study, it was aimed to create a descriptive resource to create a national database infrastructure in sports. In this regard, this research, which is a review study, attempts to present a distinctive model for sports management including database application that can meet national needs.

FINDINGS

Sports Management and Sports Industry

Management in general is the orientation of organization and events to reach its goals. To achieve this goal is needed a managerial tool to coordinate resources. All kinds of administrative activities are carried out in a physical or virtual structure called organization. In modern science, "management" refers to the process of managing or directing various organizations such as an employee working in a market economy, a working group, a team, an organization. The main philosophy of sports management is stated as the implementation of the necessary managerial skills for the management of sports-related main and by-products in the sports industry and organizations to maintain their existence in accordance with the purpose (Ekmekçi, 2013: 8).

Management in sports refers to the rational use of materials, human and information resources in market conditions for the implementation of duties and objectives determined within the frame of sports organization. In other words, sports management is the effective management knowledge, skills and practices of inter-sectoral organizations such as sports industry, sports medicine, sports education and sports organizations (clubs, federations, leagues, associations, etc.) (Altuhov, 2019).

While executives are putting their thoughts and plans into practice, they have to develop an organizational model with a way of acting in line with the thought and plan. When operating the organization model, it should adjust the timing and power balances of activities well; otherwise the activities will not meet expectations. These features are the factors to be considered in sports organizations and structures. Due to the above-mentioned features, the concept of organization has great importance in sports management. The organization of major tournaments and competitions,

has many sub-units. The planning, coordination, task responsibilities and supervision of all units require great knowledge, skills and dedication. Therefore, sports managers should know the concept of organization very well (Ekmekçi, 2013: 5). To engage individuals with sports, to participate in sports activities or to be a spectator is possible through getting to know well the operating sectors of the sports industry, Therefore, it is important to know the sports industry and the place of sports activities.

The only feature that differentiates the sports industry from other industries is sports activities, consisting of games and competitions. Accordingly, Pedersen et al. (2011) collected the sports industry model developed by Li et al., (2001) under 3 items:

1. Sports activities production,
2. Production of services and products for the realization and support of sports activities,
3. Trade and sale of products related to sports activities.

According to the "Sports Industry Model", the sports activities production is in the centre of the industry. Other sub-support sectors surround the activity production centre by being around. In the surrounding sub-support sectors, sports services and products are produced, traded or sold for the sports activities production centre. This model connects the existence of sub-support sectors to the production of sports activities in the centre, by centring sports organizations (Pedersen, Parks, Quarterman & Thibault, 2011:12).

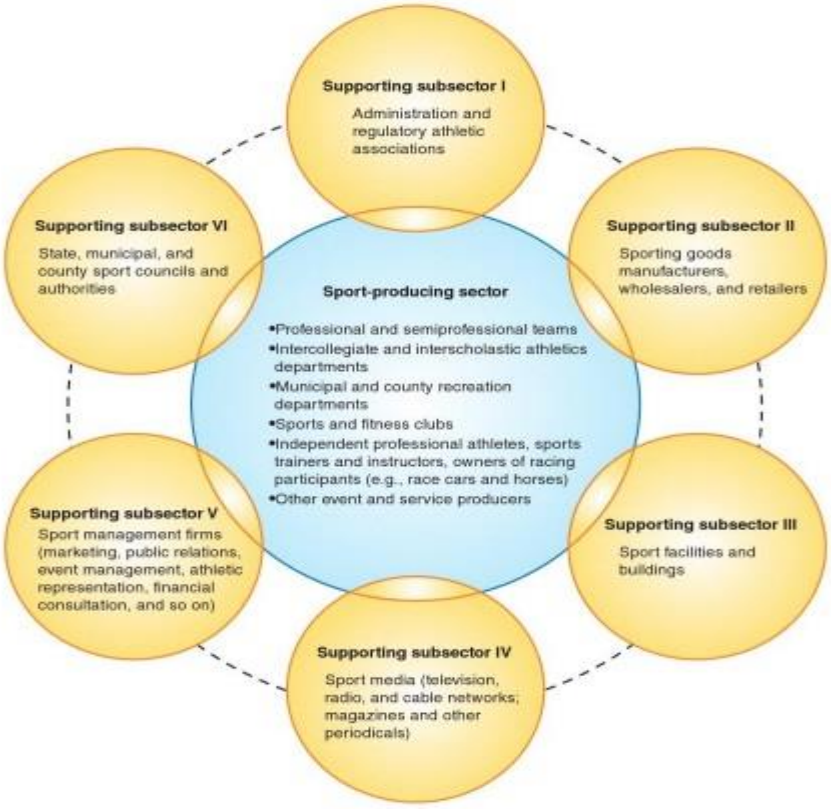

Figure 1. Li, Hofacre and Mahony's sport industry model (Eschenfelder & Li, 2007)

It will be useful to briefly touch on the "Supporting Sub Sector III" sector, which is included in the sports industry model and includes sports facilities. Sports facilities are the structures, fields and areas for sports activities, personal training and preparatory training for each sports branch, suitable for national and international competitions that have units to meet the needs of athletes and spectators (tribune, toilet, shower, etc.) before and after sports activities (Özdemir, 1998). Sports activities which are at the centre of the sports industry cannot be carried out regardless of location, facility and time. Every sporting activity needs a venue (including virtual spaces for virtual matches). Sports venues and facilities are also an important support element within the sports industry for the society to access sports activities and services. It is clear that there is no mention of sports organizations, sports services and management where there are no sports venues and facilities. Therefore, it would be appropriate to position the sports facilities and sports activities as inseparable stakeholders in the centre.

Tasks in Sports Management

General sport management responsibilities that sport managers should fulfil are shown in Figure 2. The tasks listed in the groups represent two types of responsibilities. To perform the duties of the organization management department, it is necessary to have leadership and management features. Sports managers should have good organizational skills to manage sports organizations, activities and events. In the communication management group, verbal and correspondence skills are more important skills. Communication management includes information needs, accurate information, categorizing and classifying information, developing product and service information, and organizing information (Ekmekçi, 2013: 7).

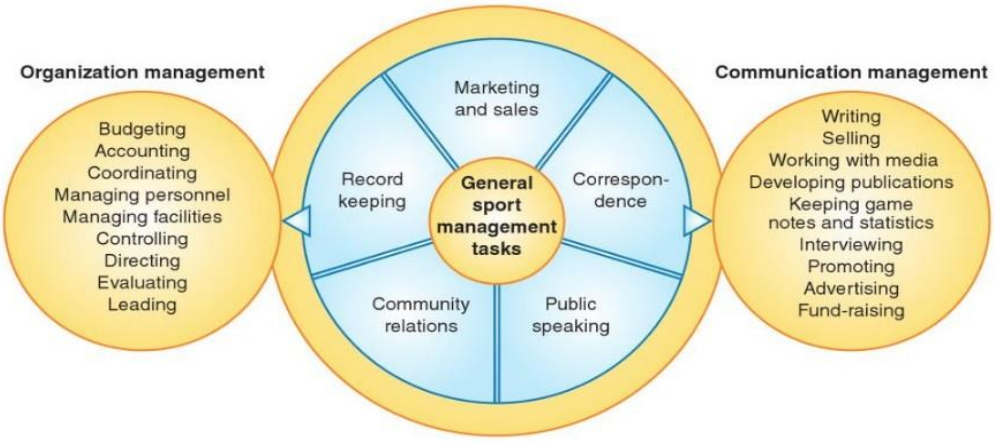

Figure 2. Sport management task cluster (Parks, Chopra, Ouain, and Aiguindgue, 1988)

The figure of sport management task cluster draws a framework that defines expectations from the sports industry. In the centre of the figure above, there are "General Sports Management Tasks" that sports managers of all levels can benefit from their work and transactions. Whether it is a sports club, a professional sports team, front office worker, a sports association or an inter-

university sports department worker, everyone regardless of where they work must have proficiency in the central tasks (correspondence, public relations and other layers) of the figure above (Pedersen, Parks, Quarterman & Thibault, 2011:12). In contemporary sports management, managers should now have the skills of using computer, creating and using data. On the other hand, sports managers should also have the ability to use internet-based technology for marketing, communication, media, fan and customer-oriented works (Ekmekçi, 2013: 7). Managers with these skills can access the information that they need more easily at all stages of their management processes. Thus, in the light of objective information and data, managers can create a healthier idea and decision about the events, subject, competition, athletes, facilities, coaches, referees, clubs. In this regard, nowadays, sports managers can form their ideas and decisions more accurately and effectively by using database technologies in sports management. When analysed from this aspect, database sports management practices facilitate the work of sports managers.

Database Management Systems

Whether in the private or public sector in today's business life, managers make their managerial decisions by analysing the data coming from the lower level business and transaction processes. In other words, the information transferred to management levels by analysing the data filtered from production and service processes shapes the decisions of the managers. The data and information that managers need are linked, but not identical. The data is raw, unprocessed and not analysed. When the data is analysed and processed, it becomes information. Data is the building block of knowledge, raw, unformed and unresolved. Information offers both meaning and content. Computers need data, and people need information. For this reason, today's managers use various software and systems to obtain information from computer-based data. At this point, the concept of database comes into play. Database is a collection of logically related records or files that are integrated into a common pool and provide data for one or more uses (Vincent et al., 2009). The term of database management system covers exactly one database and all software related to management on this database.

It is possible to divide databases into two levels:

- Logical Layer
- Physical Layer

Accordingly, the layer expressed “Logical Layer” above, is closer to human thought, more comfortable for us people to think and use it. On the other hand, the layer expressed “Physical Layer”, has a structure that is a little more distant from the daily thinking of people while it deals with more concrete things, such as how the computer holds the data. With a clearer expression, we have a data to be kept. While dividing this data into columns in tables as the logical layer and as the physical layer, we are talking about blocks, segments on disk. Here, the system meant by the database management system includes these two layers as a core. Database management systems

are platforms that include additional software such as user management, system backup and restore, performance display and improvement, and scattered database operation (Şeker, 2019).

There are many kinds of data models. Some of the most common ones include (Lucidchart, 2020):

- Hierarchical database model
- Relational model
- Network model
- Object-oriented database model
- Entity-relationship model
- Document model
- Entity-attribute-value model
- Star schema
- The object-relational model, which combines the two that make up its name

It's possible to describe a database with any one of these depending on several factors. The biggest factor is whether the database management system used supports a particular model. Most database management systems are built with a particular data model in mind and require their users to adopt that model, although some do support multiple models (Lucidchart, 2020). Databases play an increasingly important role in traditional management (accounting, sales, decision-making, etc.) applications that concern corporate information systems, especially in e-commerce or customer relationship management. Today, database systems have an important place especially in the field of management and informatics (Gardarin, 2003:3).

Database Management Systems in Sports Management

Today, the success of an organization depends more on its ability to manage activities such as obtaining accurate and instant data from its actions, effectively using and analysing the acquired data. Expressions such as the information highway and computing have grown rapidly everywhere and become billions of dollars of industry (Ramakrishnan & Gehrke, 2003:3).

The use of multimedia databases has the potential to revolutionize the way coaches, athletes, administrators and the public approach sport. It can impact the way sports are judged, the way athletes are selected to participate in teams, the way coaches approach training plans, and the public perception of sport both at the amateur and professional level. Many skilled, elite level coaches and sport administrators make decisions based on intuition, 'gut feeling' and the influence of past experience. Effective use of performance databases can encourage sport professionals to employ an evidence based decision-making approach. This does not mean that they need to abandon their 'intuition' rather they need to integrate valuable data modelling into the decision making process. If the data does not support intuition, the data could be wrong, but at least there

is a challenge to verify the decision. With the advent of online databases in sport, evidence based decision making is now practical (Vincent et al., 2009).

With the emergence of online databases in sports, evidence-based decision-making is now practical. Databases with the tools for capture, storage, management, retrieval, integration, analysis, interpretation, reporting, and dissemination have the potential to be the single most powerful tools in sport science. Knowing how to collect, store, access, retrieve, and integrate information is critical to effective performance analysis and decision-making. Databases should form the underlying foundation of most other tools used in sport science as they provide the structure and access to the information that is the catalyst for most other applications (Vincent et al., 2009).

Database Sports Management Applications in the World

Looking at the applications available in the world, it is possible to see e-applications that combine the sports industry layers comprehensively. Some developed countries in the field of sports such as Russia, Australia, Canada, USA, France, and England seem to use sports applications that electronically organize existing sectoral sports structures from the base. In the world and Turkey, the broad scope of software and application samples is available in sports. We can list some popular applications as follows: Activesports, Wildapricot, Ususport, Teamapp, SportsEngine, Mobilsporcu, Clubmanagercentral, DakStats, Omnisport, Playyon, Youth Sports Management, Zedsport, Csharpsports, etc. (Getapp, 2019; Yazılım, 2020).

In addition, some of the existing applications serve in many languages, and also serve by covering many countries and removing borders. If we take the "Ususport" software as an example, it has gained popularity and is used actively in many countries in Asia and the Balkans. If we count the countries covered by Ususport software, it includes many countries such as Russia, Azerbaijan, Armenia, Georgia, Bosnia and Herzegovina, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Serbia, Tajikistan, Turkmenistan, Uzbekistan, Croatia, Montenegro, Mongolia, Moldova and Ukraine (Ususport, 2019). Existing sports software can generate instant data and statistics for sports businesses and federations, starting with the primary state of training and competitions. Apart from this, this statistical information may include the financial status of the business, as well as generate useful information about the staff, customer and facility usage.

Another example is the French Ministry of Sports, especially since 2001 it has been providing sport's statistical information under a lot of topics (Sports, 2019). The National Youth and Popular Education Institute (INJEP), established by the French Ministry of Education and Youth, is transformed into useful statistical information and studies centre by analysing and synthesizing the data obtained from the field of sports. The data and information obtained from the development of sports field can be compared with previous years and accordingly, the necessary measures can be taken on time. In France, INJEP acts as both an observatory that produces information and a

resource and expertise centre for youth issues and policies, popular education, community life and sports (INJEP, 2019).

Today, China has made considerable progress in the promotion and spread of social sports that appeal to the masses through sports clubs or private sports centres etc. In this regard, economic and organizational transformation systems that trigger social competition have been transformed the state functions, and urban social sports management has been restructured in China by integrating the "Social Group System" instead of "Single System" (Wang, 2004). In this topic, Zuo and Song (2004) stated that the basic point of China's social sports strategy is formed by the formation of many small sports groups that are joined together instead of crowds.

Database Sports Management Applications in Turkey

With the integration of Sports Information System in Turkey, many works and operations of sports contents are transferred to the Youth and Sports Ministry database, whose information technologies environment is forming a database of Turkish sport, which can ensure that sports data is used from a single source. Providing services related to sports in Turkey to the citizens through e-government, the first and unique application "Sports Information System" is made with about 2 million transactions annually. The system, which provides service through e-government, works integrated with 11 public institutions (GSB Spor Bilgi Sistemi, 2019). The transactions in Figure 3, refer to current transactions that can be made through e-government.

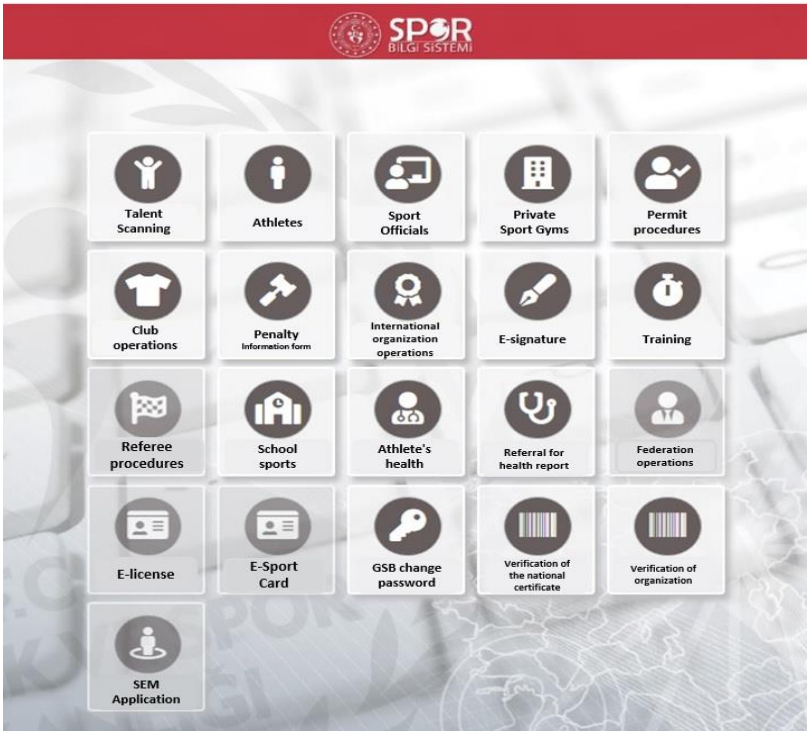

Figure 3. Sports Information System within the scope of e-government (GSB Spor Bilgi Sistemi, 2019)

The main objective in the e-government system is to create a state structure with increased information processing capacity, which can take urgent decisions and respond quickly to social needs. In this structure, e-government does not only mean that modern technique is widely used in the field of management. It also provides an opportunity to make management fundamental, simpler, faster, more effective and efficient to ensure citizen satisfaction. E-government is also a chance for transparency, participation and stakeholder (Taban, 2013).

Today, communication networks in Turkey, especially public automation systems carried out over the internet, are the software foundations of e-government projects. In the "Sport Information System" there are services used by real and legal persons through e-government. However, athletes and citizens can only access the limited sports information from this platform. Therefore, as Baştan and Gökbunar (2004) stated, it can be said that those who request service have not reached the desired level of sharing information and services yet. As a matter of fact, Demirhan and Türkoğlu (2014) in their research; some public employees and public service buyers were effectively benefied from e-government applications, a significant number of them stated that they could not profit from the e-government applications at the desired level due to the system deficiencies and insufficiency. They are also stating that preference for presentation services through more websites by public authorities, implementation of e-government is not reflected in the use specified in the bureaucracy. So e-government transformation for identifying the real sense, change, alternative properties was not fully realized in Turkey (Demirhan & Turkoglu, 2014). This situation is still valid for sports service applications today. Therefore, it can be said that e-government solutions for the needs of users at the base of society have not been popularized yet.

As a matter of fact, because of e-government services which cannot reach people's request, it is possible to come across some applications that are used by several schools and organizations in Turkish Republic which have not gained popularity. Sports management applications such as "mobilsporcu.com", "cla23.com", "sporokullari.gen.tr", which operate as a database system, stand out as applications that serve to meet certain needs of our people in the field of sports (Yazılım, 2020). However, an application that serves nationally and covers all layers of society has not been put into effect in Turkey yet.

DISCUSSION & CONCLUSION

As Baştan and Gökbunar pointed out (2004), "Today the e-government system is still disconnected and has no standards. Various public automation systems are not associated with each other and e-government transactions are tried to be carried out with service information and kept in data warehouses", continues to be valid today. They stated: "The last trend that has started to be observed in advanced countries regarding e-government structuring is development of models with an integrated e-government information system based on the delivery of all services from a single point" (Baştan & Gökbunar, 2004). Today Turkish e-government structure is almost reached to

the target they set. However, due to the new needs of communities such as social communication and sharing on the global virtual platform, current e-government structure remains insufficient. Therefore, differentiated, narrow scope applications that meet special needs can be seemed. Accordingly, there is a need for a new structural model that targets the society's comprehensive demand for sports services, reaching any information or interactive service, based on database technologies available in sports. One of the models that can be applied in sports is "High-level conceptual data models" that can provide concepts for presenting data in ways that are close to the way people perceive data. A typical example is the entity relationship model, which uses main concepts like entities, attributes and relationships. An entity represents a real-world object such as an employee or a project. The entity has attributes that represent properties such as an employee's name, address and birthdate. A relationship represents an association among entities; for example, an employee works on many projects. A relationship exists between the employee and each project (Watt & Eng, 2014).

Regarding the mass prevalence of sports, Karataş (2011) has associated management with personnel and facilities, the operation of materials, equipment and mass media, the adequacy of activities, balanced distribution and fulfilment of all responsibilities (Karataş et al., 2011). Zhang (2003) describes the structure of the sports management discipline as sports bureaucracy management, sports information management, sports industry management, competition management and school sports management. As can be seen, sports management has a wide range of goals, dimensions and areas of application and managing all these stakeholders together is a highly demanding issue. However, considering the current database technological developments and progress made by our state under the name of digital transformation (e-government), it is possible to create a database sports management model to rearrange the sports industry and task groups.

Existing sports activities are shaped and performed around a sports facility or venue (can be also virtual spaces). Each activity has space and time planning, so an activity without area cannot be considered. For this reason, sports facilities, together with sports activities and events are at the centre of sports management. Sports activities, which are the goals and objectives of sports management, can generate many useful data (types, duration, participation, results, officers, etc.) from the venue and facilities where they are performed. In addition, today's software and hardware technologies give us the possibility and opportunity in order to build efficiency and quality to sports management by adding services, activities, facilities and institutions from the smallest unit to the highest unit. As a matter of fact, Zuo and Song (2004) stated that the acceleration in Chinese sports was achieved thanks to "many small sports groups that were joined together in the sports rather than crowds". That's can be valid for Turkey by a sports management model based on rules, which will convey the decisions of the sports managers to the lowest ring and transfer the needs of each athlete to the top, providing bidirectional interaction that can be developed. In this regard, we should turn attention to a model that will add functionality to the sports industry described previously above by Li et al., (2011). Since sports activities are based on sports facilities and

venues, social and sportive groups that will be linked to each other by providing “Social Traceability and Communication through Activities” can form the structural sports management model of Turkish Republic in a database platform. It is possible to shape this model as follows.

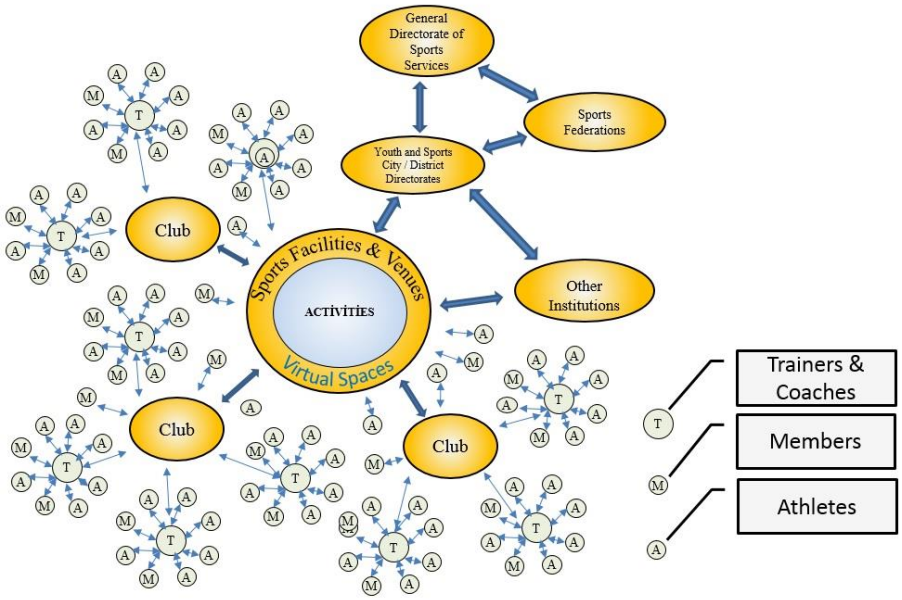

Figure 4. Structural model of “Social Traceability and Communication Through Activities” (FATIH) in Sports

The main success in sports management can be obtained in case of organizing the "Sport Management Task Clusters" presented by Li, Hofacre, and Mahony's (2001), in a way that optimally processes with the "Sport Industry Model" described by Parks, Chopra, Ouain, and Aiguindgue (1988). It can be thought that the sports industry constitutes the body of sports management, and sports management tasks constitute the spirit of sports management. The model, which can combine these two elements as body and soul, will enable to get integrated and functional management services based on the delivery of all services from a single point. In this regard, by adding sports management duties and the sports industry around the activities, today's software technologies offer the opportunity to make sports services effective. The mentioned database management systems can easily organize the society with a social network model, and the effective information and data filtered from it, can be reflected back to the sport management as an effectivity, quality and efficiency.

From another point of view, a system that can produce the necessary information and statistics for sports management levels will be able to reach the masses more easily by increasing quality, speed, efficiency and citizen satisfaction in sports management and processes. In this context, a functional sports management model providing “Social Traceability and Communication through Activities” (FATIH) can be achieved by combining the sports industry and sports management tasks. We can model the "FATIH" functional structure as follows.

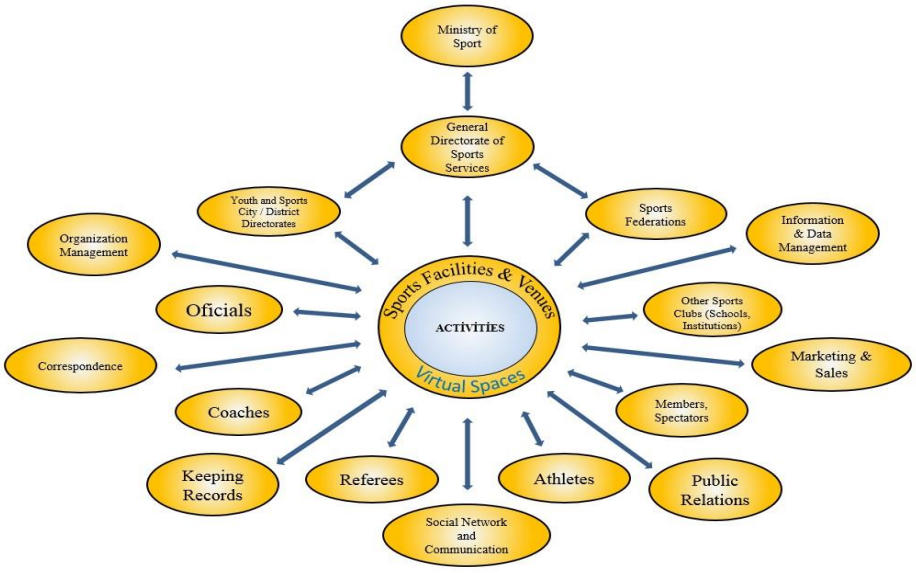

Figure 5. Functional model of "Social Traceability and Communication Through Activities in Sports" (FATIH)

Figure 5 represents the merging of the "Sports Management Task Sets" presented by Li, Hofacre and Mahony's (2001), "Sports Industry Model" described by Parks, Chopra, Ouain and Aiguindgue (1988) on the same platform. In the centre of the figure above are sports facilities and activities. In the second, intermediate layer of the figure, there are stakeholders who carry out, participate in and conduct sports activities. The last layer surrounding the scheme is the task groups of the sports management, which was previously explained. The Figure 5 means the sharing of data and information produced for sports management from sports activities in sports facilities and venues among stakeholders of the sports industry.

In the "FATIH" model, direct or indirect communication channels are required between the support sectors in the sports industry. Today, software technologies have become an important sector that includes concepts such as artificial intelligence, performing multi-dimensional tasks and providing solutions. Within the framework of the above model, it is possible to create a principle based on authority, rules and duties between real or legal persons. Thanks to this model, for the 1st generation artificial intelligence described by Intel (2020); "rules-based and emulated classical logic to draw reasoned conclusions within a specific, narrowly defined problem domain. It's well suited to monitoring processes and improving efficiency" is sufficient for its functionality. Considering that the 3rd generation artificial intelligence studies (Intel, 2020) are currently developing in the world, we can say that we are late in transition to artificial intelligence-supported database management.

Database software such as the "FATIH" model, applied in sports as a national social network platform that Turkey needs for many years, can be an easy solution for organization and participation of masses in sport activities. In this line, a path can be taken for an integrated and

effective e-government management model by combining the sports and other service units of Turkish Republic in the same denominator. It can be briefly described as in Figure 6 below.

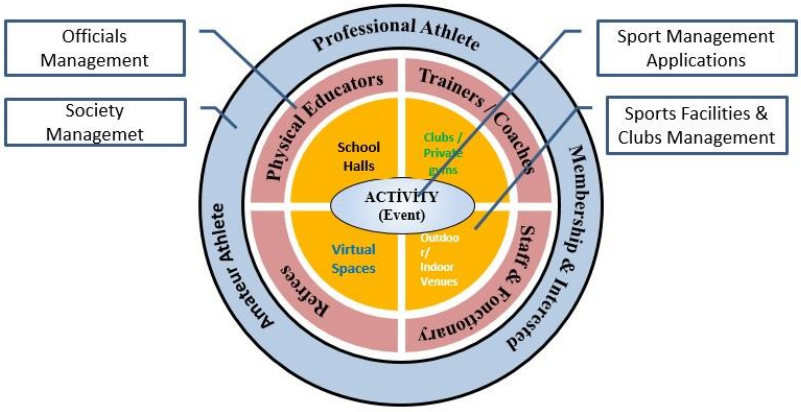

Figure 6. Core model of "Social Traceability and Communication Through Activities in Sports" (FATIH)

In case the data flow in the sports field is created like this model, it can be transferred to this sports information database with real-time data flow and can always be used in accordance with the needs of the sports manager. This kind of database sports management model is assigning the event on the convenient venue (Virtual spaces, outdoor-indoor venues) according to the nature of sports activities, attaches parts (Athletes, fans, members & interested) and service groups (Referees, officials, coaches, staffs) related to the sports event and organizes, follows, store and analyse all event data. Today, database social management models, which will be created like the "FATIH" model in sports, will appeal to a very large and important need with potential and value in our society.

With the current review study, which is proposing database management model, that will provide the organizational needs in sports, has been a result of examined and analysed compilations of current developments in the national and international arena. Accordingly, the "FATIH" model in sports, which is proposed as the "Social Traceability and Communication System through Activities" system, is an organizational model that includes small social sports groups joined around the activities and facilities at the base in centre and generally produces data for sports management service groups. It is thought that if the relevant model is adapted to Turkish sports management, some important results summarized below can be obtained.

- Sport-related (if desired, other state services) communities can be organized on the social platform and can provide an environment of information and benefit from quality, cheap and effective sports services.
- Organizing the sport at the base of society will be made more widespread. In addition, more realistic data can be provided in the number of licensed and registered athletes in Turkey.
- Continuity in success can be ensured by qualified follow up to elite sports.

- Standardization in management, reduction in bureaucracy, and increase in service quality can occur.
- All areas of sports management (Athletes, clubs, facilities, organizations, federations etc...) can become organized, traceable, reportable and auditable.
- Capacity utilization can be calculated and managers can be able to encourage their sport development and mass spread by observing the execution of sports activities within the plan and program.
- It enables sports managers to make accurate evaluations with instant statistics by obtaining the information and data, that they want to reach in every field (data from facility, density, beneficial demographic structure, athlete tracking, training and coach tracking, club data, etc..).

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