INTEGRITY OF KNOWLEDGE AND TECHNOLOGY, THE NEW PARADIGM IN SPORT

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Abstract:

The modern system of sport in the world is experiencing continuous deep qualitative, quantitative and structural transformation, resulting from any recent social, economic, political and technological conditions of the society. Better sports results achieved in recent years in various sports, to a large extent changed the perception and character of the sport and set new requirements for solving the current task on an integral basis. Origin, development and rapid changes in sport tehnology and business-control function of modern sports organizations are undoubtedly in the world today is one of the most important incentives change sports and business functions, and philosophy, and the turning of man to his knowledge and creative and creative potential, as the most significant production and development resources.

Key words: *information, techniques, data bases, data processing*

INTRODUCTION

One of the prerequisites for the active involvement of people in information and communication society is their ability to use information and communication technology (ICT in

Everyday life. Information and Communication Technology) in everyday life.

Taking into account the fact that the information and communication technology (ICT) made a significant impact on the workplace and everyday life of people and has become an inevitable competence, medium and long term objectives of sports development must include measures to ICT use expanded, contributing to the democratization process sports development. Only with the rapid development of technology overall, and particularly information technology and management, it becomes evident that the strength of the economy and science, as a priority development resources, less dependent on machinery, equipment and capital.

Information communication technology and sports

Information and communication technologies, observed through the function of their use, integrating modern technologies associated with modern computer (computer) systems and communications. This newly constructed integrated information systems based on the established and systematically applied set of organizational rules, which are associated with holders of task information (system elements).

To get into the sport could establish an information system, we have to first have to be designed, compatible and equal level of quality furnished all relevant information activities, and also have the most important information technology, software, personnel and organizational needs with the requirements and assumptions , in order to facilitate the collection, processing, interpretation and dissemination of data, which are primarily for the development of professional sport. Accordingly, it

is necessary to integrate information technology resources which include human resources (experts and users), hardware resources of computer systems, software resource software packages, resource database, resource, network communication media and network equipment, as between particular parties, groups or organizational units within the monitored information system, and between information systems and the environment, there are communication links. With the goal of optimal functioning of the system, it is necessary to devise and implement marketing strategies and operations of sports organizations on the Internet, with the aim of creating high-quality information flows within the organization, which allows the presence of high-quality sports organizations, which means it should be designed and implemented in constant communication.

Academic and Training Technology is a system of knowledge a certain value, which is derived from some theoretical concepts, the acquired life flows, entrenched positions and policies, the scientific and technological principles, which describe or explain a subject area, the occurrence or event. Accordingly, it is necessary to carry out and implement scientific discoveries that are based largely on empirical research, and to establish such a system of knowledge, which is logically well-structured, in which the facts must be raised (to measure), check the hypothesis (statistical process), obtained interpret the (log.) and used them to get to the relevant scientific value - findings which will have its immediate practical application. To the scientific and Training technology in the sport could function optimally, it is necessary to modernize and improve the system of training (education, licensing) professional staff (coaches, managers, experts and scholars) who, on the one hand, includes subjects who have completed some level of education successfully operate in the immediate practice and want to acquire the latest knowledge, on the other hand, made the selection of potential candidates, educate them, improve, streamline and control their activity, and then integrate them in professional and scientific teams and mainstream professional sport.

The way to knowledge

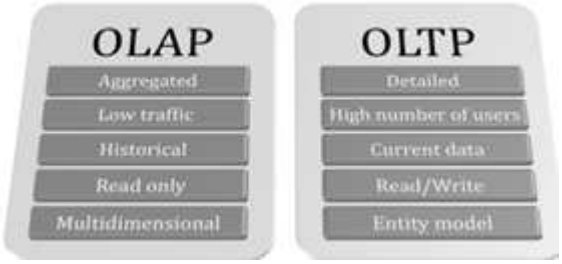
New approaches to contemporary decision-making, with a modern integrated information systems, including new research directions through the Data Warehouse (Data Warehouse) and data mining (knowledge discovery). The basic idea of this approach is that the large amounts of data reveal the appearance interesting system behavior, to conduct the same to a controlled reference point.

Collecting data in an adequate database (BP), through the development phase of the observed organization is characterized by large amounts of data. So BP organization grows in ope in the data warehouse, followed by business and sports organizations.

OLAP

Data warehouse, as new technological concept, has exactly the role to integrate related data of the vital functions of the organization in a form suitable for implementation of different analysis. Thus, as opposed to daily operational data processing (OLTP), there is a need for analytical data processing (OLAP). OLTP databases are mainly used SQL (Structured Query Language) query language specifically designed for relational databases. Although the same over the years developed and improved, but not simple enough to be used in complex analysis.

Real OLAP systems contain up data from an OLTP system and not compromise the competitiveness of the processing, because the same data do not perform surgery create updates and reports. OLAP system can recover data from any relational or non relation sources because it stores data on "their" way and not very important types of data sources. This feature is enabled due to the fact that it is possible to take data from different DBMS and OLAP integration into a common system. Warehousing way data is optimized in order to create very complex reports OLAP also has very powerful query language for creating multi-dimensional queries, which has many more features than the SQL language.



The difference between OLAP and OLTP and

OLTP OLAP

Data processing, data reading,Many short transactions, long and complex queries,Mb - gigabytes of data, Gb- Tb of data,The raw data, summary and processed data.A variety of different customers, users and analysts have,It contains updated data, and so on. It contains historical data, etc..

The most frequent users of OLTP systems are the operators, supervisors, programmers, etc., while users are always OLAP systems analysts. In any case, it is about people who are not fully educated IT, and the very idea of OLAP adapted to them. OLAP users do not have to (mostly) have a high knowledge of IT, but only experts in the field in which to deal with.

Second, the OLTP database is always oriented to the past and the present ones at all times have a date, then all data in the database, while the OLAP database containing historical data and periodically according to a standard procedure automatically downloaded data from the OLTP database. Mainly used for the analysis of historical data in order to detect regularities in the past and based on them could make plans for the coming period.

Data Warehouse, Data Mining

DW implementation consists of the following stages:

- Analysis of current situation,
- Selection of data from existing databases that are interesting to analyze,
- Water purification and reduction of data
- Transferring data to a temporary base,
- Select Table of fact and dimensional tables,
- Selection of appropriate scheme,
- The choice of measures,
- Selection of the percentage of aggregation,
- The choice of storage
- Establishment of a cube, and
- Use the cube.

The basis of success of any modern governance in sport is the possession of explanation data and / or timely information. Just one of under point of this author iso demonstrate, as previously described in large data warehouses can extract relevant information and discover knowledge.

Common conclusion is that companies are suffocating from the data on the one hand, but they are thirsty for information on the other. As the database grows, it becomes more difficult with these data to support decision making in the company. For most organizations, the objectives include DM improving organizational capabilities, detection of unusual patterns, predicting future trends.

DM (data mining) is a set of techniques for data analysis, whose goal is to find the data dependence, relationships and rules related to the same data and interpret the new, higher level of quality information. Unlike the Data Warehouse, which has a unique approach to data, the DM gives results that represent the relationships and dependencies between data, which could not be detected in other ways, for example. using SQL queries or simple observation data.

DM represents the integration of multiple technologies. It included the management of data such as database management, DW, statistics, decision support, machine learning, visualization, and so on. The research DM used knowledge from many fields and disciplines. For example, the DW as one of the key technologies of data analysis, integrating various data sources and organizes them for efficient analysis (mining).

DM process consists of several important steps. These steps include organizing data mining, determining the desired result, the choice of tools for mining, performance of data mining, selection results in order to separate them useful, undertaking concrete actions and evaluation of actions used to find what is useful.

There are several types of results obtained data mining. One of the results found is classification, where records have been grouped into meaningful subclasses. Another "way out" from the DMA is a "detection sequence", sequence detection. So, looking at patterns (patterns) in the data, determine their sequence. The following form of output is "depending on the analysis of data" which are identified potentially interesting relationships, dependencies and associations between data. Analysis of the deviation is another form of output.

Some of the current directions of development of data mining are:

- Analysis of distributed, heterogeneous, and the old database,
- Analysis of multimedia data,
- Analysis of data from the Internet,
- Security of data in data mining,
- Analysis of metadata, etc..

Knowledge

Knowledge discovery is a lengthy and complex process that consists of seven main stages:

1. Purification data
2. Data integration,
3. Selection of data
4. Data transformation,
5. Data mining,
6. Evaluation models, and
7. Presentation skills.

Presents the process of discovering knowledge, represents a symbiosis of implementing Data Warehouse and Data Mining, as a good basis for the quality of modern decision-making.

An important advantage of this approach to disclosure of information and knowledge in databases is that users do not need to possess knowledge about the relational model and complex language queries.

This approach to data analysis is becoming increasingly popular because it allows the OLTP systems optimized for its purpose, and that the analysis of data transferred to OLAP systems. The possibility of prediction and discovery of relevant decision making criteria that influence the observed phenomenon, it gives them great advantages over other approaches in the modern decision-making.

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ИНТЕГРИТЕТОТ НА ЗНАЕЊАТА И ТЕХНОЛОГИЈАТА - НОВА ПАРАДИГМА ВО СПОРТОТ

УДК:796:004
(Стручен труд)

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Апстракт:
Современиот систем на спортот во светот постојано доживува длабоки квалитативни и квантитативни и структурни трансформации кои произлегуваат од сите нови општествени, економски, политички и технолошки услови во развојот на општеството. Се подобрите спортски резултати кои последните години се постигнуваат во разни спотови, во значителна мера се променија сфаќањата и карактерот на работата во спортот и поставија нови барања за решавање на повеќе актуелни задачи врз интегрирана основа. Појавата, развојот и брзите промени во спортско-технолошката и работно-управувачката функција на современите спортски организации, во денешниот свет, несомнено претставуваат еден од најважните стимуланси за трансформацијата на спортските и менаџерските функции и филозофии, за приближувањето на човекот кон неговото знаење и креативно-творечките потенцијали како најзначајни производни и развојни ресурси.

Клучни зборови: *информации, техники, база на податоци,*