

# The Development of Computer Data System for Presenting the Athletics Competition Record in Thailand

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Received: January 31, 2019 Revised: May 18, 2019 Accepted: May 27, 2019

## **Abstract:**

The study aimed to understand the problem, the obstacle and the needs of the computer information system for presenting the athletics competition record in Thailand. The data were collected from 200 related person in the athletics area by questionnaires and 20 key informants by interview. The main results found that the situation in the present day was not comfortable for searching the athletics competition records. It has the big problem in high level about the saving and updating the athletics competition records. The results in the need that in very high level were able to retrieve information quickly, easily, up to date and can be retrieved via social network. The guideline to develop the athletics competition record in Thailand were determined systematically input the athletics competition records and up to date the database at all levels from the provincial, the national and the international level. There should be a public relations and publish information to be able to access information and can be used for developing in training and the athletics.

**Keywords:** Data system, Sport data, Athletics competition records

## Introduction

Sport is the physical activity that focuses on supporting and increasing the health of physical body and psychology which leads to combination in term of the society and the result from any level of the competitions. (Coalter, 2005 from The department of physical education, 2009). Playing sport is one of things that help to support everyone away from many things, using the most benefit from the free time after school or after work including with making a lot of friends from playing sport together, better relationship within the member of the family, away from the drug abuse which is one of the country's big problems, sport helps you to have better health due to the exercising which is the thing that you can't live without, and also many more useful such as, the quotation " The participation in sport help to increase quality of life both in term of the personal and the society, supporting in combining in the society, increasing the healthy, decreasing the anti-society behavior, increasing the self confidence and realize the value of yourself." (Sport Scotland, 2003). Many countries realize in the benefit of the sport so they have been supporting because the exercise makes the body fresh and strong, decreasing and relaxing the stress, decreasing the medical fee, and also to develop the idea and the behavior of people in term of the sacrifice, know how to lose, win, forgive and work together (The department of physical education, 2009). The athletics competition is the core event in every tournament both national and international level, and each achievement in the competition found that the athletics competition in the international level has been developing a lot in every aspect in the last 10-15 years ago. By bringing the sport science to use in full scale of sport area, has been broken the records, the new equipment model which supports for the judgment in sport and lot of details have been used for setting up the event such as, the judgment accessory by the photo, the distance measurement accessory for the field events and the electronic accessories which make the events are qualified to be the international standard. There are so many countries in Asia where have been qualified to host the Olympics events such as Japan, South Korea and China. Thailand used to host the world university games

which these factors increase awareness of sport's development in many regions.

Presently, searching the record data of the sports competition for the comparison data in many athletes' levels are very difficult. Although these data are allowed to publish such as, How long does it take for the record of 100 meters both men and women in the present day whether Olympic games, Asian games, Sea games or the sport in the level of national and regional in Thailand, To compare with the athlete record who are training in many levels that how far do they away from those levels by the competition's record information that what level are the competition's record in the track category or other categories that aren't the times, but might be the height, the distance, the weight in the field category. From the data of the Ministry of Tourism and Sports have only the art of Thai boxing standard data, the sport TV for the sport community, the national cheer sport songs, the Thai boxing academy data and the calendar of the international tournament from 2007 – 2014 (The Ministry of Tourism and Sports, 2012). In the Olympics' website have no competition record's data of the present competition in term of the number of the competition, most of them are the competition news information, the competition media both the photo and the VDO from the searching about the competition category both Olympic Games and Youth Olympic Games.

Thailand's sports record from the National Olympic Committee of Thailand under the Royal Patronage of His Majesty the King which have the title of the sport and the record that are consisted of the history of Olympic Games, Asian Games, Sea Games and the rule and regulation of the sports competition. In the part of the competition's record, there is only the number of the medal that the athletes have won from the events (Olympic Games, Asian Games, Sea Games) (The National Olympic Committee of Thailand under the Royal Patronage of His Majesty the King, 2012). which the searching of the record data or the record-breaking in the competition is one of the key information of the athlete. The athletics use the present record as the norm for practicing which is very difficult to find; they can only ask the national athletics who know their own draw. Studying the guideline of managing the athletics competition record of Thailand is very important and benefits to the sports area in Thailand, and will be used

for planning and sourcing in the future development for the athletics such as the Athletic Association of Thailand doesn't have the data about the record in the website. (The Athletic Association of Thailand Patron: His Majesty the king, 2017). Apart from that, there are also other sport organizations which don't have the record data and the data breaking of the athletics, so the researcher aims the importance and the necessary for doing the record data in order to have the guideline in developing the data presentation of the athletics record in Thailand for becoming the professional, and creating the website in order to be the center of the athletics competition records and to develop the sport in Thailand for increasing the world-class competition standard and can be developed to the concrete object in the future.

## Method

This study uses the Mixed Method Research that employs both Qualitative Research and Quantitative Research by using the research tools which are in order to as follows:

1. In-depth interview was conducted study the problem, the obstacle and the needs in searching and the usage of the competition record data, and the developing guideline system in managing the athletics competition records for the sport's development in Thailand from the specialist and the professional in the sport. The interview form was finding the validity by using IOC that had a value over than 0.5 all of the items. The purposive sampling was employed and the criteria for selecting the key informants who are the data specialists and professional in the sport area, included 1) The Minister, the high level of the administrator at the ministry tourism and sport 2) The administrator of Sport Authority of Thailand or the representative 3) The administrator of the organization in the sport area 4) The famous national sport academic 5) The operator in the sport area (The coach, The trainer, The athlete guard in the national level and the Thailand national Athlete) The quality of instrument which was interview guideline was checked by 3 experts.

2. Questionnaires were used to study the problems and the needs of

searching and the usage of the competition records and the guideline in managing the competition records for developing the sport of Thailand from the involved people in the sports area that has been passed the questionnaire. It's finding the validity by using IOC that had value over than 0.5 all of the items and reliability from trying out with 30 people which Coefficient Alpha Cronbach ( $\alpha$ ) equal 0.89. And then the questionnaires were distributed to with the samples who involve with the sports area as follows: 1) 20 the academic sportspersons. 2) 50 the coaching persons (the coach, the athlete guard in any level), 3) 80 the of national athletes and the provincial athletes and 4) 50 graduate athletes who study in the sports field.

3. Focus Group Forms for Discussion were conducted with 20 participants who were purposively selected include academic person, the administrator, the sport operator, The national athletes, the graduate students who study in the sports field. This method aimed to criticize the guideline in managing the competition records for developing the sport of Thailand.

## **Data analysis**

The quantitative data obtained from the in-depth interview and Focus group discussion were analyzed using content analysis. While the quantitative data were analyzed by using the percentage. Explaining the sample's general data and the average use the analyzing and explaining the level of the guideline in managing the athletics competition records for developing the sport of Thailand and the Standard Deviation has been used for analyzing and explaining the data scattering. The meaning of mean using the equation of maximum minus minimum and divide by the number of levels. (Youthao, 2017).

## **Results**

The result study can be concluded in 4 issues as follows:

1. The analyzing result of the condition of the athletics record data system of Thailand which are consisted of the status, the problem and the obstacle in managing the athletics record data in Thailand.

**Table 1:** The status and the important problem of managing the athletic record data in Thailand

<b>The status and the important problem of managing the athletic record data.</b>	<b>Mean</b>	<b>S.D.</b>	<b>Level</b>	<b>Rank</b>
The perceiving about managing the athletic record data of Thailand in the present day.	2.61	.60	Medium	8
The searching of the athletic record data of Thailand is easy and convenience in the present day.	2.66	.55	Medium	5
The athletic record data has the convenience system and easy to use.	2.70	.51	Medium	4
The satisfaction level in searching the athletic record data in Thailand	2.65	.55	Medium	6
The adequate of the athletic record data of Thailand that the data guard can search the data for you.	2.64	.56	Medium	7
The level of the opinion toward the overall important status.	2.65	.54	Medium	6
The problem about managing the athletic record data.	3.78	.67	High	1
The problem in assessing the athletic record data of Thailand.	3.67	.69	High	3
The problem of the out of date in the athletic record data.	3.75	.73	High	2
<b>The level of the important problem in overall.</b>	<b>3.73</b>	<b>.71</b>	<b>Medium</b>	

From table 1, It was found that the overall level of the important problem in managing the athletic record data was rated at high level with the mean score of 3.73 Among all items, the problem about managing the athletic record data was rated at high level with the highest mean score of 3.78 while the perception about managing the athletic record data of Thailand was rated at medium level with the lowest mean score of 2.61

2. The analysis result of the needs in the aspect of the athletic record data system from the department that involves with the sport development, the coaches and the athletics in Thailand.

**Table 2:** The analysis result of the needs in the aspect of the athletic record data system in Thailand

The needs of the athletic record data system	Mean	S.D.	Level	Rank
The needs of collecting the athletic record data systematically by the computer.	4.25	.63	Highest	7
The needs of the precisely assessing in the result of the athletic record data.	4.33	.67	Highest	6
The needs of having the collecting the athletic record data system that can search the data by ourselves.	4.34	.66	Highest	5
The needs of the quickly search for the athletic record data system.	4.43	.64	Highest	2
The needs of having the athletic record data system for searching always.	4.41	.62	Highest	4
The needs of searching the athletic record data system	4.42	.66	Highest	3
The needs of having the social network for being the new choice for searching.	4.56	.56	Highest	1
The needs of the athletic record data in overall.	4.39	.51	Highest	

From Table 2, it was found that the overall of the seeder of the athletic record data was rated at the highest level with mean 4.39 Among all items, the was needs of haveing the social network for being the new choice for searching was rated at highest level with the highest mean score of 4.56 while the needer of collecting the athletic record data systematically by computer was rated at highert level with the lowest mean score of 4.5

3. The important situation of the athletic record data in Thailand in the present day was analysed as follows:

3.1) The perfect collecting of the athletic record data starts from the first day of the competition by using the information system for the athlete name, the result which the perfect data have to link to the association.

3.2) The athletic association should collect the data, and the accessing department shall collect the data and send to another department which work for the result.

3.3) Due to the increasing of the athletic in the present day, the making system center for every event should be arranged.

3.4) The tournament records in data base have been collected by the association, but they were not online system, no annual record in order to develop the record in the future.

3.5) Lack of the skilled personnel who are skillful in the technology and website operation, and the record data isn't collected in the online system.

3.6) The athletic record data aren't clear in details. There are only the overall presentation of the athletic association website without updated the data and also lack of the information working system.

4. The important guidelines for developing the athletic data in Thailand are as follows:

4.1) The updating information system should be arranged, and broadcasted both national and international level.

4.2) All website database should be updated and developed. The responsible person of every event should be responsible for collecting the data and expanding the network at the center.

4.3) The updating data on the website should be arranged, and also relates to the organizations.

4.4) The information management system position should be available. The updating and linking data need to send to the association which is taken care from the association's representative in order to approach the data constantly.

4.5) The stadium standard the necessary data needs to be managed such as, the identity document, the field number, the athletic website or providing the program for every province.



## Conclusion

The status of the athletic data system in Thailand has problems and the obstacle in the athletic data system about the status of the athletic record in Thailand. The important problem and the obstacle in managing the athletic data system included the out of date data and the inactive athletic data system, the accessing the athletic record data problem which found that there were still lacking the personnel in the process of collecting the competition record systematically and there was no the center place for the collecting record data processing and the competition record. On the important issue of the needs in the aspects of the athletic record data of the organization that involves with the sport development, the coach and the athletic in Thailand are the needs of using the athletic record data of the organization that involves with the sport development, the coach and the athletic can find through the social network in order to allow the athletic to search quickly, and the needs of the updating the athletic record data in of Thailand.

The collecting guideline of the athletic record data processing of Thailand starts on the first day of the competition by using the information that linked to the athletic association which has the duty about the collecting and the guardian of the official competition record in Thailand, being the information center for developing to the competition database and the record in every level of the competitions. To see the development and the record-breaking in the athletic completion at the national level, and the athletes go to join the competition in the overseas that people can access the data for comparing the training and competition data of the involved people in every department, and be allowed to access from many patterns both asking the information from the athletic association, from the sport ministry and from searching through the computer network.

## Discussion

The result from studying the athletic record data in Thailand which have been retrieved from the in-depth interview about the present situation of the athletic record data in Thailand in overall are relate to the athletic association development plan,

the assessing of the potential strategy in the opportunity area (The Athletic Association of Thailand Patron: His Majesty the king, 2016) and the updating information technology leads to approach the sport data source quickly. (The personal development, the updating technology sports equipment, the benchmarking with the competitor) Obviously has seen that the Athletic association of Thailand planned in the part of the athletic record data in Thailand for athletic association development plan in the medium term (2017-2021) which made the plan for the developing and managing the athletic in order to be the system.

From the study about collecting the athletic record data in Thailand concludes that the systematic development should be arranged, especially the improving of updating the data to the present situation for the athlete benefit, the coach includes with the involved person in the athletic area in order to use the data for the benefit in term of training for the competition. Spiriev (2016) who is the director of the website name “www.all-athletics.com”, he is the specialist in collecting the athletic record data of the Official IAAF Scoring Tables in Athletics which the website www.all-athletics.com was made. The website is one of the most places for collecting information about every athletic event, and also keep updating the data. (The Most Comprehensive Athletics Database), and also keep updating the data. The Most Comprehensive Athletics Database), and also keep updating the data.

This study found that the problem of accessing the athletic record data in Thailand was high. The sample expressed the opinion about assessing the athletic record data in Thailand was high which relates to the study result about the needs and the statement problem of hosting the athletic Thailand Championship tournament. It was found that the average at the possibility level in using the guideline of developing the hosting the tournament in overall was 4.42. The consideration in each aspect found that the two most aspects in the possibility of using the developing guideline were the organization aspect and human recruitment. The 6 high levels are the place aspect, the equipment aspect, the coordination aspect, the management aspect, the budget aspect, the planning aspect and the reporting and accessing the competition record data aspect. (Chimphali, 2014: 75-89).

The highest needs in using the athletic record data of the organization that involves with the sport development in term of the coach and the athletic were the

needs of having the social network for the new alternative in searching the athletic record in the computer network which the sample express the opinion about the needs of having the social network as the new alternative for searching the athletic record data in the computer network was highest (60%). (Thithathan, 2015: 59-65). That was the same direction with the study result in the title of the influence of using the online media for creating awareness in sport management of the involved industrial person group. The communication by using online media is the most effective modern tool. Mcquail (2002) because of the qualification that able to make two ways communication, able to participate in doing activity, able to contact all the times and able to connect to other society networks, so it is very necessary to have the sport management website for searching the athletic record data in the computer network in order to broadcast through the online media which affect to create the knowledge and the proper understanding in the involved industrial person group, and website will become the important tool for doing the sport marketing ever. (Griffin, 1996: 50-53)

The average of the needs of searching the athletic record data in Thailand was 52.0%. The overall consideration found that the needs of the athletic record data were the highest which relates to (Chaleysub, 2003) said that the information technology has the important role in our routine in the present day. Although we neglect to learn information technology, it will be difficult for us in term of working and connecting, so we need to learn how to use the information technology in order to keep on updating the news in the society. Everywhere in the world is connected easily. Although you aren't used to with the information technology, if you look thing around you, you will find them there. In the routine life, the speed and updating the data is the needs of the user who need to spend their life with the updating to the present event.

From the results, it was found that the problem was still there in term of collecting the athletic record data in the country which should have the data development in order to become the information system. Arranging the specialist personnel in the information for working by the association should cooperate to the needs of the data category. The administrator should give the priority in setting up the official committee of IT development for collecting the athletic record data both the academic

data and the coach. The formal athletic and the present athletic should allow the officer to collect the data in the pasta and to keep proceeding to the updating data and becoming the database in order to relate to the desired organization. Allowing the people to use the data which makes the benefit, and effect to the athletic development in Thailand. Creating the opportunity for the people who are interested in the athletic which relate to Gembris et al. (2002) studies about making of Sports record: Trends and random fluctuations in athletic. The improving or developing the competition result comes from the good training and the standard equipment; especially the chance is the important thing for supporting. Furthermore, there were the opinions that affect the competition's result differently in two issues were the assessing from the athlete ranking which has been recorded in case of lacking the development and the comparing with the result of showing the actual ability. The research result found that there were only 4 out of 22 that the pattern of the regulation in the tournament improved the system, and the annual report showed that the pattern of the regulation in some tournament was a great development.

## **Recommendation**

From the research study, study the status, the problem, the obstacle and the needs of using the sport record in managing the athletic record data system in Thailand have the important suggestion that drives the research result to the performing as follows;

1. The information development and every aspect of the athletic database should be included in the master plan, which athletic association of Thailand and the potential university in the information system are the core responsible organization.

2. The athletic association of Thailand should process the database system for collecting the data, broadcasting, answering the question about the hosting the athletic tournament, and also providing the IT officer for bringing the data information about the athletic record to adapt for supporting the coach in term of the training plan in each periods, to see the trend of developing in the athletic competition and the competition record data is still can use for the making decision in choosing the tournament for the athletes.

3. The athletic website of the association of Thailand should consist of the updated competition record data that are linked to the related organizations, and the people who are interested in this data can be allowed to access. The core responsible organizations are the athletes of Thailand and the potential university in the information system or the professional private organization in making the information for online broadcasting.

4. The online database of the athletic association of Thailand should collect the holistic knowledge, that includes the training pattern for the people who are interested in athletic. The record is very important in training and coaching the athlete due to the record can be compared for developing the trainee themselves.

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