

## The Development of Sports Information Management System (SMICO) of KONI Salatiga Municipal

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### Abstract

The purposes of the research are: obtaining a product of Sport Information Management System (called SMICO) in KONI Salatiga Municipal, evaluating the effectiveness of SMICO product in KONI Salatiga Municipal, finding out the acceptance of SMICO product in KONI Salatiga Municipal, therefore it is expected that SMICO takes a role in decision making. The method in this research is developed from Borg and Gall procedural model, in which includes: observation, planning, and developing. Data taken is by field observation, questionnaire distribution, data collection and filing. The finding of this research is a software product titled SMICO website based in KONI Salatiga Municipal in which: the percentage of effectiveness test of the home page is 65%, which means it is satisfactory valid, the percentage of the menu page is 60% which means it is valid, the percentage of the menu sports is 61% which means it is good, the score result of the specification of the use is 4.0 or 80% which means it is excellent, the score result of submenu of sport information is 3.2 or 63% which means it is good, the score result of contact submenu is 4.7 or 93% which means it is excellent, the score result of web management and maintenance is 4.1 or 83% which means it is excellent. The result of the athletes as the respondents show that SMICO has average score 4.44 or 88.8% which means that it is excellent, the average score from the coaches as respondents shows 4.31 or 86.18% which means it is excellent.

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## INTRODUCTION

Sport handling is not indifferent, instead it needs a professional maintenance. It is necessary as well to sustain the resources in order to coaching and develop the sport itself through establishment and development work relationship in harmony, transparency, interactive, synergic, and supporting the common interest. Accordingly, in term of developing the national sport system of Indonesia, there is KONI, the National Sport Committee of Indonesia, organized for protecting the interest of Indonesian nationality, promoting the Indonesian well-being and bringing forward the education, being as a subsystem of national sport.

Now days the management information system can not be separated from a modern organization management (Siagian, 2009). A well organized information system can produce as well as a management in sport. The definition of information system is a system build up by human or either machine incorporate for giving information in supporting a function or an operation, a management and a decision making in an organization (Yana Alvi Saputri, 2014).

The information system is able to give information or data needed by society and can be seen openly. This existence of the system is intended as accessible anywhere by society due to sport club stuff information and easily serve information transparency.

Regarding to the description above, the researcher is considering to create an information management system in order to know the data of athletes and their achievements in KONI Salatiga municipal accessible.

Management is a specific process in which includes planning, organizing, practicing and controlling whereas in this every single field needs certain knowledge and skill systematically in order to reach the particular goal (Rumini, 2015).

Now days the information management is mostly used in schools, industries, offices, and sports. One of the information technology widely spread is the internet network. It is developing to become computer networks that easily accessible

by people and has been useful as the development of information system as information resources (Tri Suratno, 2010).

It is not only companies who need management, nevertheless sports need such enforcement as well. It is necessary to apply management in sport because it is worthwhile to superintend the organization. Without a management, an organization is stuck and unorganized, furthermore it can not reach the goal as it is planed in advance. Regarding to the fact, it is necessary that KONI as a sport committee needs to develop the management based on the information system in order to promote the performance in monitoring and filing the achievements of the athletes in every single sport. It is also important for the members of KONI to improve the skill in managerial.

The firm of information management system in sports will contribute to the performance of the athletes and the supporting team. Therefore it is necessary as well to evaluate the procedure of proper management so that the precise treatment trained for the athletes is effective.

Involving advance information technology is prospective to ease KONI on how to analyze and evaluate the athletes towards the achievement. Collaborate the knowledge and the technology, it is easier to get solution in management system runs more effective and efficient (Pressman & Roger, 2007).

Applying discriminant analysis technique in term of statistic, it is capable to create a model system which is able to ease members performance in analyzing and planning the management system (Fekie Adila, 2017).

The purpose of the use of management information system is to increase the performance of an organization by upgrading the quality of management in decision making. Therefore a management information system has an effectiveness to collect, store, synthesize, serve information so that it can answer all questions related to operation and strategy. The core of the information is the database.

In order to facilitate the operation, it is necessary for KONI to have sports information

management system as a software. SMICO is an information system with website base for managing data and athlete achievement used by KONI Salatiga municipal. It just needs computers and internet connection for running the system in which program applied in the system is HTML (Hypertext Markup Language), PHP JavaScript and MySQL database (Utami & Sukrisno, 2006).

Researcher found out that KONI Salatiga municipal has not had yet a management system to administrate and to manage their best sport program which could be accessible easily. This organization still use manual access to serve information and data. Regarding to this condition, researcher keen to create and develop a sports information management system that could be applied in KONI Salatiga municipal where the goal is to associate plainly the achievements of athlete.

According to the background stated in this earlier study, researcher is interested to investigate systematically as a research titled The Development of Sport Information Management System (SMICO) in KONI Salatiga municipal.

**METHODS**

This research is conducted to develop a sport information management system as software using website base where applied in KONI Salatiga municipal. The perfection of the system is developed from Borg and Gall model named procedural model. This procedural model is a descriptive model that represent procedures which is followed to produce a certain product (Borg & Gall, 1983).

Perfection procedures regarding to Sugiyono (2006) are follows: (1) potential and issues; (2) information collecting; (3) product design; (4) design of validity; (5) design of revision; (6) product trial; (7) product revision; (8) usage trial; (9) product revision; (10) massive production.

All procedures mentioned above are not absolute procedures in developing the system. The researcher might choose which ones are suitable for the study regarding to circumstances

in the development process (Ardhana, 2006). Due to the theoretical references described in this study, the researcher would modify and simplify models applied so that it is relevant. The procedures chosen as follows: research and information collecting, planning product, and develop product. The website system base developed is the sports information management system in KONI Salatiga municipal.

Model analysis used for the reliability in this study is questionnaires reliable to likert scale 1-5, answer category as follows: Poor (P), Low (L), Satisfactory (S), Good (G), and Excellent (E).

$$P = \frac{\text{Total score}}{\text{Criterion score}} \times 100\%$$

**Table 1.** The Extent to Which in It Measure is Applying Likert Scale

Percentage (%)	Criteria
20	Poor
21-40	Low
41-60	Satisfactory
61-80	Good
81-100	Excellent

(Marhadini, 2017)

**RESULTS AND DISCUSSION**

Information management system is a set of connecting things in term of information system in producing data and information that use for managing an organization across the grades. The system is intended to serve data so that contributes in decision making effortlessly in the daily operation or short and long planning in an organization transparently

The media used in this research is an appropriate software that is able to serve information of athlete achievements. The software is using a programming language that called PHP (Pearl Hypertext Preprocessor), MySQL database for storing, and html (Hypertext Markup Language) for displaying.

The format chosen in this stage covers the content of the website as: (1) Sports in KONI Salatiga municipal or the most favorite sports in KONI Salatiga municipal; (2) athlete information regarding to the athlete personal identity, best

performance of the athlete in scope of regional, province, national, or either international.

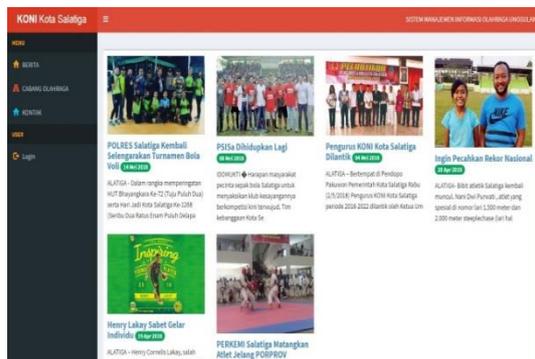
Initial design, it covers the activities of: (1) listing sort of sports in KONI Salatiga municipal; (2) listing every athlete in every sport level. These data include athlete profile, age and the best performance of the athlete, as well as the athlete background.

The next step of the stage is early product development which will be evaluated by some experts so that the product will get feedback as well as validity and reliability test. The goal of this step is producing draft II or it is called as a revision product after feedback received.

The validation from the experts covers all devices developed in the initial design stage which includes configuration, language and illustration. Validation result from the experts is basically used for earlier product revision which obtain draft II.

Being evaluated by some experts and been limited examined as well as been revised, there are 4 main points of the content in the information management system that should still provide (Table 2). After all, this product software called SMICO are ready for operating.

This earlier analysis of the system purposes for finding basic issues in sports in the body of KONI in Salatiga municipal. Analysis achievement directed through the activities clarify the achievement of athletes from regency level, municipal, province, into national level.



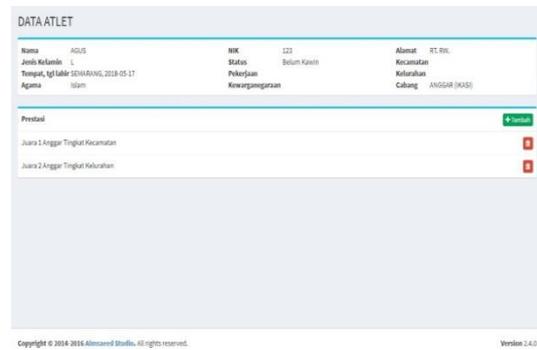
Picture 1. Home Interface

Home Menu in the website displays about sport category, latest news stored in the database, and contacts of KONI Salatiga municipal.



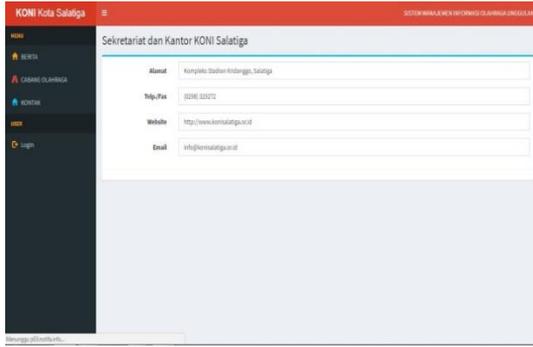
Picture 2. Sports Category Interface

The menu of Sports Category contains sports branch of KONI Salatiga municipal whereas chief of every sport branch stated in its page. There is also athlete names in every sports category and all the achievements they have obtained, at least there are five level area that the athletes have participated in level of regional, province, national, and international. Organizing the relevant data in the information management system has purposes for facilitating the society as well as KONI as the sport committee in gathering information of local athletes of Salatiga municipal and their best performances.



Picture 3. Athletes List and Their Achievements Interface

In the menu of Athletes list and their achievements interface serves information about each athlete and her/his best performance in every branch sport.



Picture 4. Contact Interface

The contact menu in the website contains of telephone numbers and secretariat address of KONI Salatiga municipal.

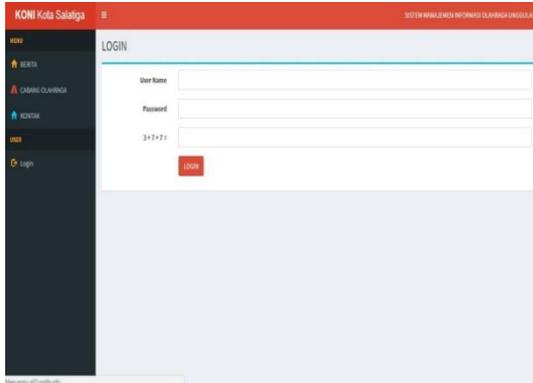


Picture 5. Latest News Interface

The Latest News menu in the website gives information about agenda and activities of KONI Salatiga municipal.

Table 2. Final Product of Sports Information Management System of KONI Salatiga Municipal

Display content visual	Description
Home Administrator	This menu display website content served by the centre which covers: Sports Category, Contacts, Latest News, Toolbar provided (picture 1)
Sports Category	This menu display information about KONI sports into detail: Sports, Sports Logo, Sports Name, Principal, Address/Secretariat
Contact	This menu display all contacts of KONI Salatiga municipal.
News	This menu is website page contents information about the latest news stored in the software database SMICO of KONI Salatiga municipal.
Login	This menu is the website page which has a function to login into administration page and only one administrator who could access the website.



Picture 6. Login Interface

The login menu in the website can be only accessible and manageable by one person who is the administrator of KONI Salatiga municipal.

This proper software chosen for displaying information is suitable to the earlier analysis of the study, KONI's analysis, and athlete specifications. The software in this research is using programming language or PHP (Pearl Hypertext Preprocessor).

The further stage is the web design which covers most favorite sport, data athlete for each

sport, athlete achievements that all is formulated in the observation and information collecting stage.

This initial product is evaluated furthermore by some experts so that it will have revision. These experts are ones who have skills in multimedia, research and development project from KONI Salatiga municipal. After having revision, the product is formulated as draft II.

Orientation result by the multimedia expert; research and development project team; as well as Binpres (coaching and achievement team) of KONI Salatiga municipal, shows that the home page aspect in the software product is 3.3 in the average score or 65% which means that this home page is satisfactory valid.

Orientation result by the multimedia expert; research and development project team; as well as Binpres (coaching and achievement team) of KONI Salatiga municipal, shows that the menu page aspect in the software product is 3.0 in the average score or 60%. Even though the home page aspect is valid but the menu page aspect of the software system is not yet valid.

Orientation result by the multimedia expert; research and development project team; as well as Binpres (coaching and achievement team) of KONI Salatiga municipal, shows that the sport menu aspect in the software product is 3.0 in the average score or 61% which means that this sport menu is good.

Orientation result by the multimedia expert; research and development project team; as well as Binpres (coaching and achievement team) of KONI Salatiga municipal, shows that the aspect of specification or the use of the website in the software product is 4.0 in the average score or 80% which means that this specification is excellent.

Orientation result by the multimedia expert; research and development project team; as well as Binpres (coaching and achievement team) of KONI Salatiga municipal, shows that the sub menu aspect of the sport latest news in the software product is 3.2 in the average score or 63% which means that this sub menu is good.

Orientation result by the multimedia expert; research and development project team; as well as Binpres (coaching and achievement team) of KONI Salatiga municipal, shows that the sub menu aspect of contact in the software product is 4.7 in the average score or 93% which means that this sub menu is excellent.

Orientation result by the multimedia expert; research and development project team; as well as Binpres (coaching and achievement team) of KONI Salatiga municipal, shows that the web management and maintenance aspect of the software product is 4.1 in the average score or 83% which means that this web management and maintenance aspect is excellent.

Regarding to the percentage showed in the graph, it is mentioned that the athletes as respondent one has 88.8% towards the system assessment, which means it is excellent, while the coaches as respondent two has 86.2% towards the system assessment, which means it is also excellent. Due to the two category respondents stated above, the product of The Sports Information Management System (SMICO) is stated as an excellent product software category.

**CONCLUSION**

A website product named Sport Information Management System (SMICO) of KONI Salatiga municipal has been produced. It is a software website based that is operated by KONI, the sport committee of Salatiga municipal, purposes for representing accessible data effectively and efficiently used by athletes, coaches, and committee members of KONI in the municipality of Salatiga.

The implication of this study is facilitating software users of Sports Information Management System (SMICO) of KONI Salatiga municipal in managing the organization in order to reach its goals. Furthermore this information management system is intended to supporting the performance of KONI Salatiga municipal more integrated in term of valid and reliable system.

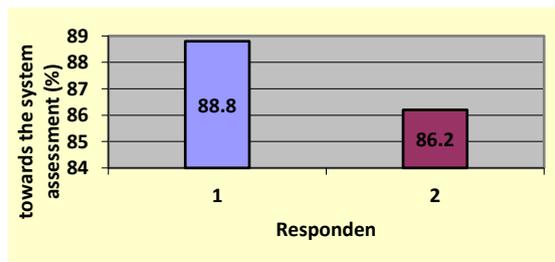
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**Graph 1.** Two Category Respondents Stated Above, The Product of The Sports Information Management System (SMICO)

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