Development of Data Management Information System Model for Basic Training of Civil Servant Candidates

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Abstract. This study aims at developing a Management Information System Model that is in accordance with the implementation of Basic Training for Civil Servant Candidates at the Agency for Personnel and Human Resources Development Lubuklinggau. The method used is Research and Development with the Gall and Borg system development model which is modified into three stages: preliminary study, model design development study, and model validation evaluation. The research subjects were the organizers, widyaiswara, and participants of the Basic Training. Techniques for collecting the data were interviews and questionnaires. The data obtained were analysed qualitatively and quantitatively. The product is an application of the Basic Training Management Information System called simlatsar. The results of the research were (1) the administration system of the basic training has not optimally utilized information technology, (2) SIMLatSar which was developed in accordance with the management of the Basic Training implementation, namely planning, implementation, supervision and control which is intended for three users, namely administrators, widyaiswara, and participants, (3) SIMLatSar users strongly agree with the SIMLatSar design because it meets the Service Quality (Servqual) elements which include tangible, responsiveness, reliability, assurance, and empathy, (4) users strongly agree that SIMLatSar is easy to understand, useful and appropriates to their needs, and (5) SIMLatSar is declared technically, economically, legally, operationally and schedule feasible to be used at Basic Training for Civil Servant Candidates implemented by BKPSDM Lubuklinggau.

Keywords: Basic Training For Civil Servant Candidates · Management Information System · Model · Simlatsar

1 Introduction

One of the crucial components that must be included in a company today, including educational institutions and other organizations, is the information system. This is as a result of the numerous requirements for information transmission, which must be quick, exact, accurate, and timely. Due to this, a tool that can complete the operation

rapidly and with extremely low risk is required. Because users can quickly, precisely, and reliably acquire the information they need using this method, many firms adopt web-based information systems [1].

Management information systems, commonly referred to as SIM Education, are used in the field of education [2]. An educational MIS is described by [3] as a system created to give learning data or information to help decision-making in the planning, acting, organizing, and controlling phases of the teaching and learning process. As a result, the SIM education offers knowledge to aid in management activity decision-making. To support the decision-making process in education, SIM education combines human resources and information technology applications to choose, store, process, and retrieve data [4].

The phrases education and training are sometimes used interchangeably since both aim to develop human resources, particularly in terms of the development of intellectual ability and personality traits [5]. Consequently, the training SIM is likewise covered by the educational SIM. This information system is crucial to the management of training programs, such as the Basic Training for Candidates for Civil Servants, because training institutions that serve a particular market segment are constantly looking for ways to increase the quality of their offerings and make them more competitive [6].

Users will benefit from the ease built by a training institution in training administrative tasks.

The usage of information technology for the administrative data administration of Training for Candidates for Civil Servants at BKPSDM Lubuklinggau City has not been properly optimized. The initial survey of the Training for Candidates for Civil Servants organizers, widyaiswara, and participants revealed that, on average, the respondents said that the preparation, filing, and evaluation of the event were still handled manually. This can make it more challenging to manage administrative data for training civil servant candidates effectively.

Construction of SIM for Civil Servants Background Control Data employs a conceptual model since it will later list, examine, and illustrate the links between product components. The finished product will benefit from developments in information technology. Users may find it simpler to manage administrative data if there is an administrative data SIM present, facilitating the efficient operation of administrative services. The effectiveness of the training itself is also influenced by this administrative service.

The user's job may be made simpler by the adoption of information technology-based education and training administration management [7]. An education and training management information system can make it simpler for users to provide information about the implementation of education and training, according to the research findings of [8–10], and [11].

2 Methods

The development model put forth by Borg and Gall is referenced in this work. It has been adjusted into three stages, including a preliminary study stage, a model design development study stage, and a model validation evaluation stage. From July to December 2021, the trial was conducted as part of the basic training program for future federal workers.

Participants in the basic training program for future government workers, organizers, and widyaiswara were the product trial's test subjects.

Interviews and questionnaires are two methods of gathering data. Researchers conducted interviews to gather information regarding the Management Information System (SIM) basic training for aspiring civil servants currently being offered by BKPSDM Kota Lubuklinggau, as well as interviews to gather information regarding the components or aspects required in developing the SIM model for basic training for aspiring civil servants. A survey was created to learn more about users' attitudes and evaluations of the SIM model's suitability for the basic training that is provided to aspiring government servants. Both qualitative and quantitative analysis was done on the data that was gathered. The qualitative data analysis method developed by Miles and Huberman was used to examine the qualitative data. A likert scale and percentages were used to assess quantitative data.

3   Results and Discussion

1) SIM Data Administrative Basic Training for Prospective Civil Servants.
The results of the interviews demonstrate that the Lubuklinggau City UPT Education and Training Center does not yet have a management information system for managing administrative data for basic training for aspiring civil servants that can be accessed anytime, anywhere, and is capable of providing the most recent information about the ongoing basic training for aspiring civil servants. Information management model for administrative data of the fundamental training provided to aspiring civil workers has not made the best use of information technology. The application, such as registration and filing, filed directly by the government agency requesting the implementation of the training, has not been used by UPT Education and Training. Where the PIC, who has been appointed by the Head of UPT Education and Training of Lubuklinggau City, enters data.

Information on the implementation of basic training for prospective civil servants at BKPSDM Kota Lubuklinggau is presented to support the management operations function and speed up decision making. This is done in conjunction with the development of the Basic Administrative Data SIM Model for prospective civil servants. Reducing uncertainty in decision-making during planning, mobilization, and control is crucial for MIS [12].

2) Planning SIM Administration Data Basic Training for Prospective Civil Servants.
The preparation of administrative data Basic training for potential civil servants using the SIM Model, a 3P conceptual model design that considers Users, Processes, and Products, as well as management of the implementation of basic training for potential civil servants, which entails planning, implementation, and monitoring and control. These three concepts are mentioned in the developed SIM model [13]. Users of this application include the program administrators, teaching staff, and widyaiswara, as well as those who are undergoing basic training to become future government servants. This

indicates that planning, implementation, monitoring, and control are available on the application menu page for these three users.

3) Design of Administration Data SIM Model Basic Training for Prospective Civil Servants.

The application was created under the name Basic Training Management Information System for prospective civil servants, abbreviated as SIMLatSar, and can be accessed at http://simlatsarllg.com/ after the design of the application for the development of SIM Data Administrative Basic training for prospective civil servants at BKPSDM Lubuklinggau City. The menu layout was created for a mockup of an information system for administrative data management. These pages each have a menu and a submenu. The front-page design display for SIMLatSar is as follows (Fig 1).

The administration, training participants, and teaching staff/widyaiswara application users were tested on the design of the administrative data SIM model using a Service Quality approach that covered aspects like tangible (physical), responsiveness, reliability, assurance, and empathy) [14]. The physical component demonstrates that SIMLatSar has satiated users' (administrators, lecturers, and participants') needs.

The responsiveness component demonstrates SIMLatSar's highly attractive responsiveness and its ability to accommodate users' requests for application service access. The Reliability component demonstrates that BKPSDM Lubuklinggau City can rely on SIMLatSar to arrange fundamental training for aspiring government servants.

The element of certainty demonstrates SIMLatSar's ability to persuade users of the application's data security assurances or promises of accuracy and certainty. The Empathy component demonstrates how SIMLatSar makes it simple for consumers to use.

4) Implementation of Administrative Data SIM Basic Training for Prospective Civil Servants.

Questionnaires about SIMLatSar user opinions were also distributed throughout SIMLatSar implementation. Five managers and organizers, including the head of BKPSDM, the head of UPT Education and Training, the head of TU UPT Education and Training, the person in charge (PIC) of basic training for aspiring public employees, and one

Fig. 1. Front page of SIM for Basic Civil Servant Prospective Candidates

member of the UPT Education and Training staff, serve as user administrators. Strongly concur that SIMLATSAR is a Model SIM because it is simple to understand, practical and needs-based, capable of providing motivation and feedback, applicable to the workplace, supportive of performance improvement, time-based, has clear goals to be achieved, has access to the relationship between the committee and participants, provides information quickly and accurately, and is effective in communicating activity information.

Seven Widyaiswara BKPSDM Lubuklinggau City responders to the SIMLatSar assessment questionnaire I firmly believe that Widyaiswara can present training materials more easily with SIMLatSar. They are able to deliver material in accordance with the time available thanks to the SIM Widyaiswara model. The SIM Widyaiswara approach allows them to provide participants objective evaluations. The SIM Widyaiswara model offers problem-solving simulations, the SIM model encourages participants in becoming more proactive, and the SIM Widyaiswara model assesses participants' skills and knowledge both during and after training. They concur that this SIMLatSar can describe information in a targeted manner, can adapt communication skills with participants, and can test participants' competencies.

All participants resoundingly concur that SIMLatSar can facilitate the delivery of content, is an engaging learning tool, and offers involvement opportunities. All participants concurred that SIMLatSar enabled participants to follow concise and simple presentations. Individuals from batches 56 and 58 SIMLatSar is an appealing SIM model, and participants in batches 13, 14, 15, 55, 57, 59, 60, 61, 62, 63, and 64 strongly concur with this statement. The assertion that participants in the SIM model can access materials in accordance with training subjects is strongly agreed upon by participants in batches 58, 60, 61, and 64, as well as by participants in batches 13, 14, 15, 55, 57, 59, 62, and 63.

5) SIM Feasibility Test Administrative Data Basic Training for Prospective Civil Servants.
The feasibility study is used to determine whether SIMLAtSar is feasible to continue or stop. The method for measuring SIMLatSar feasibility is TELOS which stands for technical, economic, legal, operational, and schedule feasibility [15]. SIMLatSar feasibility test results as illustrated in the following graph:

The findings of this investigation demonstrate that SIMLatSar is technically (technical), operationally (operational), economically (economic), legally (legal), and time-wise (time-wise) practicable. Because SIMLatSar was created using current technology, technical viability suggests that it is a technology that is simple to acquire, affordable, and simple to operate. Although adopting new procedures and retraining existing resources may be necessary when implementing SIMLatSar, operational feasibility indicates that SIMLatSar can be operated properly at BKPSDM Lubuklinggau City due to compatibility between the existing procedures in BKPSDM Lubuklinggau City and the skills of existing personnel. Economic viability suggests that SIMLatSar can improve time and resource efficiency. Legal viability makes sure that SIMLAtSar won't interfere with BKPSDM Kota Lubuklinggau's ability to fulfill its legal obligations. In terms of the software employed and the information generated by SIMLatSar, no legal violations or deviations from relevant law exist. The schedule's viability suggests that Lubuklinggau
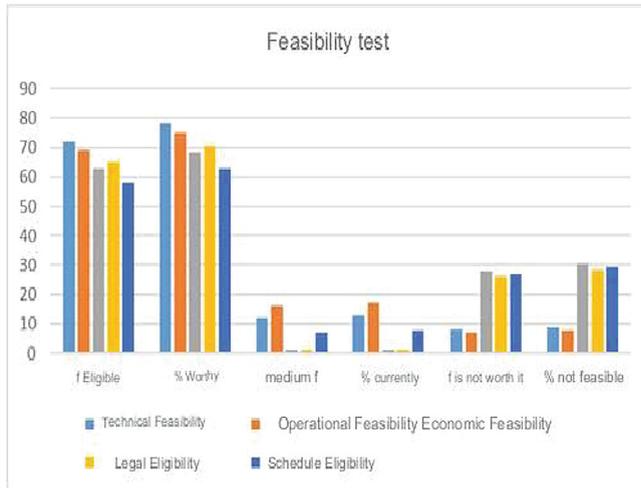
Fig. 2. Feasibility Test Results

City's BKPSDM is able to implement SIMLatSar, and that work on the SIM Model will continue within the allotted time frame.

4 Conclusion

Based on the results of the research and discussion above, it can be concluded as follows: 1) The administration system for organizing basic training for prospective civil servants at BKPSDM Kota Lubukinggau is guided by KepLANRI Number 93/K.1/PDP.07/2021 which states that the scope of organizing basic training for prospective civil servants includes planning, implementation, monitoring and evaluation, however, the organizers of the basic training for prospective civil servants at the BKPSDM in Lubuklinggau City have not fully utilized information technology in its implementation, especially in managing training administration; 2) Planning for Administrative Data Management Information System Model Basic training for prospective civil servants in the form of a 3P conceptual model design namely Users, Processes, and Products, taking into account management of the implementation of basic training for prospective civil servants consisting of planning, implementation, and supervision and control; 3) The SIMLATSAR design, which is an application model for administrative data management information systems. Where each menu page has been tested by three users and received positive responses; 4) Application of administrative data management information system model Basic training for prospective civil servants at BKPSDM Lubuklinggau City which has been developed received a positive response in the form of acceptance from organizers, trainees and teaching staff/widyaiswara. This application is easy to understand, useful and according to needs, able to provide motivation and feedback, relevant to work, supports performance improvement, according to the time available, has clear objectives to be achieved, has access to the relationship between the committee and participants, is

able to provide information quickly and accurate, effective in conveying activity information; 5) Administrative Management Information System Model The basic training for prospective civil servants that has been developed is declared technically, operationally, economically, legally, and scheduler feasible by a sample of users which includes 5 administrators/organizers, 7 teaching staff/widyaiswara, 80 participants.

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