

E-Learning Using LTSA

(Case Study: Lembaga Sertifikasi Profesi/LSP)

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Abstract - The development of Information and Communication Technology learning patterns for training for professionals who will take certification in a Professional Certification Institution we called LSP (Lembaga Sertifikasi Profesi) felt necessary to be done by e learning. E-Learning is made web-based with Learning Technology System Architecture (LTSA) standard, which is an international standard for supporting learning systems supported by information technology. LTSA is a standard 1484.1-2013 from the Institute of Electrical and Electronics Engineers (IEEE) for learning technology. Professionals who have busy work is expected to prepare themselves to learn e-learning. In this way the prospective certification participants can acquire the knowledge to improve their competence and competence in a way other than the conventional learning method.

Kata kunci: *E-Learning, LTSA, Lembaga Sertifikasi Profesi (LSP).*

I. INTRODUCTION

The development of human resources in all sectors at present is still largely done in the conventional way, where the learning process is held at the time and place specified. Educational institutions such as schools or colleges as well as other similar educational institutions should provide such infrastructure as building for the classroom and all the additional equipment to meet the teaching and learning process and on the other hand, the presence of teachers and learners becomes a must[1] [2][3].

This also happens to the Professional Certification Institute, called LSP, the field of Finance who perform the certification process on professionals such as bank employees to see how far the competence of the employee. Before obtaining the certificate of competence there is a process of learning from professionals as well as employees to obtain the required competencies. The difficulties experienced by these LSPs are that a lot of knowledge has not been mastered by professionals /employees that caused their failure to obtain this certificate[4]. For that LSP

bridging by holding training to improve the competence. The training process is often constrained because of their busyness and the difficulty of arranging the appropriate schedule. With the development of Information and Communication Technology, the learning pattern for training for prospective certification participants is deemed to be done in another way, not the conventional way of face-to-face, but added with the help of information and communication technology. The process of teaching and learning based on information technology is known as elearning, which improves the process of conventional teaching and learning into digital teaching and learning process[5]. The presence and pull of social media such as Facebook, Twitter and others for the community to encourage people's curiosity to be more sociable with this technology. With the dukukngan information technology infrastructure and the Internet access also encourage people to be more aware and concerned that technology can simplify human life.

The problems that exist in the training process to obtain the certificate of competency in LSP are 1) the limited training time which is only one day at the end of the week on Saturday, 2) the busyness of bank employees to manage the training time, 3) the availability of training place for, 4) the training process is felt less if done only one day, considering the amount of material that must be given, 5) conventional learning model so far felt quite helpful but felt less. From the existing errors it is necessary for researchers to make learning by using e learning to overcome the problems of time and space limitations. And the researchers tried to make frame work e learning for this KS LSP.

Therefore, in this research, problem limitation is made, that is, how to model the right learning for a training on LSP. The model that will be made is the right e learning model using the right frame work for LSP.

II. MATERIALS AND METHODS

The existence of licensed institutions that issue certification is a solution for professionals and companies in the industry because competence certification is one of the measuring tools to know the competence and capability of a professional so as to facilitate the recruitment process, job placement, remuneration arrangement and career

development so as to create the banking system healthy, productive and efficient.

Rosenberg defines e-learning as an asynchronous learning activity through an electronic computer device that obtains learning materials to suit its needs[6]. The increasingly widespread use of the Internet for educational purposes, especially in developed countries, is a fact that shows that with this medium it is possible to have a more effective teaching and learning process. This happens because the nature and characteristics of the Internet is quite typical, so it is expected to be used as a medium of learning as other media have been used previously such as radio, television, Interactive CD-ROM and others.

Learning Technology System Architecture (LTSA) is a standard for learning technology systems that provide a framework for knowing the existing and built systems[7]. LTSA is an architecture based on abstract components. Implementation of learning technology system can be mapped from / to LTSA. The LTSA document to be used as a standard in this study is IEEE.

LTSA specifies five layers, but only layer 3 is normative. Each layer describes a system on a different level. Higher layers have greater priority and influence in system analysis and design.

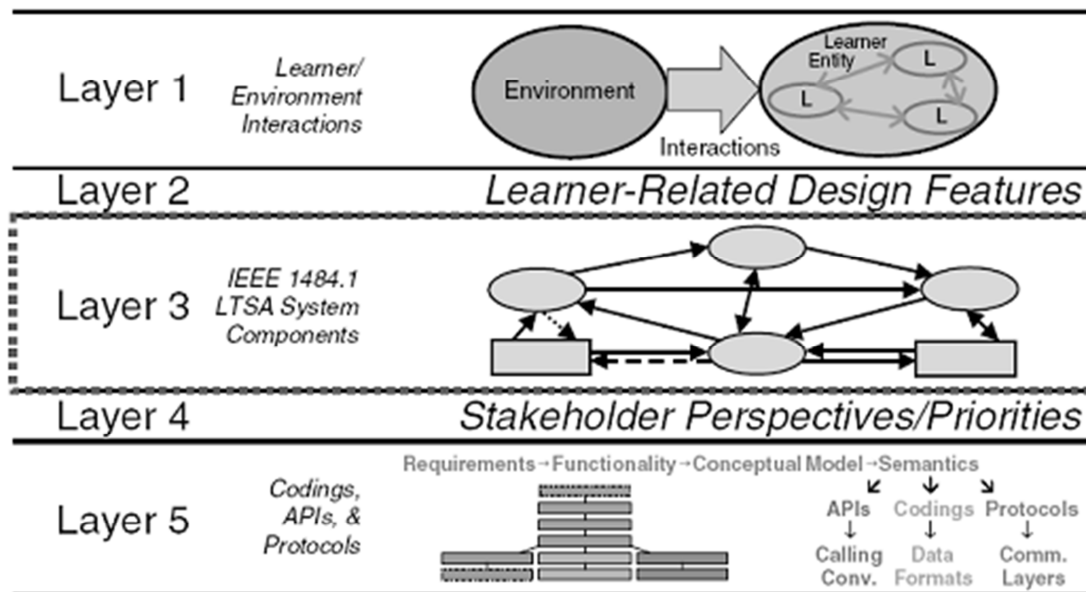


Figure1. LTSA Architecture [8].

The framework of thinking in this study ranging from formulating the problem and then do literature studies and observations in the field; followed by application design.

After the application so eat done implementation and evaluation and reported in document form.

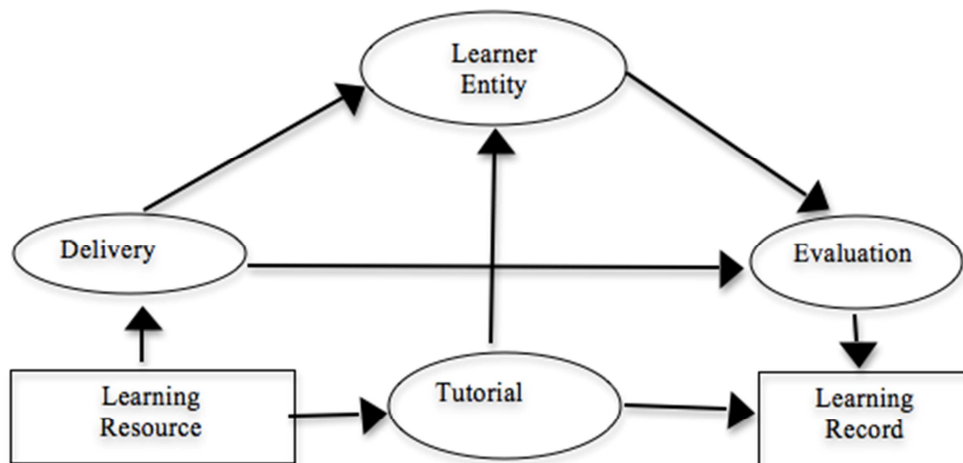


Figure 2. Adopsi layer 3 LTSA[9].

III. RESULT ANALYSIS AND DISCUSSION

Learner Entity

In the Learner Entity process there are inputs and outputs as follows: matter & question (input) and answer (output).

Learning Resource

Learning Resource can include information types such as habits and preferences people with physical limitations. In e-learning this parameter is simplified, because indirectly affect the learning process implemented online.

Learning Record

Data storage of participant information, such as achievements, preferences, and other types of information. We can save/retrieve its means evaluation process can save/retrieve participant information or save/take that's means process of the testers can save/retrieve participant information like achievements, preferences.

Tutorial

A data storage can include an overview of knowledge, presentations, tutorials, tutors, tools, experiments, laboratories, and other teaching materials.

1. Can be searched with questions.
2. Matched information is returned as catalog info.
3. Searchers can be used by the submission process to retrieve learning content.

IV. CONCLUSION

After completing the design and manufacture of web-based tutorial learning applications on Islamic Financial LSP it can be concluded as follows:

1. This application makes it easier for employees of prospective competency test participants in preparing to follow the MR 1 and MR 2 certification program test.
2. With this application the employees who want to follow the competency test can obtain materials and materials MR 1 and MR 2 online.
3. This application can motivate the fulfillment of the competence that is expected to have sharia banking employees in particular.

RECOMENDATION

This e- learning is recommended for training programs on similar LSP.

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