Massive open online course (mooc) based desa skill application

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ABSTRACT

This research aims to build skills applications that can be used to collect skills data and improve the skills possessed by the community, while understanding concepts that can be done to improve digital community resource management and provide applications to analyze information exchange online. Sampling was carried out through intentional data collection techniques using questionnaires and tests. The Skill Village application is built using massive open online course (MOOC) technology, and complex problems are handled through complex computer simulation technology and massive open online course technology, a computer engineering education model that can adapt quickly. Implementing an online skills village information exchange application to support and improve the skills and management of community resources. Community resources that are well managed can reduce unemployment, so that the positive impact that is felt is an increase in people's income. Testing the Skill Village application was carried out using the -t test and gain test techniques, where the t test was used to test hypotheses and the gain test was used to determine the significant results of the community's professional level.

Keywords:
Desa Skill Application
Massive Open Online Course
Digital Society
Community Resources

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1. INTRODUCTION

The Industrial Revolution 4.0 witnessed a change in the educational paradigm, originating from the widespread use of Information and Communication Technology (ICT). With the proliferation of ICTs, online, open and flexible learning is being moved from the periphery to mainstream education (Putra et al., 2020) ICT improves the quality and delivery capacity of online educational content. Online networks are used as learning spaces that are distributed, flexible, accessible, and, most importantly, potentially open. Openness in education has evolved over time and has appeared in many forms. MOOCs are the latest development of this open learning movement, which has attracted a lot of attention from both the academic and public spheres. The first course in this format was
offered in 2008 at the University of Manitoba and was titled Connectivism and Connective Knowledge. (Sati et al., 2021)

MOOCs are often criticized for their relatively low completion rates, as so far the completion rate has been the only relevant measure of quality. This paper will present the level of completion related to the community's initial intention to take part in the MOOC. (Matematika et al., 2020) To increase the level of completion, from the perspective of achieving goals, this paper proposes to utilize learning materials (module-approach) for MOOCs (Sam & Idrus, 2021) Modules are the application of learning materials in non-game scenarios with the aim of having an effect and solving problems. The purpose of this paper is to describe how learning materials can be included in MOOCs to enhance the achievement of user goals (Wulandari et al., 2022) More specifically this paper aims to identify learning materials that will enable MOOC users to implement their intentions through planning actions, based on implementation intention theory, i.e. avoiding behavioral intention gaps.

Well-managed community resources can increase income and reduce unemployment. After the implementation is built, it is tested against the development function of the application (Hidayat & IBBI Jalan Sei Deli No, n.d.) A job training application that can be used to gather information on community skills and get ideas for improving skills by implementing and analyzing digital community resource management. Sampling using focused data collection methods such as tests and questionnaires Creating specialized training programs using massive open online course (MOOC) technology, using advanced computer simulation techniques, massive open online course methods and rapidly adapting computer engineering training models to address complexity question (Rizki et al., 2022) Combine job training apps with online information sharing to encourage and improve community skills and resource management.

2. RESEARCH METHOD

Using a problem analysis approach, researchers conduct research that focuses on a series of field studies, situations, or individual and collective activities that develop over time in a particular context. It is also equipped with literature studies that support problem analysis (Alfiansyah & Supriyati, 2020) Problem analysis is useful in situations when very little is known about a particular topic or phenomenon. (Wibowo et al., 2014) In general, the purpose of problem analysis is to develop solutions that are relevant to the conditions that occur in the field, although it is often used to expand or modify existing problems. This study uses a type of qualitative research. Qualitative research aims to gain a general understanding of social reality from the perspective of participants through descriptive data. Understanding is not predetermined, but is obtained after conducting an analysis of the social reality which is the focus of the research, then a conclusion is drawn in the form of a general understanding of the facts (Riche & Johan, n.d.) Qualitative research focuses more on observation and natural settings. Researchers act as observers (Rakhmawati et al., 2021) He only makes categories of behavior, observes symptoms and records them in his observation book (Stefanus et al., n.d.) Qualitative research uses theory as a reference or guideline in conducting research, not testing theory as in quantitative research (Bakri & Muliyati, 2017) Data sources in this study consist of primary data and secondary data. Primary data obtained from the distribution of questionnaires directly to 60 employees. Answers from the questionnaire using a Likert scale, there are eight alternative answers set, namely strongly agree (8); strongly agree (7); agree (6); somewhat agree (5); disagree (4); disagree (3); strongly disagree (2); Totally disagree (1). Secondary data is a source of research data obtained indirectly through intermediary media (obtained from other parties) The development of human resources is highly expected by an institution, including at Puangrimaggalatung Sengkang University.
This study aims to describe the development of human resources in improving public services at the University of Puan眢agatalung Sengkang. The role of training is very important as the basis for a new culture of improving employee performance during the Covid-19 period. Until now, the company's strategy to fight Covid-19 to keep the company alive is to use digitalism.

Data analysis techniques use the normality test and gain test. The normality test is used to test whether the research data is normally distributed or not. The gain test is used to measure the increase in conceptual understanding and student character development. LMS is made through 4 stages as follows (Syafitri, 2016):

a. design the system design, including template design, databases and flowcharts.
b. coding with the PHP programming language.
c. installation on the hosting server.
d. complete teaching materials at LMS.

![Research Procedure Diagram]

Table 1. Table of Training Participants

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Age</th>
<th>Phone Number</th>
<th>Date</th>
</tr>
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<tr>
<td>1</td>
<td>Arme Tinambunan</td>
<td>46-59</td>
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<tr>
<td>2</td>
<td>Sindi Klarita Br Tarigan</td>
<td>18-30</td>
<td>0812699662857</td>
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<tr>
<td>3</td>
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<td>46-59</td>
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<td>03/03/2021</td>
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<td>03/03/2021</td>
</tr>
<tr>
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<td>082277134350</td>
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<tr>
<td>6</td>
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<td>46-59</td>
<td>081263821518</td>
<td>03/03/2021</td>
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</tbody>
</table>

Figure 1. Research Procedure
3. RESULTS AND DISCUSSIONS

This study aims to create a professional training application that can be used to collect data on skills possessed by the community, while understanding the concept of adding skills to digital community resource management to be performed, and analyzing the application of online information exchange (Dwi Kartika & Priyadi, 2020). Sampling was conducted through targeted data collection techniques using questionnaires and tests (Listiawan, 2016). Job training applications using massive open online course (MOOC) technology solve complex problems through sophisticated computer simulations, massive open online course technology, and rapidly adaptable computer engineering training models (Sulistyaningsih et al., n.d.). Implement career training applications in online messaging to support and improve skills and community resource management. Well-managed community resources can reduce unemployment and increase people’s incomes. Once created and deployed, the application is tested against its development functionality. Application testing is performed using t-tests to test hypotheses and intensive testing techniques to find significant results of community expertise (Septia Angriawan, n.d.). Create Job Training Apps Based on Massive Open Online Courses Implement job training apps to reduce unemployment and increase income through

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proper management of community resources (Pendidikan & Konseling, n.d.) The implementation results of vocational training applications can improve people’s skills, which will have an impact on reducing unemployment and increasing people’s income. The display of the administrator page in the skill village application is shown in the image below:

a. Main page
The main page is the main page when accessing the address bar, from the main page and there are menus that can be accessed when accessing the skill village application.

![Figure 1 Display Main Menu](image1)

b. Login Page
Login Page is a page that displays login confirmation options for both users and administrators. Each user must enter the correct information when logging in. Information must match the information entered during registration.

![Figure 2 Display of the Login Page](image2)
c. **Sign Up Page**
   The Sign Up page is a page that displays the Sign Up confirmation options for both the user and the user.

![Figure 3](image)

**Figure 3** Display of the Sign Up Page

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d. **Shopping Cart Homepage**
   Home Shopping Cart page is a page provided for users to purchase courses and materials provided. Users can choose the course and material they want with free and paid options. However, during the first registration, all members are given free access to choose courses.

![Figure 4](image)

**Figure 4** Shopping Cart Home Page

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e. **All Course page**
   The All Course page displays available course information and material related to information on increasing the skills the user wants.
There are many choices of course categories provided, which can be adjusted to the price, level, language and ratings of each option.

f. Contact Us page
The Contact Us page is a page that is used to send messages or input to the skill village application and the contact us page displays social media information that is directly connected.
4. CONCLUSION

MOOCs are often criticized for their relatively low completion rates, as so far the completion rate has been the only relevant measure of quality. This paper will present the level of completion related to the community's initial intention to take part in the MOOC. To increase the level of completion, from the perspective of achieving goals, this paper proposes to utilize learning materials (module-approach) for MOOCs. Modules are the application of learning materials in non-game scenarios with the aim of having an effect and solving problems. The purpose of this paper is to describe how learning materials can be included in MOOCs to enhance the achievement of user goals. More specifically this paper aims to identify learning materials that will enable MOOC users to implement their intentions through planning actions, based on implementation intention theory, i.e. avoiding behavioral intention gaps. Well-managed community resources can increase income and reduce unemployment. After the implementation is built, it is tested against the development function of the application. A job training application that can be used to gather information on community skills and get ideas for improving skills by implementing and analyzing digital community resource management. Sampling using focused data collection methods such as tests and questionnaires Creating specialized training programs using massive open online course (MOOC) technology, using advanced computer simulation techniques, massive open online course methods and rapidly adapting computer engineering training models to address complexity question (Rizki et al., 2022) Combine job training apps with online information sharing to encourage and improve community skills and resource management. In future research it is hoped that the development of information systems can adapt to current needs, so that they can be in accordance with the wishes of the user.

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