USE OF THE LATEST WEB TECHNOLOGY IN SCHOOL WEBSITE DEVELOPMENT

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Abstract

Students and teachers of SMK Negeri 1 Pontianak have achieved numerous academic and non-academic accomplishments, which, however, have not been documented and published on the school's website portal. This research used a literature review method, studying various sources, including journals and the internet. The data used for this research had been collected and published in national online journals between the years 2017 and 2023. The researcher searched research journals published on the internet using Google Scholar, with a focus on full-text access. The abstract and full texts of the journals were carefully examined and analyzed. The research objectives and findings were extracted and analyzed using content analysis of the journals. The web-based school information system at SMK Negeri 1 Pontianak was developed to provide information and an overview of the school to the community, enabling them to familiarize themselves with the institution. The need for information related to both academic and non-academic aspects of students is also crucial for parents or guardians. The creation of a virtual tour using 360-degree photos is highly influenced by the choice of camera, selection of shooting spots, and photo stitching software. A 360-degree camera facilitates image capture compared to regular cameras, which merge to form panoramic photos. The Multimedia Virtual Tour 360 effectively describes the school's location.

Keywords: web-based school, information system, Virtual Tour 360

INTRODUCTION

SMK Negeri 1 Pontianak is one of the favorite schools in Pontianak City. Apart from that, there are also many academic and non-academic achievements obtained by students and teachers at SMK Negeri 1 Pontianak but they have not been documented and published through the school website portal.

The achievements achieved by students and teachers at SMK Negeri 1 Pontianak need to be published via the website so that it attracts the public to collaborate or as promotional media to improve the school's image and credibility.

School websites are a means for more effective and wider-reaching school promotion (Anwar et al., 2017). With a school website, the presentation of information will be broader and the presentation time can be at any time (Syarifudin, 2019). Implementation of information systems can improve performance and competitiveness (Maslim et al., 2020).

Information systems can improve the quality of excellent education for the community (Darmansyah & Suhendro, 2020). People who want to know the information available at SMK Negeri 1

Pontianak, such as school profile information, do not have to come to school. Of course, this is efficient in terms of time. Websites are a medium used to replace manual and time-consuming activities with computerized activities (Lubis et al., 2020).

Virtual Tour is a revolution in Virtual Reality Photography (VRP) technology that collaborates or is combined with information technology (IT) which aims to provide a wide information space to users or tourists. According to the journal compiled by Osman, Wahab, and Ismail, a virtual tour is a technology that allows users to be placed in images and allows users to increase awareness, capture and analyze data well and accurately.

A virtual tour is a simulation which consists of a series of images. The series of images will be stitched together to form an unlimited or 360-degree panorama. Virtual Tour makes it possible to provide an experience of having "been there" at the object using only a monitor.

The application of virtual tour application has certainly been successfully carried out, as in the research entitled "Virtual Tour Guide Application as Bali Tourism Promotion" by Gusti Ngurah Mega Nata in 2017. In this research, tourism objects are displayed that attract the attention of users, there is a user interface that can make it easier and help users to use the application.

It is hoped that the existence of a school website portal can help SMK Negeri 1 Pontianak in managing and providing useful information for the school and community. School websites have several benefits, including being present in providing positive content for the public to create a healthy internet (Mushlihudin et al., 2019). Having an information system can make it easier for schools, teachers, and school residents to access information (Wahyuni et al., 2020). Having a website can help admins control the data and information needed (Christian et al, 2018).

With the SMK Negeri 1 Pontianak school website, the public can easily access information such as the school profile which consists of departments and the scope of the school. Websites can provide information about school activities that will be held or those that have been held (Salmun, 2019). Apart from that, the use of social media connected to the website is very necessary to accelerate school promotion. Promotion strategies via social media can be used as a benchmark (Setyowardhani & Susanti, 2020).

METHOD

This research used a literature review method, studying literature from various sources, including journals and the internet. The data used has been carried out and published in a national online journal. In conducting this research, researchers searched for research journals published on the internet using Google Scholar search. The years of literature sources taken are from 2017 to 2023. Search based on full-text.

To further clarify the analysis of abstracts and full-text journals, read and pay close attention. The journal summary was then analyzed regarding the content contained in the research objectives and research results/findings. The analysis method used uses journal content analysis.

The subjects in this research were divided into two, namely development subjects and testing subjects. The development subjects consist of material experts who aim to assess the suitability of the material for the learning media being developed and media experts who aim to assess the design of the learning media. The subject of development for media experts and material experts is 1 person each. The test subjects were 17 students.

The data analysis technique used in this research was the descriptive analysis technique. Descriptive analysis techniques are used to provide a general description of the data collected, both qualitative data and quantitative data. The assessment data from media experts, material experts, and user responses will then be interpreted to see the feasibility of the learning media that has been developed.

RESULTS AND DISCUSSION

Based on the results of research that has been carried out on the use of school websites, they are as follows: the category regarding the use of school websites at SMK Negeri 1 Pontianak, has a category of students who choose the disagree category 3 (10%), the agree category 27 (90%). Thus, it can be concluded that the use of school websites at SMK Negeri 1 Pontianak tends to agree with a percentage of 90%.

In the computer laboratory facilities category for students at SMK Negeri 1 Pontianak, there were 21 (70%) students who chose to disagree, 9 (30%) in the agreed category. Thus, it can be concluded that school website users at SMK Negeri 1 Pontianak tend to agree with a percentage of 90%. The results of the learning outcomes of students at SMK Negeri 1 Pontianak in the completed category were 24 students or 80%, in the incomplete category there were 7 students or 20%.

Based on the results of the needs analysis, showed that quite a lot of users were familiar with using websites on the topic of using school websites. From this analysis, the responses from students seemed interested in the media we had created. However, in terms of understanding the material, students still do not seem to understand the content of the material, so they can only get to know the topic by using the school website directly through using the website. These results follow previous research which states that the use of website media in the topic of using school websites can attract students' attention and make them focus more on the learning material.

CONCLUSION

The result of creating a virtual tour with 3600 photos was greatly influenced by the camera used, the selection of the 3600 shooting spot, and the photo combining software. 3600 camera it will make it easier to take pictures compared to a regular camera and then combine them into a panoramic photo. Multimedia Virtual Tour 3600 can describe the location of the school. The results of the questionnaire explained that respondents strongly agreed that virtual tours were compared to 2-dimensional images or videos to explore new places virtually, respondents preferred virtual tours. The questionnaire results also explain that virtual tour users were interested in visiting after seeing the virtual tour.

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