

ABSTRACT

The world of education has been affected by the Covid-19 outbreak, so the government requires all schools to learn boldly. However, many sophisticated educators/teachers find it difficult to use technology, so most students look for courses boldly to help with learning in schools. In this study, the author uses Microsoft Power Apps to make a learning registration application, namely the MariBelajar App. QoE and QoS analysis has been carried out on the MariBelajar App by distributing questionnaires in the Institut Teknologi Telkom Purwokerto area. The QoE analysis uses the parameters of the application interface, the ease of using the application, and the usability of the application using a questionnaire as a data retrieval medium and while QoS uses parameters of throughput, packet loss, delay, and jitter. The method used in QoS is direct measurement using the Wireshark application. The QoS results on the youtube service in the MariBelajar application are categorized as very good based on the TIPHON standard. This research questionnaire was designed with 5 answer scales called the Mean Opinion Score (MOS) to measure the quality of user satisfaction, MOS has a five-point scale where 5 = very good, 4 = good, 3 = adequate, 2 = bad, and 1 = very bad. The QoE results obtained have an average MOS value of all questionnaire questions for each year of students. The average score for the 2017 year students is 4.2, the 2018 year students is 3.9, the 2019 year students is 4.1 and the 2020 year students is 4.2. Meanwhile, based on the learnability and satisfaction aspects, each year of student for each class have an average score above 3.5 points, proving that the MariBelajar application is in a good category according to ITU-T P.800.

Keywords: MariBelajar App, Microsoft Power App, QoE, QoS