PEMANFAATAN *AUGMENTED REALITY* UNTUK MENUNJANG PROMOSI PRODUK UNGGULAN DAN OBJEK WISATA KECAMATAN PATUK GUNUNGKIDUL

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ABSTRACT

Superior products and tourist attractions are one of the things that can support the quality and economic quantity of the people of Patuk Gunungkidul District, therefore more attractive promotional media is needed to attract more consumers and tourists by using Augmented Reality technology. Augmented Reality technology is able to provide more interesting information by combining 2D or 3D virtual objects into a real environment. With the android operating system based, the PatukMapAR application can be created. The creation of this application uses Unity software and also Vuforia in making markers, while for making 3D models, it uses Blender software which is then built in Unity to subsequently become a complete application. The tests carried out on the markers contained on the monitor screen were carried out using different brightness levels, marker picking distances, marker picking positions, and using several different smartphone devices. The results of testing markers at the brightness level of the monitor screen show that the PatukMapAR application can detect markers at low screen brightness levels. Testing with the marker picking distance showed that the best distance for marker detection is at a distance of 100 cm to 150 cm. The results of testing with the marker retrieval position show that the best retrieval is from the front position, but the PatukMapAR application can detect markers from side positions that are not less than 45 degrees with a distance of approximately one meter on the majority of smartphone devices and can detect markers that are blocked by up to 70%.

Keywords: Augmented Reality, marker, 3D, AR.