Build design introduction to university profiles using the logo with the augmented reality method

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Abstract. The development of smartphones that make people dependent on a gadget lifestyle, as well as in the aspect of introducing a new thing in terms of product detail explanation and introduction in terms of promotion to increase imagination in real form with that trend develop smartphone-based technology that combines cyberspace and real through images and objects that are more called Augmented Reality. Augmented Reality (AR) is a term for an environment that combines the real world and a virtual world created by a computer so that the boundary between the two becomes very thin. This system is closer to the real environment. With the aim of using augmented reality promotion can be more interactive and more interesting, the audience can get to know the explanation aided with an object. More specifically with the marker method that uses the logo as an object, the marker itself is the main key so that the object being scanned raises the output object because in research that gets a logo can be easily found anywhere and will not change for a long time. From these objects will bring up objects that can be identified, namely the 3D building of Universitas Maarif Hasyim Latif which appears with a marker scan that is the logo as the object, so that with the help of these objects it is hoped that the impact can help visually explain Universitas Maarif.
Hasyim Latif building and become a different promotional media and more sophisticated because Augmented Reality is a technology that is developing at this time.

1. Introduction
The development of the latest technology has sprung up from time to time one of them in the latest visual promotion media is AR the term Augmented Reality (AR) was first discovered by Boeing researcher Tom Caudell in 1990, and the technology was first brought to the phone held in 2004 by a number of German researchers. In 2014, Wearable AR technology became a headline in various media, all because of Google Glass, an AR eyeglasses product made by Google. Information about objects and the environment around us can be added to the Augmented Reality system which is then displayed above the real-world layer in real-time as if the information is real [1]–[3]. In Indonesia AR technology Not many known by many people, before the advent of Pokemon games in 2017, many users were curious and amazed by the combination of virtual images and realities that made it possible to look real, AR allows users to see the real environment, with virtual objects added or incorporated into the real environment. Unlike VR which completely replaces the real environment, AR simply adds or complements the real environment [4]. Indirectly many people are educated and create creators who create AR as a product innovation that can be developed to attract many potential customers or users, the real example is the number of accessories or gifts made as games to promote a food brand. The number of mobile or smartphone technologies that can support the development of AR makes the technology a trend in 2017. With the existence of these technologies can be utilized as other innovations because the user has been educated and many users who are familiar with AR technology. use at the University in terms of promotion because many universities out there are still using the media. 2D or passive media promotion. With the innovation that I will apply in the case study at Universitas Maarif Hasyim Latif, I can add or become an innovation that has not been implemented by other universities using AR media for the introduction of a place or building, so that prospective students can only see the shape of the building [5]. Enough with a logo that is easily found by many people either through banners or brochures, even the Universitas Maarif Hasyim Latif website for users or freshmen can easily recognize and understand the shape of the Universitas Maarif Hasyim Latif building anywhere and anytime without coming directly to the Place.

2. Research Method
In the design, the introduction of profiles using a logo will be applied at Universitas Maarif Hasyim Latif. As a promotional material or introduction to the market profile that is a new student candidate with augmented Reality Augmented Reality (AR) method is a term for an environment that combines the real world and virtual world created by a computer so that the boundary between the two becomes very thin. This system is closer to the real environment [2], [6]–[9]. with logo objects as markers of augmented reality that will process the emergence of 3D buildings from Universitas Maarif Hasyim Latif which are expected to be able to help visualize profiles visually. This method starts with collecting data for 3D building and building locations, then according to the data obtained continues for making 3D Modeling of the building with blander software after that proceeding with the making of Marker That is in this concept using the University logo which will be uploaded to Fuvoria and from the marker data then the design of software from marker and 3D which is managed by using Unity software then exported with extension APK to run on a smartphone.

3. Result and Discussions
The system development method used in the making of this application is the Rapid application Development (RAD) method of life cycle strategy which is intended to provide a much faster development and get better quality results compared to the results achieved through traditional cycles [4], [8]–[10].from this method is produced an application or output as follows: Beginning with Marker Design Using the logo used as the data taken is the logo of the Universitas Maarif Hasyim Latif uploaded to Fuvoria for the database.
With the logo it will be scanned using a camera and matched with the data base that has been uploaded and has been planted on the Unity platform as an application maker which will output the following 3D images as follows. The following features and output are produced.

- Login page with the application logo to enter the menu

- Menu page containing the About Us button and AR / VR

- The About Us Menu page is used to explain Universitas Maarif Hasyim Latif in the form of a text description so that the application user can get to know the University in the Profile discussion first.
Figure 4. Menu page for about us

- Image Display The output of the AR button that produces a 3D view of the Universitas Maarif Hasyim Latif building is used to determine the overall appearance of the building.

Figure 5. 3D view of Building

- Display Additional Features Displays Virtual Reality Building Made to Know and like in front of the original building using VR glasses made using Camera 360.

Figure 6. Virtual reality building feature

4. Conclusions
Based on the description and the results of the analysis that have been carried out during the development of the System Application, the markerless augmented reality method can be used as a means of introducing the campus by using logos that are free to download or spread anywhere to use, and in this case can be used as a medium for explanation of new introductions for new students /
prospective students with a percentage of satisfaction in 80% of them feel satisfied with the application and as a means of different approaches or ways that generally use brochures or banners that are indeed as passive media.

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