**THIRD EYE – AI based Augmented Reality**

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Augmented Reality starts with a camera-equipped device—suchas a smartphone, a tablet, or smart glasses—loaded with AR software. When a user points the device and looks at an object, the software recognizes it through computer vision technology, which analyses the video stream. The device then downloads information about the object from the cloud, in much the same way that a web browser loads a page via a URL. A fundamental difference is that the AR information is presented in a 3-D “experience” superimposed on the object rather than in a 2-D page on a screen. As the user moves, the size and orientation of the AR display automatically adjust to the shifting context. New graphical or text information comes into view while other information passes out of view.

In industrial settings, users in different roles, such as a machine operator and a maintenance technician, can look at the same object but be presented with different AR experiences that are tailored to their needs. A 3-D digital model that resides in the cloud—the object’s “digital twin”—serves as the bridge between the smart object and the AR. This model is created using computer-aided design and Android SDK (software development kit).

The twin then collects information from the product, business systems, and external sources to reflect the product’s current reality. It is the vehicle through which the AR software accurately places and scales up-to-date information on the object.

