## **Abstract**

In general, the way to find out ad effectiveness done by seeing the final result of the products sold. It inflicts the slow reaction done by seller in respond to sales result based on the ad installed. Even the use of digital ad media such as digital banners are mostly static. Ad displayed not following the visitors interest. In example, a visitor interest to the ad of A phone, but the visitor has to wait for several times to be able to see the ad of A phone again.

Therefore, it is necessary to have a system which can showing ad dynamically by giving feedback to the visitors interested to an ad. This interest detection consist of face detection and eye detection running for one (1) second to ensure visitor interest to the currently showing ad.

The main result of the assessment is a tool that detecting visitor interest to an ad and offer feedback to the interest. System also save the interest detection data for each ad patterns. Based on assessment, success rate system is 68,57%. Other assessment, represent system ability to sort out visitor interest based on patterns to find out the most popular ad pattern for the visitor.

Keywords: display, ad, feedback, face detection, eye detection, pattern