## ABSTRACT

Online advertising is the means by which a company or organization in presenting and promoting the ideas, goods, or services online. In managing online advertising, website owners can utilize applications to help facilitate the process of advertising. However, not all websites use applications for help in putting ads on its website. Pasaramai is one of the portal websites which manually manage online advertising. Advertising is done manually causes the business process is not optimal, and there are several processes that should be automated.

In this research an application is built to integrate advertising on the website is incorporated in the portal to make Pasaramai advertising process easier. Researchers used an iterative and incremental method in the application development process. While the analysis and design using the Unified Modeling Language (UML). Then ad management application is built using the PHP programming language to implement the CodeIgniter framework.

The results of this research is the design of the application using UML and ad management application with functionality that supports a centralized advertising on Pasaramai portal. The functionality of the application includes the installation and ad serving, ad serving reports results, and confirmation of payment. The test results of user feedback indicates that the application can provide added value and convenience in the process of advertising on the portal Pasaramai. However, the application still needs to be developed, especially in terms of speed of access to the website in order for the website to respond more quickly.

Keywords: online advertising, iterative incremental, web-based application.