## **ABSTRACT**

As technology advances, Artificial Intelligence (AI) become indispensable in industrial world especially the AI Recommendation Engine Technology System. The evolution of the internet and digital technology has sparked new opportunities for trade, expanded product lines, and improved customer experiences. As Artificial Intelligence becomes a practical technology in industries, it is worthy to note that many businesses are still playing catch-up, while figuring out how it can transform their operations. Many retail and e-commerce companies, such as Amazon and Alibaba. Use a recommendation engine. To identify the target audience. Based on recent searches by potential customers, AI algorithms in search engines record the details of the product being searched for. Based on the results of the algorithm, the search engine recommends the appropriate browser. And list them on a personal dashboard to help them find products quickly. This research is a mix of qualitative and quantative methods, then uses multiple regression research methods. The aim of this research is to identify the impact of content-based filtering, recommendation cluster analysis and collaborative filtering recommender system on online consumer satisfaction.

Key Words: Conten-based Filtering, Recommendation Cluster Analysis, Collaborative Filtering Recommender System, E-Commerce, Online Consumer