## **ABSTRACT**

Managing and sharing design information is a crucial point in doing an engineering projects. In the design process, designers and engineers needed the right computer aided design (CAD) tools to create a product design and also need the right engineering data management system to manage and share various information about the designs with related parties. The purpose of this research is to measure efficiency from the implementation of engineering data management system in XYZ Company, which is a research and manufacture company and actively doing work using CAD tools.

Engineering data anagement system desing generally changes current business process of XYZ Company. Design development process which initially started from concept design until production is done manually, with the existence of engineering data management system, it will help design development process in XYZ company become extimated by suggesting collaborative engineering, traceability and automation.

Based on discussion, engineering data management system by suggesting collaborative process, treaceability and automation, could help XYZ company speed up design time working time, from 5 components in 5-7 days, into 1-3 days, from 5-10 components in 10-12 days, into 3-5 days, and more than 15 components from 20 days, into 10-15 days.

The result from this research is, that engineering data management system been able to efficiently assist XYZ Company in the product development process, It is hoped that future developments can integrate all parts of the company with the Engineering Data Management System.

keyword: CAD, Engineering Data Management System, collaborative engineering, traceability, automation.