

## **ABSTRACT**

Globalisation era is era where technology becomes primary need for every sector in industry. Technology that usually used by manufacturer are robot, machine, information system/ technology, etc. Those technology can help the company to minimize defect and control the production time which is one of quality control system scope. One of quality control aspect is maintenance management which often become an issue in a company because it spend a lot of money. Thus, in this era most of company are challenged to find a method that make maintenance more efficient and effective, minimize cost and complexity. The method that suitable with this case is life cycle cost analysis. Unfortunately, most of company lack of industrial engineer in their maintenance department that cause life cycle cost can not be applied in those company, whereas life cycle cost analysis is method that can help the company to get the optimum lifespan of machine or equipment, and how many maintenance crew that needed in every maintenance activity for each machine which drive to the minimum overall cost that has to be paid during the lifespan of machine or equipment. The aim of this research is to build an application or software that can help the company and maintenance department to perform life cycle cost analysis. With this application, it is expected that many companies can push down their expenses and make the machine perform better.

Keywords: Life Cycle Cost, LCC, Csharp, Application, Software, Maintenance.