

## ABSTRACT

In the current economic situation, the way to survive of an organization is to increase the serviceability towards the customers and reduce the cost, so that improvement of purchasing performance is one of the ways to solve that problem.

This project is aimed to realize how Material Requirements Planning (MRP) reduces the cost of organization by using the case study from site reference at Toshiba Display Device Thailand (TDDT). The study used the comparison method between the current purchasing system and the concept and simulation of MRP system at Toshiba Display Device Thailand (TDDT).

The input data has been collected using 8 months' past record of a raw material, which is a directed material for producing Cathode Ray Tube (CRT), and compared with MRP simulation. The comparison was made between the expected benefits of MRP and actual results from simulative MRP, which showed the comparison results especially in terms of finance.

It is shown from the study that MRP system has reduced the cost of purchasing for the organization and the benefits are realized from implementing the system.