ABSTRACT

Purchasing activity is an activity that always done by every company, even big or small in any kind of business field. Purchasing activity directly related to purchasing budget that must be spend by company. The size of purchasing volume done by company will effect to the size of purchasing budget. Commonly, company will spend their budget between 40% until 80% from their income for purchasing activity. This research held in P.T X, a company whose producing electronic goods in Jakarta. Like any other company which produce electrical goods, P.T X also did purchasing activity in a large amount of volume. According to Telgen (1994) and Boer (1998), Canon and Sony spend up to 80% of their budget for purchasing activity. Every company would try to use more than one supplier. It is done with consideration to avoid dependently to one certain supplier in order to fulfill production needs, so the production continuity will kept maintained. The problem that might be arise is on what basis the company allocate the purchasing volume and how they allocate them to each supplier.

DEA is a method based on linear programing to measure supplier efficiency score relatively in comparison with another supplier. DEA has a high flexibility in adapting model with many kind of problem. There are several model of DEA that has been used in many researches. DEA model used in this research is DEA model with purchase volume allocation approach. This model enables to evaluate supplier performance and allocate purchasing volume to each supplier at the same time. Generally, the DEA model will maximise each supplier efficiency so that supplier which has high performance will get purchasing volume allocation bigger than the lower one.

By using SOLVER program, the method result the highest purchasing volume allocation for 8 parts achieved by P.T C with percentage 12.97, and at the lowest achieved by P.T I with percentage of 7.53. If we compare this result with the purchasing volume allocation that already made by company at period March 2002, it is conclude that stay remain saving about Rp. 2.445.014. By allocating purchasing volume based on supplier performance there are several managerial advantages that might achieved by company. A good relationship between buyer and supplier will stay maintained, also it can motivate supplier to improve their performance because the competitive condition between supplier will emerge in order to get more purchasing volume allocation.

Keywords: Alokasi Volume Pembelian, Data Envelopment Analysis, Input Allocation, Purchasing, Supplier Performance Measurement.