

## ABSTRACT

The automotive industry is affected by the world recessive economy, consumers' purchasing power decrease, so it is hard to generate sales in this difficult situation. The only way to survive and maintain profits is cost and expenses reduction in the supply chain. Applying reverse logistics concept through implementation of returnable packaging in the outbound logistic between distribution centre and dealerships can reduce packaging expenses for a company. In addition, utilizing running empty trucks to pick up empty returnable packages from dealerships to the distribution centre creates more transportation efficiency.

The purpose of this project is to explore knowledge of reverse logistics and reduce cartons consumption and purchase amount. The result of this study provides guidelines and suggestions for the company for decision making in the implementation of returnable packaging.

The result from trial period indicated that consumption of cartons reduce 34,528 pieces to 12,672 pieces or 63 percent in average. Packaging cost of cartons also reduced drastically from 319,278 baht to 110,728 baht or 65 percent. With this reduction, the company can cover an initial investment for returnable packaging and operating cost within 1.93 years.

The conclusion of this project is that the company in this case study should implement returnable packaging as a strategic tool to reduce packaging consumption and expenses in outbound logistic.