DESIGN OF DISTRIBUTION CHANNEL:  
DIRECT SALE vs. MIXED SALE

Yeonjung Kim

Dr. Wooseung Jang, Thesis Supervisor
Dr. Cerry M. Klein, Thesis Advisor
Dr. Carlos Sun, Thesis Advisor

ABSTRACT

The design of the distribution channel is one of main decisions for manufacturers and should be determined in the early stage of the production. In this paper, two types of channel distributions are suggested for single product manufacturers. One is a direct sale, which is considered as a general tendency of the times, and the other is a mixed sale, which combines wholesale and retail sale strategies. The expected profit functions for these strategies are formulated and evaluated by different assumptions about customer demands. In particular, the customer demand function is assumed to be uniformly distributed, depending on the sales price. As a special case a linearly bounded demand distribution is further investigated. Based on these conditions, the optimal wholesale quantity and retail price are determined. In conclusion, the results indicate a channel strategy that guarantees the maximum profits based on business conditions.