The research on implementation of information platform for packaging recycling operations in TFT-LCD industry

Student : Guo-Hung Deng

Advisor : Dr. Chi-Yang Tsai

Institute of Industrial Engineering and Management Yuan-Ze University

ABSTRACT

Panel industry is one of the Two Trillion & Twin Star industries in Taiwan. Warehousing operations have a profound impact on the delivery schedule and logistics company and labor costs of a panel factory. As the panel has become thinner, packaging materials becomes of unique importance. Due to customization for special needs, delivery lengths tend to be longer. Thus, for flat panel industry with thin profit, how to effectively control flow cycles of packaging material becomes very important.

This study first analyzes the operation flow of color filters and identifies problem points of the packaging material management. With the use of bar code information management, inventory control on packaging materials is achieved. By controlling the entry and exit points the control of packaging material flow cycle is ensured and service quality is improved. Next, flow improvement and system implementation assessment are studied, and then a packaging information management system is constructed. Qualitative and quantitative analysis on system performance is conducted. It clearly shows that the implementation of the information platform has a significant and positive effect in terms of quality improvement, time saving, and cost reduction.

Keyword: information platform packing materials management quantitative analysis