

# Model to Plan and Control the Generational Transition of DRAM Industry

杜瑩美, 許敦皓

Industrial Management

Management

amytu@chu.edu.tw

## Abstract

DRAM industry is not only among the largest manufacturing industries in the world, but also the most competitive. Furthermore, due to DRAM business is characterized by short life cycles, along with highly competition, the manufacturers are forced to migrate to advanced technology quickly. Under this circumstance, the manufacturers have to launch new technology and purchase generational equipment to meet the market demand and reduce manufacturing cost frequently. This paper investigates the technology generational transition of DRAM industry from manufacturing and planning perspectives. The concept of TOC is applied to schedule the production plan of the new/old products. Regarding to shop floor control, three definitions of cycle time are used to diagnose the production status. Finally, the workload ratio of bottleneck is used for the release decision to adjust the rhythm of production.

Keyword : DRAM, Generational Transition, TOC, Workload Ratio