## 能源光電LED產業政策與競爭策略之研究 邱冠斌, 邱冠燿, 陳金花 行政管理學系 人文社會學院 chiu5168@chu. edu. tw

## 摘要

Compared with international manufacturers, Taiwan's LED manufacturers are much smaller in both scale and capital input. Japanese and American manufacturers hold the patents on critical components and materials of LED. Due to the shortage of main materials and equipments in the upstream, and low cost and technical requirements in the downstream, Taiwan's LED industry originates and masses in the lower reaches. Under the circumstance that all countries advocate environment protection, many domestic and international groups invest in LED since it is energy saving, carbon reducing and widely applicable. In the early period, constrained by patent, technology and scale, Taiwan's LED industry was relatively laggard.

In recent years, manufacturers have launched a wave of integration through merger, investment and tactical alliance, so as to promote international competitiveness by expanding scale and channel, and exchanging technique and patent grant. According to the industry development observation, the year 2005 is a critical year of industry merger. Since then, most manufacturers have been striving for a dominant position. From the observation of merger trend, we can clearly see that larger scale brings stronger competitiveness.

This research focuses on application terminal, the upstream and downstream LED industry of Taiwan. Here this paper inquiries the integration trend of LED industry and causes of the integration result, industrial policy, as well as competitive strategy, in virtue of industry matrix and deep interview with experts.

The results of this survey indicate that the upstream LED industry of Taiwan presents the horizontal integration trend, while the downstream industry presents the vertical integration trend. Taiwan and international groups present the backward vertical integration trend. The long-term

overall integration is complete vertical trend. In the light of different trends, the research offers corresponding competitive strategy, respectively, which will be highly contributive to Taiwan's LED industry.

關鍵字:LED (Light Emitting Diode), Industrial Policy, Strategy, Vertical Integration, Horizontal Integration, Merge & Acquisitions