A RISK ANALYSIS OF LIQUID-CRYSTAL DISPLAY INDUSTRY

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The purpose of this paper is to analyze how many risks affect Liquid-Crystal Display (LCD) industry.

Recently Liquid-Crystal Displays (LCDs) are widely used for daily life; for example, cellular phone, notebook PC, monitor for desktop PC, digital camera and TV. Especially in TV market, LCD TV are expected to be replaced with Cathode-Ray Tube (CRT) TV, because LCDs have attractive feature such as lightweight, thin thickness and low electric power. LCD industry grows up rapidly in these ten years. This growth ratio is more than 200% per year. This market volume of 2003 reaches about 38 US billion dollars. And that of 2008 is estimated at about 80 US billion dollars. Even though the outlook of LCD industry is bright, there are a variety of risks in this industry such as the investment risk, the demand (price) risk, and the technology risk. Analyzing these risks is useful for LCD industry to grow steadily. This paper focuses on the investment risk and the technology risk among others.

It is very risky and highly profitable for LCD producers to invest huge money. And without this huge investment, it is very hard for LCD producers to be alive in this market. In short, LCD producers require "High Risk - High Return" Response.

TV market is very potential market for LCD producers. In the market, however, there are a number of substitutive products such as Rear projection TV, Plasma Display Panel (PDP) TV, Field Emission Display (FED) TV and Organic Light Emitting Diode (OLED) TV. In order to get advantage over these alternatives, LCD producers have to develop low-cost process of manufacture with their technology.

If overcoming all kind of risks, LCD industry would join a group of basic industries.

Key words: High-risk high-return, Investment risk, Technology risk, Liquid-Crystal Display industry