Part 1: The Current and Future State of the Market

LED Video Market Size and Growth

The growing demand for more advanced, brighter, and eco-friendly lighting has greatly impacted all sectors of the $9 billion light emitting diode (LED) industry. Representing 13% of the industry, the LED digital signage sector comprised of LED professional displays, video board and signs has the most promising growth potential. Compiled research from Electronicast and SBI indicates that the market for LEDs used in professional video display applications is roughly $1 billion to $1.5 billion. The market size is predicted to grow by 15-20 percent annually, reaching nearly $3 billion in 2016.

5-Forces Market Analysis

Supplier Power: Moderate
Although an increasing number of companies are developing the technology capable of producing LEDs inexpensively, none compare to the quality of Nichia and Cree, the top LED manufacturers. Since sports and entertainment venues demand high quality video lighting, LED video board developers in this niche must purchase from the top tier LED manufacturers. Even though industry LED prices are dropping, top-notch LED manufacturers continue to maintain LED prices higher than low-quality competitors.

Threat of Entry, Moderate
In nearly all growing markets, threats of entry, high-costs and the need for large fixed capital can serve as barriers to entry, especially for start-up companies. In the LED video industry, raw materials, labor, and R&D can be a huge and overwhelming investment for small companies, discouraging new market entries. However, these costs will not dissuade large corporations with high brand image/recognition, presence in the electronics industry, and extensive knowledge of LED technology.

Buyer Power, High
Within the market’s top tier there is minimal product differentiation, substantial pricing parity, and significant incentives by suppliers to maintain high utilization of production capacity. This makes price a major factor in the purchase decision when suppliers price aggressively to win a significant sale. For sports and entertainment venues, LED video integrators must bid for business, placing more power in the hands of the buyer. However, as the market gains more popularity, buyers are beginning to see that LED video is almost a necessity for their respective businesses. This need for LED video will offset some of the buyer’s power to lower prices in the industry.

Threat of Substitutes, Moderate
There are few new substitutes for LED video. It is currently the most effective form of display for sports and entertainment facilities. No other products can compare to the brightness, contrast, size, and quality of LED displays. Other forms of displays, such as static billboards and LCD monitors, are slowly becoming obsolete. However, LED displays are still relatively expensive per square foot, and buyers are willing to look into other forms of guest/customer entertainment if prices in the LED video market remain costly. As LED video display pricing drops and quality continues to improve, demand will increase in all market segments and further weaken the threat of substitutes.
Rivalry, High
As demand for LED video increases, market players must continue to service and maintain relationships with current customers while vying for more market share. There are numerous financially sound, competitive players in the LED video market making rivalry a huge threat to profitability. Large corporations like Sony, Philips, and Samsung currently hold small positions in the market, but possess the resources to aggressively gain market share. As in most markets, there is a push for quality and brand reputation, but ultimately price is the major differentiator between firms and will be the major source of rivalry in this market.

Major take away: Although the market is growing, high rivalry and buying power will still make it difficult to become or remain profitable in the market.

Market Trends: External Factors, Opportunities, and Innovations

External Factors
Economic Downturn- Although the global economy is experiencing a recession, growth in the LED video market remains positive. Even though some firms, such as market volume leader Daktronics, have recently seen a decline in sales, the market as a whole continues to prosper. Numerous market opportunities (listed below) are the cause for the high market growth projections, despite the economy’s current state.

Supplier Shortage- The factories of LED manufacturers are reaching full capacity due to increase in demand. This may cause a possible shortage of LEDs. The shortage is only a short-term problem and will not impact long-term growth. Manufacturers will eventually build new factories, hire more labor, purchase more capital, and increase production in order to meet the raising demand.

Going Green - A portion of growth in the LED industry can be attributed to society’s push for sustainability. LED bulbs are highly energy efficient, converting about 80 percent of its energy into light. They last 10 years, which is significantly longer than incandescent and fluorescent lights. In addition, a “greener” version of LED known as OLED light is comprised of organic materials and has long-term potential in the industry, but must make significant performance advancements before being used for large displays. In a market that is normally criticized for its energy consumption, large area display manufacturers are now making strong efforts to develop more energy efficient video displays, making LED the popular choice.

Opportunities
- Increased Penetration of Indoor/Outdoor Billboard market
- Gas Stations
- Major Retailers
- Schools
- Global Leisure Facilities
- Movie Theaters
- Traffic signals and signs through Government contracts
- Energy Star Certification (Potential Product differentiator)
- Continued Penetration into local/niche markets

Product Innovations
- Water-Proof LED
- LED Moisture seals
- Advancements in OLEDs (AMOLEDs/PMOLEDs)
- Constant improvement in brightness (HB and Ultra High Brightness LED)
- Current design pushes, that stray away from using sockets
Part 2: The Players in the Market

Financial Differences

With approximately 30 percent of the LED video market share, Daktronics is the clear volume market leader of LED video manufacturing having reported sales of $442 million dollars in 2011. Other competitors with large market shares are Yesco and Lighthouse Electronics.

Margins are difficult to assess due to variable expenses accrued through LED maintenance and consulting costs. However, generally speaking, margins are comparable across market players.

Types of Differentiation

Product Components

The quality of LED lights, pixel pitch, viewing angles, brightness, contrast, and image uniformity are the major features that market players try to improve in order to breakaway from competitors. Among the top-tier manufacturers, distinctions in product quality are extremely difficult to recognize. Therefore, companies must use design, style, and compatibility as key sources of differentiation.

Problem-Solving/Cooperation

True differentiation between companies in this market arises through the ability to customize and cater to customer needs. Each client has distinct requirements, challenges, and display usages. Companies creating products that effectively address the customer’s needs and concerns remain reputable and differentiate themselves from their competitors. Companies that have successfully proven to work cohesively with consultants, facility management, construction companies, and other relevant venue partners, serve the best chance of gaining business.

Experience and Brand Recognition

Experience is a value that some companies can successfully use as differentiation. As previously mentioned, brand image and recognition enable large corporations to survive in the market. Customers that have a general fondness for a brand will be more inclined to purchase related products.
Cost Advantage v. Vertical Integration
Developing and maintaining an LED board is expensive and discovering ways to be cost efficient can create a huge advantage in the industry. Companies that deliver large quantities of LED video displays are able to reduce costs as a result of economies of scale. For strategic purposes and control, many companies opt to manufacture in-house while others generate savings and flexibility from partnering with third-party manufacturers.

Market Segments
Customers are also able to differentiate themselves through the type of market segments they pursue. In the past, Yesco has catered to the Display Advertising and Casino/Resort market while straying away from sports venues. Daktronics is the most diverse offering applications for all segments of the market, clearly explaining the large market share. Many companies such as Panasonic focus predominately on sports, entertainment, and outdoor media.

Part 3: Leveraging Panasonic’s Strengths

Panasonic’s Brand Appeal
Panasonic is one of the most recognizable electronic brands in the world. More important than brand acknowledgement is the brand’s positioning. In the mind of the average consumer or business customer, Panasonic is perceived as a provider of fairly priced, high quality electronic products. Furthermore, the Ideas for Life philosophy, shows the company’s emphasis on providing products that are useful and beneficial to society. This positive perception will help the company to further penetrate the LED video market. Reminding firms of Panasonic’s brand, successes in similar electronic markets, and sponsorship opportunities provide an overall advantage.

Additional Panasonic Products
Panasonic’s ability to provide more than just LED boards is what sets it apart from most of its competitors. The corporation sells a variety of products that meet the needs of stadium, entertainment and media properties. This array of products provides a “one stop shop”, reducing the hassles associated with multiple vendor/company relationships. Sports, entertainment and media venues may see this value and feel compelled to purchase from Panasonic.

Panasonic Total Solutions
The “latest” industry products are only one aspect of business that Panasonic can provide to firms in need of LED video. The company also places significant emphasis on fostering relationships with venue owners while providing continued maintenance and product service. This complete bundle of offerings is what separates Panasonic from its competitors.
SOURCES

SBI: World market for LEDs and Oleds, 2009
marketreasearch.com

SBI: LED efficiency and Lighting worldwide markets, 2010
marketreasearch.com

May 2011- LEDs Used in Signage & Professional Displays Global Market Forecast (2010-2016)
Electronicast.com (Press Releases section)

Daktronic Press Release

LED shortage flares up in 2010

Potential Reports to Consider for more Detailed Information:

LADIS

LEDs Used in Signage & Professional Displays Global Market Forecast (2010-2016)
electronicast.com (Press Release Section)

IMS World Market for LEDs 2011 edition