



Signage Propels Display Sales as Technology Migrates to New Markets

BLUE SKIES AHEAD: THE LARGE SCREEN DISPLAY MARKET



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The seventh edition of iSuppli's report on large screen display industry has just been completed. This report encompasses a broad scope technologies used in non-consumer applications. Technologies

supporting the large screen display market range from LED video, front and rear-projection, plasma and LCD technologies to mature incandescent and electromechanical technologies. The domains using large screen displays include multiple applications, such as sports, live events, rental, trade shows, retail-signage, transportation, financial exchanges, education, conference rooms and command and control. iSuppli defines large screen dis-

plays as non-consumer displays that are at least 30 inches in diagonal size.

In an effort to limit the study to non-consumer applications, consumer-oriented televisions are excluded from the definition of large screen displays. Ultra-portable front projectors are also excluded from this definition because they are less than five pounds in weight, these products do not compete directly with installed rear projection, plasma and LCD displays.

The large screen display market value is given across various applications (Figure 1). The conference room application comprised the biggest segment of the large screen market in 2004, with a 37 percent share and \$3.39 billion in revenue. Front-projection technology will dominate the conference room application throughout the forecast period. With an increasing trend toward video conferencing, future conference rooms will need to be equipped with more than one display device. This is

where plasma and LCD displays will thrive. Plasma displays—with comparatively lower prices per square inch than LCD displays—will have an advantage in conference rooms in the near term. This application is likely to reach \$4.77 billion in 2010.

The next biggest application in 2004 was the indoor venue application with a 22 percent share, or \$2.01 billion in revenue.

Indoor venues comprise numerous applications including arenas, auditoriums, convention centers, theaters, bars, clubs, and the hospitality industry. LED video is the technology of choice for indoor sports arenas and civic centers, which require long viewing distances and high brightness. Large-venue front projectors will fulfill the needs for displays at convention centers, boardrooms, and religious places. Plasma displays, and later in the forecast period LCD displays, are rapidly growing in the smaller venue applications, such as hotel/resort guest rooms and lobbies, bars, clubs and restaurants. This application is forecast to reach \$3.31 billion in 2010.

The education market represented 14 percent of the total large-screen display market, or \$1.30 billion in revenue. Front-projection technology dominates this application with some plasma, LCD and rear-projection displays installed at the high-end of the market. The education market is technologically more advanced in Europe than in North America. Front projectors rapidly are being installed in the K-12 segment of Europe's education market and the education market continues to be the fastest growing segment. Several government-sponsored programs for projectors and other IT equipment for K-12 schools have been announced in the EMEA region. Although colleges and universities remain the largest markets for North America, the K-12 segment of the education market is expected to strengthen beginning from 2005. The education market is forecast to reach \$3.13 billion by 2010.

Retail signage is the display and man-

LARGE SCREEN APPLICATIONS

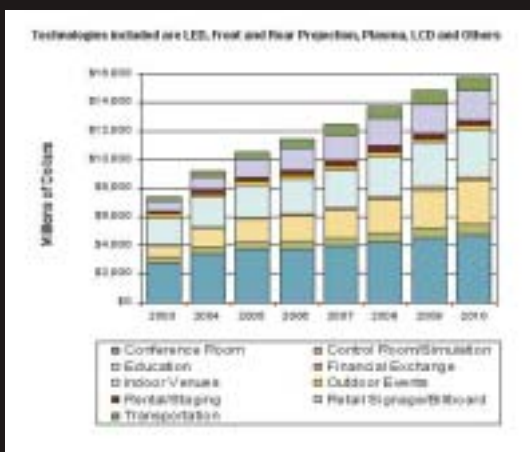


FIGURE 1: WORLDWIDE LARGE SCREEN DISPLAY MARKET VALUE BY APPLICATIONS, 2003-2010



agement of information in retail and various other commercial environments. With the availability of display technologies such as plasma, direct-view LCD, rear-projection video cubes, and LED video, the concept of displaying enticing content to capture the attention of end-users is becoming a reality. The retail-signage market represented 10 percent of the total large-screen display market, or \$912 million in revenue. While the LED video display will be the technology of choice for the outdoor retail signage market, the technologies of direct-view plasma, LCD and rear-projection videowall will compete in the indoor retail signage space. Although the initial cost to migrate to dynamic signage is sizable, the benefits to retail establishments are far greater. With digital signage, retail stores can change their advertising content faster, more easily and less expensively compared to using traditional signage. It also gives retail stores the capability to provide regional, local and even site-specific content efficiently and inexpensively. The retail-signage market is forecast to reach \$2.07 billion by 2010.

The control room and simulation application includes customized installations at government facilities, process control, public utilities, telecommunication, traffic and transportation, broadcasting, and other facilities. The control room and simulation market represented

four percent of the total large-screen display market, or \$502 million in revenue in 2004. Control-room environments generally operate 24 hours a day, seven days a week, and this demands high performance and image quality, as well as optimum reliability (24/7 operations), and the pricing of the units is a secondary concern. DLP™ rear-projection technology has become the preferred one for this application market due to longer lifetimes and better contrast ratios. In mission-critical operations, videowall displays need to perform 24:7 and poly-silicon panels face degradation of color because of heat generated in such environments. The control room and simulation market is forecast to reach \$690 million by 2010.

The transportation market with installations at airports, train and bus stations represented 3.8 percent or \$347 million of the total large screen market. Direct-view LCD technology was the most popular technology followed by plasma and LED displays. The main factor driving the transportation market is the constant need for displaying relevant and accessible information within a transportation facility. Additionally, increasing demand for display of entertainment and advertisement contents in these facilities have boosted the transportation market. This market is expected to reach \$911 million by 2010.

The rental/staging market, which serves staging, concert, trade shows, and auditorium applications, requires very high light output and high levels of resolution. The rental and staging market represented four percent of the total large-screen display market, or \$320 million in revenue in 2004. Large-venue front projection technology represents the largest share of the rental market followed

by LED video technology. High-end three-chip DLP front projectors dominate this segment of the rental market. Competition from large-screen LED video also is impacting the high-end rental market for front projectors. Video performance, color, brightness, transportability, and uniformity of picture quality are critical in this market. The rental/staging market is forecast to reach \$400 million by 2010.

The outdoor events market includes installations at sports facilities, amusement parks, and other outdoor venues. This segment represented 3% of the total large-screen display market, or

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This article is an excerpt from Ms. Khatri's latest research report: "Large Screen Display 2005." The full 200-page report is available in PDF, Excel, and Powerpoint format. For information contact info@isupply.com.

\$267 million in revenue. LED video, LED text/graphics/animation, incandescent and electromechanical technologies serve the outdoor events markets. LED video occupies a vast majority of this market. The outdoor events market is forecast to reach \$276 million by 2010.

The financial market represented one percent of the total large-screen display market. This market includes installation of plasma, LCD, LED, and rear-projection displays at stock, commodity and currency exchanges, banks and other financial establishments. The financial market is forecast to reach \$193 million by 2010.

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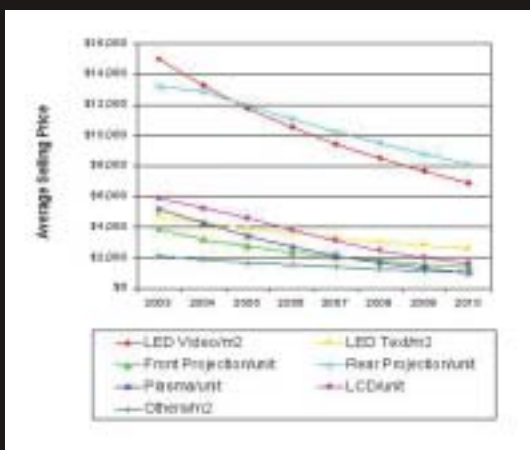


FIGURE 2: LARGE SCREEN DISPLAYS AVERAGE SELLING PRICE BY TECHNOLOGY