

Hawaii's largest video wall created using Samsung video wall solution with 46-inch UX Series displays



Overview

Business issue

Waikiki Shopping Plaza's rear-projection display wall, the mall's focal point, was outdated. The existing video wall could not display the real-time information and interactive content needed to increase mall traffic and enhance the shopping experience.

Solution

Pacific Digital Signs designed a video wall using the Samsung video wall solution with 46-inch UX Series LCDs as the project's centerpiece. Pacific Digital Signs also redesigned and re-engineered a better video wall support structure because the Samsung LCDs required less depth than the previous display.

Results

The Waikiki Shopping Plaza sold ad space and promoted on-site events through the video wall, resulting in higher event attendance. Interactive promotions displayed on the video wall also led to an increase in traffic to the upper levels of the five-story mall, which boosted revenue for the merchants.

"We receive daily compliments on the high-quality video content of the new [Samsung] displays. It really looks sharp. Our new interactive promotions are a big hit, and since we have over two million visitors visit the mall every year, our advertisers get some great exposure. Pacific Digital Signs and Samsung delivered a top-quality solution within our budget, and exceeded our expectations with their results."

— Kainoa Akina
Marketing Director, Waikiki Shopping Plaza

About the client

More than two million people visit the Waikiki Shopping Plaza each year. Located in Waikiki, Hawaii's main tourist and retail destination, the mall offers a unique blend of small shops and upscale stores, a food court and a stage area that provides various nightly entertainment.

Challenge

The video wall in the Waikiki Shopping Plaza served as the mall's focal point. It was prominently placed behind the main stage area and suspended 30 feet above the food court, providing customers in both areas a full view of promotions, advertisements and videos. However, the rear-projection display system was technologically outdated and needed to be replaced.

The Waikiki Shopping Plaza management team wanted the new system to display real-time information and interact with customers, which would raise mall attendance and increase revenue for mall merchants.

The new video wall features Samsung 46-inch full HD LCDs.

“This was a technology upgrade that involved all of the elements of a new design-build-and-install project. It required technology expertise and experience—and a considerable dose of installation smarts.”

— Vince Mitchell
President, Pacific Digital Signs

The management team wanted the solution to be dynamic in order to integrate live video from various high-definition (HD) camera locations at a future date. Scalability was crucial, because Waikiki Shopping Plaza could not budget for all of the equipment and functionality at the time of installation.

The project included removing the rear-projection displays, which weighed more than 2,000 pounds, using a manlift. The removal and installation were scheduled during the busy holiday shopping season business hours. Other challenges included organizing the project’s logistics within a fixed budget and timeframe, and ensuring the safety of mall shoppers and employees. Pretesting of every component was necessary to minimize disruption to mall traffic.

Another challenge was driving HD content simultaneously to the video wall. Many LCDs designed for a video wall can be sequentially wired together to push the video signal to the next display. However, the initial risk for this project was that, in high frame-rate video content, the delays in the video signal between the first and last display would be perceivable.

Solution

Because this project would be the largest video wall display that Pacific Digital Signs had ever built, company President Vince Mitchell immediately turned to Samsung for the LCDs that were the project’s showpiece. “We’ve had a solid success rate with Samsung,” Mitchell said.

The new video wall features Samsung 46-inch UX Series full HD LCDs, each on Peerless VW4050 custom modular wall mounts. The Samsung LCDs required only a fraction of the depth of the previous displays; so Pacific Digital Signs redesigned and engineered a support structure to evenly distribute the weight of the displays in the existing enclosure. The 46-inch UX Series LCDs provided a video wall with all the features that mall management requested.

“The Samsung [video wall solution] had the necessary built-in video wall functionality, ultra-thin bezel, natural mode and cooler operating temperatures.”

— Vince Mitchell
President, Pacific Digital Signs

The 46-inch UX Series LCDs are precise, professional displays, providing Waikiki Shopping Plaza with innovative built-in video wall functions, superior brightness and advanced cooling. The built-in PC for control over LAN/WAN provides video wall control over the network; up to 100 units or up to 15 units on one axis. The 46-inch UX Series has thin, 11 mm (0.43 in.) bezels for seamless video walls. Additionally, the MagicInfo™ software provides a web-based server to upload and control content from anywhere.

The 46-inch UX Series has up to 700 max cd/m2 for visibility in bright, high ambient conditions. Also, the displays feature advanced cooling technologies, providing the client reliable operation 24 hours a day, every day of the week.

Built-in software eliminates external processors and reduces costs.

Two Atлона high definition multimedia interface (HDMI) distribution amplifiers drive a full HD signal to each display.



Figure 1. Three views of the Samsung 46-inch UX Series LCD display

“...Samsung recommended that, for a wall of this size, some additional distribution hardware would make video perform better. This saved us considerable trial-and-error installing and configuring the solution.”

— Vince Mitchell
President, Pacific Digital Signs

Benefits

The new, state-of-the-art Samsung video wall offers many benefits to the Waikiki Shopping Plaza’s customers, merchants and management team, including:

- Updates to news, sports and stocks
- Messages regarding emergency situations, including inclement weather
- Promotions for gaming console tournaments
- Advertisements for mall merchants
- Improved backdrop to nightly entertainment

The video wall also serves as a tourist attraction. Visitors can use web-based software applications to send moderated text messages and photos from any mobile carrier directly to the video wall. Mall visitors often take pictures of their messages as the messages are shown on the display.

“Samsung provided strong support, from presales through installation, and facilitated a smooth and quick installation and a high level of customer satisfaction.”

— Vince Mitchell
President, Pacific Digital Signs

Legal and additional information

About Pacific Digital Signs

Pacific Digital Signs helps customers increase sales and traffic through customized and dynamic signage installations. The company has completed installations throughout the United States' West Coast and Hawaii. Pacific Digital Signs provides display hardware and software from the industry's leading companies, and develops custom software to serve clients' specific information and entertainment needs.

About Samsung Electronics Co., Ltd.

Samsung Electronics Co., Ltd. is a global leader in semiconductor, telecommunication, digital media and digital convergence technologies with 2011 consolidated sales of US\$143.1 billion. Employing approximately 222,000 people in 205 offices across 71 countries, the company operates two separate organizations to coordinate its nine independent business units: Digital Media & Communications, comprising Visual Display, Mobile Communications, Telecommunication Systems, Digital Appliances, IT Solutions, and Digital Imaging; and Device Solutions, consisting of Memory, System LSI and LCD. Recognized for its industry-leading performance across a range of economic, environmental and social criteria, Samsung Electronics was named the world's most sustainable technology company in the 2011 Dow Jones Sustainability Index. For more information, please visit www.samsung.com.

For more information

For more information about Samsung video wall solutions, visit www.samsungLFD.com.



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