Sony On Schedule To Ship Revolutionary HDTV Display

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By Antone Gonsalves, InformationWeek
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Sony plans to ship this year a high-definition TV that uses display technology that promises to one day replace the LCD and plasma screens used in today's HDTVs.

Sony on Thursday confirmed that it would release the 11-inch TV with an organic LED display in Japan first. If the TV ships as scheduled, Sony would be at least two years ahead of rivals Toshiba and Panasonic, which is owned by Matsushita, analysts said.

OLED, or organic light emitting diode, is a superior technology to rival HDTV displays because it uses materials similar to that used by fireflies to emit light, rather than depend on a backlight. As a result, the picture is brighter, of higher contrast, and has better color than what's seen on today's LCD and plasma screens. "OLEDs pop," said Sam Bhavnani, analyst for Current Analysis. "There's definitely a wow factor when you see the picture."

In addition, the cost of manufacturing OLED displays is expected to eventually be less than today's competitors, because the former uses fewer materials, such as no backlight, color filters or polarizer, said Barry Young, an analyst for market researcher DisplaySearch. In addition, OLED displays are far thinner and lighter than the other technologies. Sony's 11-inch screen is 3 millimeters thick.

If the price of OLED displays falls below, or is at least on par with, LCDs and plasmas, then it would make the other technologies obsolete, analysts say. That scenario, however, will take years. The reason is it will take time for TV makers to refine the high-volume manufacturing process. In the meantime, as cheaper OLED TVs hit the market, LCD and plasma makers are sure to drop prices, extending their products' life cycle.

There's also the issue of size, which does matter in the TV market. It'll probably be 2009 or 2010 before Sony starts making a 25-inch display, which is the minimum needed to compete in today's market, Bhavnani said. Many people today buy HDTVs in the 37- to 42-inch range.
Nevertheless, "OLED has the potential in the long term, a period of 10 to 15 years, to become the mainstream TV," Bhavnani said.

Sony, however, isn't waiting. The company trailed in the LCD market for a while after failing to recognize consumer preference for large screen LCD TVs before competitors, Young said. Sony, however, partnered with Samsung three years ago, and the joint venture is now the biggest seller of LCD TVs in terms of revenue.

Sony first showed off its 11-inch OLED TV, along with a 27-inch prototype, in January at the Consumer Electronics Show in Las Vegas. "The reaction was extremely positive," said Young, who was at the show. "People were crowded around it for hours."

The reaction was so good that Sony chief executive Howard Stringer put the project on the fast track, Young said. "Stringer took a dormant program, and put money into it."

Sony's first OLED TV, besides being too small, is expected to be very expensive, in comparison to other HDTVs. "What they've done is really for demonstration purpose to show that they can do it," Young said. Despite its limitations, if the TV gets a strong enough reception in the market, then Sony is expected to move quickly making 20- to 30-inch screens.

In the meantime, Toshiba and Panasonic are working jointly on OLED TVs through their company Toshiba Matsushita Display Technology. While they would like to get a product out in 2009, the companies are still in the research and development stage and haven't committed to a timeframe for TV production, Young said.

While new in TVs, OLED screens have been used for years in mobile phones, MP3 music players and automobile consoles. Kodak developed the technology in the late 1980s.

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