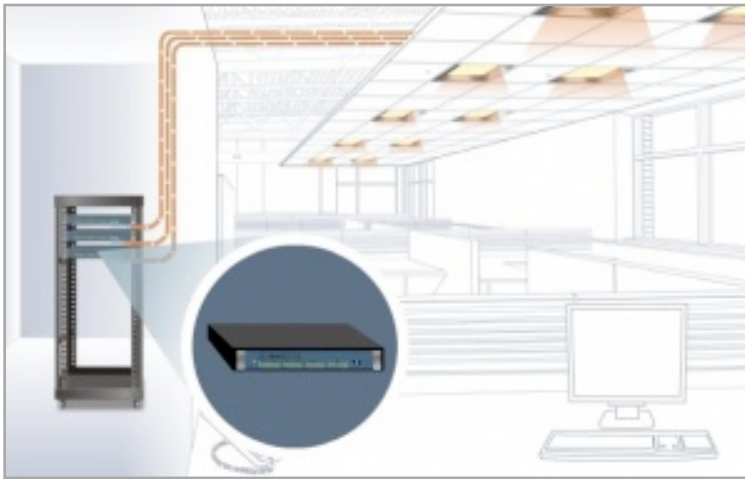


# Mitsui Backs Redwood Systems' Smart Lighting

By Katie Fehrenbacher Jun. 2, 2011, 7:50am PT



Japanese conglomerate Mitsui sees the promise of networked, smart, LED lighting. Thursday morning, startup [Redwood Systems](#) announced it has raised [\\$3.5 million](#) from the investment arm of Mitsui. In a statement, Mitsui Investment Partner Shin Kodera called the funding “a testament to the impact we believe Redwood’s technology will have on the global business landscape.”

Redwood System’s technology, which includes a control and sensor system for LEDs that runs over an optimized version of Ethernet cables, has seemed to gain significant adoption for a three-year-old company. Customers include SAP, Volkswagen, Johnson Controls and most recently, Facebook.

Commercial building owners and data center operators can use Redwood’s LED system to cut the amount of lighting used throughout the building — in some cases, up to 70 percent over standard non-networked fluorescent lighting systems. LEDs are more efficient than fluorescents, but Redwood’s management system also monitors the building environment, including temperature and room occupancy, and can dim and manage the lights to help maximize efficiency.

Redwood uses its optimized communications cables to send both a digital signal (zeros and ones of information) as well as power, and each LED fixture contains an embedded sensor that can monitor the environment of the room. The LEDs are then connected to the centralized Redwood computing engine. A typical return on investment from putting in a Redwood lighting system, in terms of energy savings, is between two to five years after installing the system, depending on different factors.

Around 40 percent of Redwood System's customers right now are in the data center space, and that percentage will likely grow over the coming months, Redwood Systems Chief Marketing Officer Sam Klepper recently told me. Data center operators are particularly focused on reducing the energy consumption of their data centers and Redwood's sensors can alert managers when panels for hot/cold aisle containment have been left open, or, say, when there is movement in certain sections of the data center.

Dave Leonard, co-founder and CEO of Redwood Systems, left Cisco's wireless division to start the company, and Redwood has already raised at least \$27 million from Index Ventures, Battery Ventures and U.S. Venture Partners. There are a variety of competitors offering similar lighting management systems, including [Digital Lumens](#) and [Adura Technologies](#), as well as offerings from building automation giants Honeywell and Johnson Controls.

Smart, networked lighting could be a massive market. The Electrical Power Research Institute (EPRI) reported recently that only seven percent of the U.S. commercial and industrial market have installed lighting control systems of any kind.