

Creating the Hussmann EcoShine LED Lighting Solution

Case in Brief

Despite the promise of reduced operating costs, Hussmann couldn't get sales traction in the North American market for its LED lighting products for perishable food refrigeration cases. Using Strategyn's outcome-driven innovation (ODI) methodology, the division of Ingersoll Rand was able to:

Discover innovation opportunities competitors had overlooked

Focus its idea generation on features to satisfy eight underserved outcomes

Introduce a redesigned product line, the EcoShine LED Lighting System, that dramatically improved sales and took significant market share from competitors

Client Challenge

Ingersoll Rand's Hussmann division decided in 2009 to reexamine its LED product line. Used to illuminate refrigeration cases for cold beverages and perishable and frozen foods, the product line offered reduced operating costs—especially when compared with fluorescent lighting. But in the four years following the launch of the product line, Hussmann had seen little reaction from customers. Convenience stores, supermarkets, and warehouse stores simply didn't warm up to the idea.

"LEDs showed minimal volume and little impact on the lighting business," remarks Clay Rohrer, an innovation and business development manager at Hussmann. "We tried to penetrate the business for four years, and we were missing the boat."

Anshuman Bhargava, a Hussmann LED product manager and also an innovation and business development manager, notes, "We were going out and searching the globe for new technologies that seemed to make sense. They were always focused on energy or controls, which were trends in the market. We were only successful about 20 percent of the time. We weren't tied to needs of the customer. We were tied to technologies."

LEDs, which offer energy efficiency, represented a potentially billion-dollar market, but customers were skeptical about the up-front costs and overall value of the technology. Hussmann knew that success would depend on the company's ability to uncover and inexpensively address specific customer needs so that Hussmann's LED product would stand out on performance dimensions that mattered to customers.



How Strategyn Helped

To find and exploit opportunities for competitive differentiation, Hussmann applied Strategyn's outcomedriven innovation (ODI) methodology. Drawing on the responses of shoppers, store merchandisers, and executive merchandisers, Hussmann dissected the complementary jobs of those key groups.

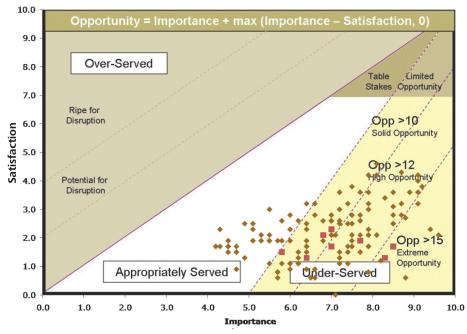
"We had been selling refrigerated boxes, not merchandising solutions," Rohrer remarks. "Historically, we had left the merchandisers alone and focused more on the product procurement people. Now, we went to different levels of merchandisers and to the shoppers, and we combined insights from all these audiences."

This extensive, multi-audience effort uncovered over 300 desired outcomes (or needs). Next, using ODI-based quantitative research techniques, Hussmann had 1,584 shoppers, 194 store merchandisers, and 53 executive merchandisers prioritize those outcomes. These customer priorities are guiding Hussmann innovation in a variety of ways. Here we focus on Hussmann's outreach to executive merchandisers.

Among the 134 outcomes prioritized by executive merchandisers, 102 were underserved, as highlighted in the opportunity landscape (see Figure 1). Of these unmet outcomes, eight related to display case lighting: for example, executive merchandisers wanted to increase the likelihood that the lighting would display the true product color and the likelihood that the lighting would be uniform. These needs became the foundation for Hussmann's LED innovation and differentiation efforts.

Knowing where to focus its efforts was the key to Hussmann's success. The team went through the eight underserved outcomes, developed engineering specifications for each and a new portfolio of LED lights, and then began systematically devising low-cost features that would dramatically improve customer satisfaction on each outcome. Rohrer reports, "We used ODI to tweak an existing design and didn't have to redesign the whole thing. We looked at it from the ODI perspective of the job of illuminating products. What are the problem areas? What are the focus areas? Then we would group the opportunities into common themes that we had to address to win the market. Uniform illumination, level of brightness, and energy efficiency were key things. We focused on them and developed solutions."

The Opportunity Landscape



The opportunity landscape for merchandising perishable goods revealed a number of desired outcomes that were underserved. Among these were eight that could be addressed by an improved display lighting solution.

To learn more about the opportunity landscape, see Anthony W. Ulwick, *What Customers Want* (New York: McGraw-Hill, 2005).

Legend

- Merchandising Outcomes
- Illumination Outcomes

The Results

Hussmann created an innovative line of LED products—the EcoShine LED Lighting System—and focused its value proposition on satisfying the eight underserved outcomes in the merchandising of perishable food products. The EcoShine system matches competitors on certain outcomes for LEDs, such as energy efficiency and long life, but it is a breakthrough innovation because it adds value on several new merchandising outcomes that competitors had overlooked. Hussmann's advertisements feature comparisons between the EcoShine line and its competitors on these specific outcomes. EcoShine boasts superior uniform horizontal and vertical lighting within a display case, reduced glare, and truer product colors (because the lighting is optimized for the display of meat, dairy, and produce).

The product has been a hit in the market. "In only one year, we've gone from a fraction of a digit to double digits in market share in North America," Bhargava notes. Backed by a strong sales commercialization effort, the product has received favorable press coverage in industry publications such as Supermarket News, generated favorable buzz as a "home run" at trade shows, and created excitement among utility companies, who are providing incentives for customers to adopt this energy-efficient system. Even the US Department of Energy is developing programs to accelerate adoption.

In addition to generating immediate revenue growth (previously measured in thousands of dollars and now measured in tens of millions, according to Rohrer and Bhargava), the ODI process resulted in three other important benefits for Hussmann.

• Cost reductions. Remarkably, Hussmann differentiated its LED products without increasing product cost—a prime management objective. Rohrer describes how this was possible: "We made incremental changes to an existing platform in all the right areas, based on how customers measure value. We hit all the key outcomes at the right level without raising costs. In fact, we reduced costs dramatically because we were so focused on just changing the things that mattered." Other cost reductions came from using the most optimal technology for specific refrigerated case applications.

"Once we went through the ODI process, we realized that our past offerings were not hitting the key points. We needed to have a product line that addressed the areas where we could be differentiated from competitors. Because we had the prioritized list of customer outcomes from the ODI process, we were able to focus our development efforts."

- —Anshuman Bhargava, Innovation & Business Development
 Manager and LED Product Manager, Hussmann Corporation
- Enhanced speed to market. Bhargava notes that having a prioritized list of customer needs, stated in clear, unambiguous language, made it possible to "move through the early stages [of product development] much more quickly ... so that we could really get to work. We could translate the desired outcomes very clearly for engineering so that they understood what to develop. We didn't leave anything for them to guess." He also notes that the insights gained through the process enabled Hussmann to set optimal prices based on the value of each SKU.
- Enhanced credibility. The prioritized customer outcomes have changed the strategic dialogue within the firm. Rohrer states, "It is a whole different conversation with the executive team. It used to be a long decision process based on arguments over whether customers would buy some new product or not. 'Oh, did you think of this? Of that?' Now they see the exact need set and can evaluate how a solution might address those needs." Bhargava concurred, "ODI brings a lot of credibility. You no longer get questioned by internal stakeholders—operations and engineering, supply chain, sales, and so on."

Beyond these project benefits, ODI has created a fundamental shift in Ingersoll Rand's innovation culture. As Rohrer describes it, "We've shifted the culture from a technology-driven company to a customer-needs-driven company."

Strategyn's outcome-driven approach to innovation helped us turn around our LED lighting business by differentiating us from competitors. Before, our LED business measured in the thousands. Now, it measures in the tens of millions.

—Clay Rohrer, Innovation & Business Development Manager, Hussmann Corporation

Learn More

Strategyn is an innovation consulting firm specializing in the management of innovation. To learn how to make Strategyn's Outcome-Driven Innovation methodology the cornerstone of your company's corporate innovation efforts, visit strategyn.com.

Publications that explain the details behind Strategyn's methodology include:

- Anthony Ulwick, *What is Outcome-Driven Innovation?*, (White paper, March 2009).
- Anthony W. Ulwick, *Turn Customer Input into Innovation, Harvard Business Review* 80, No. 1 (January 2002).
- Anthony W. Ulwick, *What Customers Want*, (New York: McGraw-Hill, 2005).
- Anthony W. Ulwick and Lance Bettencourt, *Giving Customers a Fair Hearing, MIT Sloan Management Review* 49, No. 3 (Spring 2008).
- Lance Bettencourt and Anthony W. Ulwick, The Customer-Centered Innovation Map, Harvard Business Review 86, No. 5 (May 2008).
- Lance Bettencourt, PhD, Service Innovation: How to Go From Customer Needs to Breakthrough Services, (New York: McGraw-Hill, 2010).

Contacts United States

Tony Ulwick CEO & Founder Strategyn ulwick@strategyn.com +1 415 787 2706

Europe

Petr Salz
Director of Business
Development
psalz@strategyn.com
+31 0 40 2261800

France & Italy

Maurizio Beltrami Managing Partner maurizio.beltrami@strategyn. com +41 79 596 34 27

Germany, Austria, Switzerland

Martin Pattera
Managing Partner
martin.pattera@strategyn.com
+43 7472 65510 121



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