

MAKING YOUR STORE SMARTER

14%

whole-building energy savings

Why retail stores? Brick-and-mortar stores are undergoing a transformation to compete with online retailers. More than simply providing goods, they are focusing on customer engagement and experience. Smart technologies enhance customer experience and help the store's bottom line by cutting energy costs.

Top smart technologies available to retailers¹

Technology	Cost	Energy savings
Smart/learning thermostats	Low	High
Smart lighting systems	High	High
Smart plugs	Low	Low
Advanced rooftop unit controls	Medium	High
Refrigeration system controls	Medium	Medium
Energy mgmt and info systems	Medium	Medium

Expected energy savings

The average store can save 14% of its annual whole-building energy consumption by installing smart technologies. Optimizing HVAC and lighting through smart controls offers the greatest energy-saving opportunity. Smart plugs for point-of-sale equipment and refrigerators also improve a store's energy efficiency.

Other benefits

Customers rate lighting and temperature as important factors in their shopping experience.² Smart lighting systems enhance a store's aesthetics, while smart HVAC systems increase comfort. Occupancy sensing technologies can also track customers' location in the store and give marketers valuable insights into shopping behavior.³

1. Energy savings assumptions (% of estimated whole-building energy consumption): Low: 0.6–2.99%, Medium: 3–5.99%, High: 6% or greater. Cost assumptions (% of estimated annual energy budget): Low: 0.8–9.99%, Medium: 10–39.99%, High: 40% or greater.
2. V. Gowrishankkar, "Strategic Importance of Store Ambience for Retaining Customers," *International Journal of Management Research and Review* 7:2 (2017), 129–133.
3. H. Hwangbo, Y. Kim, and K. Cha, "Use of the Smart Store for Persuasive Marketing and Immersive Customer Experiences: A Case Study of Korean Apparel Enterprise," *Mobile Information Systems* (2017), 1–17.