

MAPPING THE PATH TO PROFITABLE IN-STORE JOURNEYS

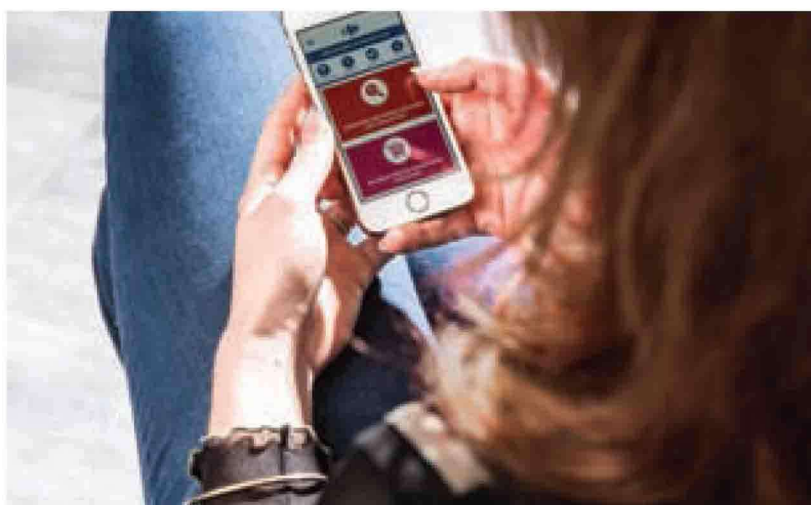
Retailers across the world are boosting sales and enhancing their user's shopping experience by building mobile apps based around indoor positioning and data analysis.

By **Sumit Padmakar Joshi, CEO – South Asia, Philips Lighting**

Imagine having a map available on your smartphone when you enter a supermarket or a large store! The indoor positioning app you're using knows exactly where you are and syncs seamlessly with you as you make your way through the shop, helping you search for your items. Fresh vegetables? Just around the corner. That bottle of red wine? Three aisles along on the right-hand side. What if you're looking for something very specific? Locate the product in your online catalogue and you'll be guided directly to its shelf. Perhaps you'll even receive a discount voucher as a final incentive to buy.

THE WORLD OF CONNECTED LIGHTING

We know, of course, that more and more consumers carry smartphones with them as they shop, which they often refer to—checking emails, texts, and social media, or simply viewing the shopping list they prepared earlier. Now, retailers have the opportunity to connect with shoppers through data-enabled LED lighting systems that can collect and send relevant information using wireless com-



“**CUSTOMERS CAN NOW SEARCH AND LOCATE THEIR PREFERRED PROMOTIONS OR DETECT ALL THE PROMOTIONS AROUND THEM WHEN THEY ARE IN-STORE”**

— Celine Martin, Carrefour's Director of Commercial Models and Innovation

munications, specially designed mobile apps and icloud services, letting them create innovative and interactive experiences in stores.

CODE TRANSMITTED THROUGH LIGHT

One way of wirelessly communicating with shoppers' smartphones is built into the LED technology itself. With Visible Light Communications (VLC) from Philips Lighting, a unique code can

be transmitted through a beam of LED light that is detected by a smartphone's camera, creating a real time link between the shopper and the lighting system. As a result, the shopper's smartphone can know exactly where it is and show relevant maps, product information, and promotional coupons. The technology requires shoppers to opt in to accept information via an app. Since the data stream is one way, users' private information

is safe. One major retailer that has already been experimenting with the potential of VLC and connected lighting is French multinational Carrefour.

TRANSFORMING STORES

Technology guides shoppers directly to items they want to purchase and offers them relevant discounts. With over 10,000 stores in more than 30 countries, Carrefour is a true giant of the retail world. Its hypermarket in Lille, France, covers 7,800 sq. m. and was previously fitted with fluorescent lights. Replacing this conventional technology with 2.5 km of connected LED luminaires transformed the store and the shopping experience, offering significant advantages. One of the primary motivations for the installation was energy efficiency. The system cut the store's energy consumption in half, which has had an immediate impact on the bottom line. Products, particularly fresh produce and meats, benefit from the unique qualities of LED light, giving food more colour and appeal to customers.



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HYPER-ACCURATE LOCATION

Carrefour wanted to harness the power of connected lighting to

strengthen its relationship with customers. The project included 800 linear LED luminaires, each making use of the Philips VLC technology. With indoor positioning capabilities, the system can pinpoint a customer's location within half a meter. Once registered with the system, customers can access a map to guide them around the large store, find promotions in the online catalogue, and locate them in the store. As a shopper approaches a shelf and begins comparing items, the app can show him available discounts or special offers for products in the vicinity. Céline Martin, Carrefour's Director of Commercial Models and Innovation for the brand's French hypermarkets, is delighted with the system's impact in store. "Thanks to this new application, which uses Philips technology, we are now able to provide our customers at the Euralille Carrefour with a new service, enabling them to quickly search and locate their preferred promotions or detect all the promotions around them when they are in-store." 🧐

THE TECHNOLOGY AT A GLANCE

 <p>Unique Code</p> <p>Unique Code from the LED light beam can be detected by any smart device with a camera</p>	 <p>One way location store</p> <p>System acts like an indoor GPS — each light point transmits a one-way location code. Once connected, customers can orient themselves in the store and receive targeted discounts on an easy-to-use app</p>	 <p>Fully integrated</p> <p>Philips indoor positioning software is fully integrated into Carrefour's mobile app and supported by a cloudbased location database operated by Philips</p>
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