

## PRESS RELEASE

# InnovationLab demos printed organic sensor ‘smart mat’ for social distancing in retail settings

### *Automated distance control platform features 8,000 printed sensors*

**HEIDELBERG, Germany – June 25, 2020 – [InnovationLab](#)**, an expert in printed electronics “from lab to fab,” today announced its innovative “smart mat,” a sensor-based distance-control floor mat that helps to ensure social distancing in retail outlets.

With [new research](#) citing a 50% risk reduction of COVID-19 when maintaining two meters (approximately 6.6 feet) of distance between people compared to a one-meter distance, maintaining distance between both shoppers and cashiers in retail settings has never been more critical. While existing systems monitoring shoppers’ locations and the number of people in a store typically use cameras, such systems are limited by accuracy and privacy issues.

Leveraging InnovationLab’s field-proven capacity to print high-accuracy, high-volume roll-to-roll electronics, the smart mat demonstrator uses a sensor array to control a traffic light-style indicator which detects when a shopper stands on it. In a simple use case, the smart mat displays a red light when a person is standing on the mat, and green when no one is there, signalling that the next customer can proceed.

InnovationLab is now demonstrating its smart mat in a retail store in Heidelberg, Germany (view: [Link](#)).

The intelligent sensor matrix embedded in the smart mat features more than 8,000 individual sensors spaced at 1 cm intervals, which enables differentiation between human steps and the wheels of a grocery cart, for example. In addition to promoting safe social distancing in a retail environment, the smart mat platform could be further customized to analyse in-store traffic. InnovationLab is already working with industry leader SAP, making it easier to integrate the sensor data with existing retail IT systems and gain new insights on customer behaviour.

“While the smart mat serves an important function in reducing the risk of contracting COVID-19 in a retail space, our demonstrator just scratches the surface of InnovationLab’s capabilities in printed electronics,” said Florian Ullrich, business developer, InnovationLab.

“By offering a variety of printed sensors, that are flexible, customizable for many uses, and have extremely low power consumption – and are very low cost — we’re opening new classes of applications to sensors for the first time,” said Luat Nguyen, managing director, InnovationLab. “From health and fitness wearables and automotive infotainment systems to Industrial Internet of Things (IIoT) and warehouse management, printed sensors offer manufacturers complete design freedom, an advantage over conventional fabrication methods.”

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### **About InnovationLab**

Founded in 2008, InnovationLab GmbH is a one-stop shop for printed electronics, with a focus on flexible pressure sensors, as well as temperature, moisture and gas sensors, and

the capability to design and produce fully integrated hardware/software systems. The company offers highly customized solutions and supports high-volume production at two manufacturing sites in Germany, providing hands-on support to its customers throughout the entire product value chain, from concept to bulk production of printed functional products. InnovationLab provides state-of-the-art infrastructure along with comprehensive expertise in materials, processes and printing technologies to develop novel products. InnovationLab also supports numerous research and industrial partners at its lab and fabrication facility, an interdisciplinary environment featuring 6200m<sup>2</sup> of usable space for production, development and offices, including 700m<sup>2</sup> state-of-the-art cleanrooms. For more information, see: <https://www.innovationlab.de>