NESTE'S UNMANNED EASY DELI

Friction-free Shopping in a Sustainable,
Quick-to-Deploy Store

Today's consumers want to shop when and where it suits their schedule, and they do not want to wait in line to check out. That means having well-stocked stores that are close to home, open around the clock, and built for quick service.

In Finland's capital city of Helsinki, Neste meets the need with Europe's first unmanned store, the Easy Deli. RFID-labeled products and check-out stations let you grab what you need and go, while the store itself is designed for easy deployment, built with materials that conserve energy and save time.

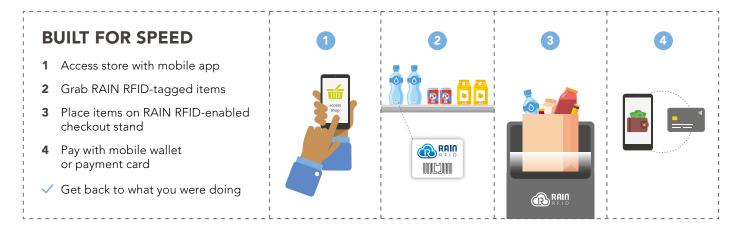## THE EASY DELI TEAM

Store Operator
Neste
www.neste.com

Solution Provider
Nordic ID
www.nordicid.com

Inlay Partner
Avery Dennison
www.averdennison.com

Chip Technology Provider
NXP
www.nxp.com

BUILT FOR SPEED

1 Access store with mobile app

2 Grab RAIN RFID-tagged items

3 Place items on RAIN RFID-enabled checkout stand

4 Pay with mobile wallet or payment card

✓ Get back to what you were doing

HOW IT WORKS

The Easy Deli experience starts with a mobile app, which you download to your phone and use to register for the service. When you approach the store, you use the app to unlock the door and start shopping. Controlling entry with a mobile app can help to secure shopping and prevent misuse and vandalism.

Once inside, you pick out your products and place them on a specially designed self-checkout machine incorporating RAIN RFID reading capability, which scans all your items at once and presents the total. You pay for your purchases using your mobile wallet or a payment card and choose whether to have your receipt printed or sent to you by email. You re-open the door with a simple press of a button and you are on your way.

Items in the store are labeled with a tag that the self-checkout machine reads when you want to make your purchase.

RAIN RFID MAKES IT POSSIBLE

The technology that makes the Easy Deli work is RAIN RFID, a proven wireless technology that is used throughout retail and the supply chain to identify and track items in real-time. Each item in the Easy Deli store has a label attached that contains an NXP RAIN RFID chip inside which communicates with the readers and antennas embedded within the self-checkout machine. RAIN RFID tags are inexpensive, easy to affix on just about any item, and can be read at a range of many meters. Also, since the checkout system can communicate with the cloud, inventory control becomes fully automated because each item purchased can be recorded in a back-end system. Sell-by dates for perishable goods can be part of the information associated with the RAIN RFID tag too, so store operators can do a quick sweep of the deli to identify and remove items that are past or close to their sell-by date.

BETTER THAN BARCODES

Unlike barcodes, which can only be read one at a time, RAIN RFID labels can be read in bulk, without line of sight. This means that customers can place the items in a bag or pack whilst shopping, and then place their fully loaded bag on the self-checkout machine when it is time to pay. There is no need to take each item out, one by one, look for the barcode, and then present it to the scanner, thus making the whole experience faster, easier, and more convenient.

The read rates for RAIN RFID tags are much higher than with barcodes, too, so the system is far less prone to errors and failed reads.

REPEATABLE FORMAT

As a global corporation focused on sustainable solutions for transport, business, and consumer needs, Neste created a store format that could be set up quickly without any construction or excavation needs. The Helsinki pilot store is built using sustainable and eco-friendly materials, and is designed to minimize energy consumption. It serves as a template for quick and easy deployment, so Neste can rapidly expand the shop concept to new location as demand grows.

A TEAM OF EXPERTS

To create the RAIN RFID system for Easy Deli stores, Neste partnered with Nordic ID, a full-service Platform-as-a-Service (PaaS) solutions provider that helps companies optimize the flow and count of goods. Nordic ID was pleased to be part of the Neste project because, as CEO Juuso Lehmuskoski puts it, *"the Easy Deli store creates a new shopping concept that enhances consumer experiences and caters to the future needs of many different retail outlets."*

The Nordic ID setup uses RAIN RFID labels from Avery Dennison, a global leader in RFID-based solutions for retail apparel and other markets. The RAIN RFID functionality is provided by NXP's UCODE chip which is embedded in the label. The UCODE 8 and UCODE 7 families reflect NXP's long-standing commitment to support retailers with contactless, automated and efficient inventory and supply chain solutions.

NXP RAIN RFID SOLUTIONS

- ✓ Powering retail applications worldwide
- ✓ Portfolio ranges from basic do secure chips
- ✓ Enabling tag design achieving long read ranges
- ✓ Can be read in bulk, without human interaction
- ✓ Enables fast, accurate, and low-cost tracking of items
- ✓ Global network of inlay and solution providers

Interested to learn more?

CONTACT US TODAY
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UCODE

RAIN RFID