CASE STUDY

DINOSOL: SECURE MACHINE AUTHENTICATION FOR RETAIL SCALES

Machine Authentication

SECURE AND CONTACTLESS OPERATOR AUTHENTICATION VIA UNIVERSAL RFID READERS

DinoSol, a leading supermarket chain in Spain, needed to authenticate scale operators at meat, seafood, produce and deli serving counters. Precision scales from Bizerba display the weight of selected goods and print receipts for checkout. With more than 1,000 scales in use at 800 stores nationwide, and thousands of potential operators, Dinosol wanted an easier way to match operators to transactions so they could track service behaviors and improve customer satisfaction.

REQUIREMENTS

The reader needed to:

+ Be easy to integrate with the Bizerba precision scales

+ Work with their existing employee ID card technologies

+ Read a unique encrypted ID to identify the operator and display their name on the scale

+ Link the operator to the sales transaction, anywhere in the store

+ Support manual or automatic logout

BENEFITS

+ Fast, contactless and hygienic operator authentication

+ Enables collection of behavioral and customer satisfaction data linked to a specific operator

PRODUCT: TWN4 MULTITECH 2 HF DESKTOP READER

+ Reads MIFARE DESFire® EV1 or EV2 8K

+ Plug-and-play setup

+ Can be upgraded to support additional technologies, including NFC, in the future

SITUATION

DinoSol needed an RFID reader that was compatible with their existing Bizerba scales and enabled fast, efficient and contactless authentication for scale operators. The company had more than 1,000 precision scales located at meat, seafood, deli and produce counters in their 800+ stores. To track service behaviors and weighing processes, employees log into the scale prior to starting the transaction.

They wanted an authentication system that would not only prevent unauthorized use of the scales but also identify each individual operator, display their names on the scale and send operator and transaction information to a customer feedback app. By linking operator identities to sales transactions, DinoSol could gather behavioral data and customer satisfaction scores for individual retail employees. In turn, this would allow them to reward employees for good customer service practices or provide additional training to improve customer satisfaction throughout the store.
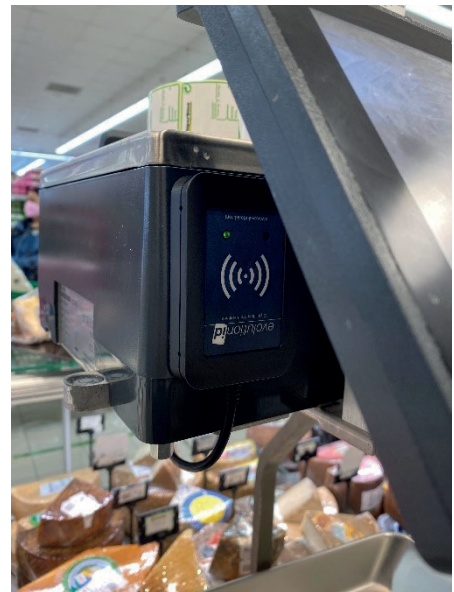
CHALLENGE

Their existing solution required employees to log into the scale by typing in a numerical code or password. This system did not provide adequate security, as codes and passwords could be easily compromised or shared between employees. It also created headaches for the IT department, which spent an inordinate amount of time resetting passwords or PINs. Finally, it created another shared touchpoint in a food service environment where preventing cross-contamination or the spread of pathogens is essential.

DinoSol wanted to move to a contactless RFID system to address these drawbacks. The solution needed to be fast and easy for employees, so it did not slow down the sales process. It needed to be able to identify each operator at any scale in the score and link their unique identification number with the sales transaction. And it needed to integrate with existing scale hardware and software and their customer app to enable desired behaviors such as linking the ID to the employee's name and photo in the app for feedback.

SOLUTION

The Authentication solution from evolutionID with ELATEC's TWN4 MultiTech 2 HF Desktop Reader met all their requirements. The desktop reader hooks up to the scale via USB for easy plug-and-play operation. Employees simply wave their ID card over the reader to start the transaction. Their name displays on the scale readout and is linked to the transaction information encoded in a QR code that is printed on the register receipt. Customers use the QR code to provide feedback on the transaction in a customer service app, which displays the operator's photo for positive identification.

The readers were configured to read the transponder technologies already in use for employee IDs across the DinoSol stores (MIFARE DESFire Ev1 and EV 2 8K) and can be easily reconfigured for other technologies, such as Near-Field Communication (NFC), if their needs change. Data is exchanged in a secure AES-encrypted and forgery-proof format for enhanced security. Logout can be completed manually or automatically at the end of a shift.

Now, it is easy for DinoSol to link customer feedback with sales transactions and the individual salesperson. For example, after a customer completes a transaction at the fish counter, they can open the DinoSol app, scan the QR code, and evaluate the service they received. DinoSol can use this information for training purposes or employee rewards programs. Employees can also track their own scores within the employee app. For e-commerce processes, customers can see in the app who is preparing their order and where their order is in the process. Secure, reliable linking of operating identities with individual sales transactions helps DinoSol drive greater customer satisfaction while also preventing unauthorized use of the scales at food counters.