



#### IoT Delivers for Schwan

Larry Gaskin

Sr. Director of Warehouse Operations and Facilities Operations Schwan's Home Delivery

#### About Schwan's

Schwan's Home Delivery is the largest Direct – to – Home delivery company in the United States. 70 years ago, we launched as a single milk and ice cream delivery business in Marshall, Minn., selling the families dairy products.

Now we have 304 locations across the country with over 3200 route trucks.





#### About Schwan's

With our complex delivery model in a variety of regions all over the country, we need a tool that assist us in ensuring our product meet temperature standards and to meet the needs of our growing business, we partnered with Digi – Smart Sense.





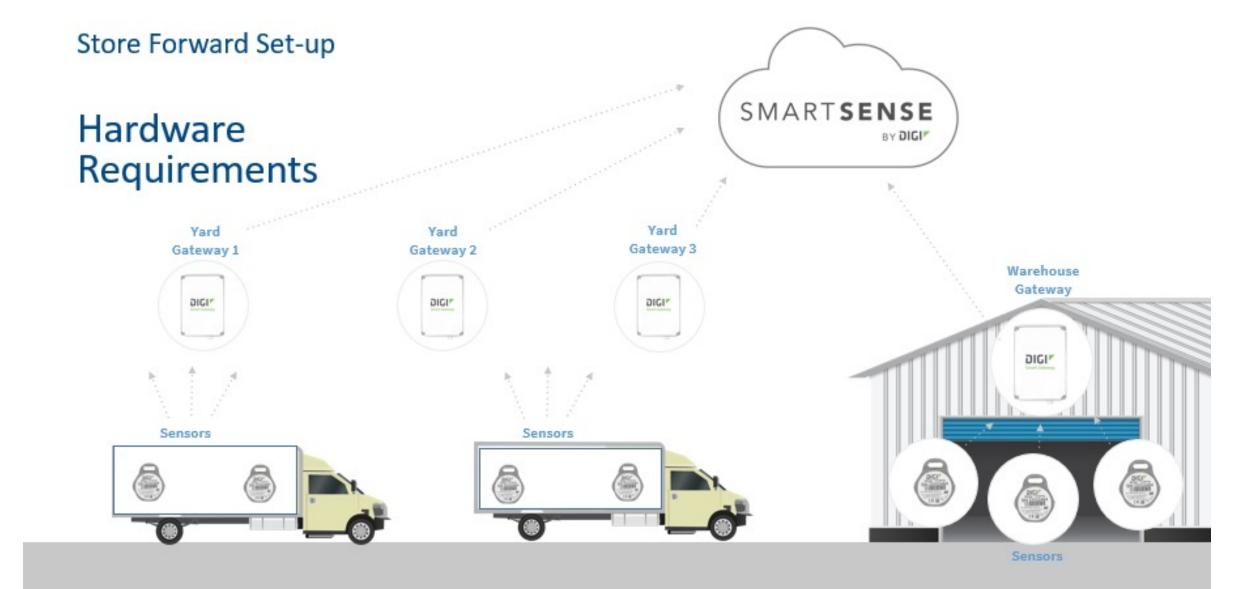
#### Schwan's Home Delivery Issues

- Manual Weekend Temp Checks
- After hours protection
- Error-prone paper processes
- Temp irregularities
- Manual Process

#### Digi – SmartSense Solutions

- Automatic temp monitoring
- Real Time Alerts
- Digital Processes
- Improved QA
- Online tracking



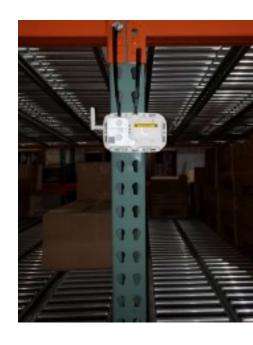


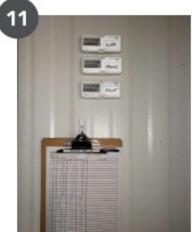


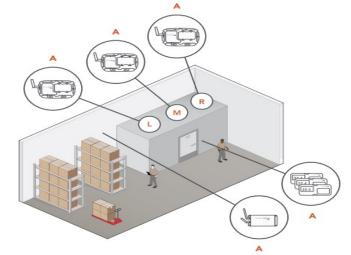


## Z Sensors for Warehouse

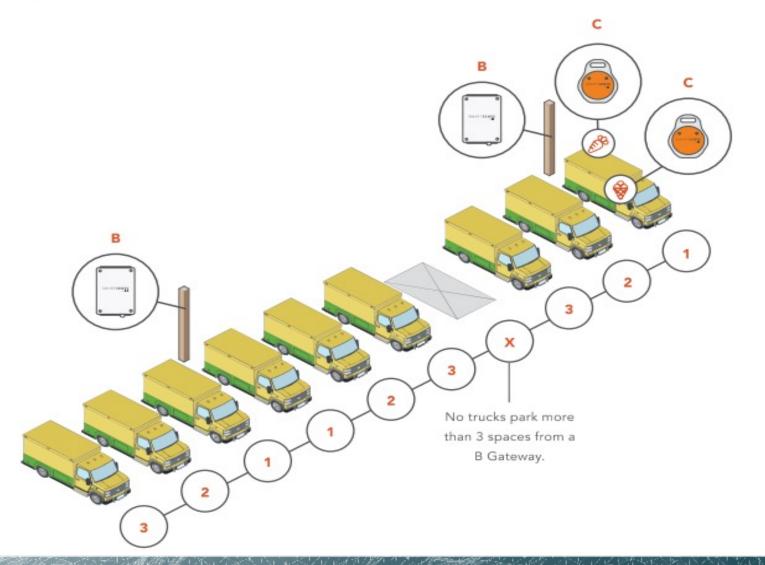
- Digital Faceplate
   See temperature outside of freezer
- Replaceable Batteries
   No replacements after battery dies; when refresh is due, saving on 15% of replacement cost
- Battery Back Up
   Z equipment has store-and-forward technology, and the gateway has a built-in battery pack
- Upgraded Platform
   Warehouse hosted on newly released platform,
   migrate loggers when developed







#### **Temperature Monitoring Installation Overview**







#### Automated, configurable Alerts

- Alert triggers defined by sensor
- Triggers often defined by:
  - Type of Product: frozen, refrigerate, produce, etc.
  - Defrost Cycles
  - Time of Day: business vs. off hours
- Configurable email and text alerts sent immediately based on hierarchy
- Alert acknowledgement through corrective action
- Alerts can also be integrated into other systems (e.g., security systems)





AM Testimonial – Tory Waconia AM "I now check my Freezer and Truck Temperatures from home on the weekend, I actually look at it more then before, because of the ease of the APP. My Fiancé and family love the uninterrupted weekend time. The alerts have saved me several potential melt downs and alerts me if a truck leaves the lot on the weekend"



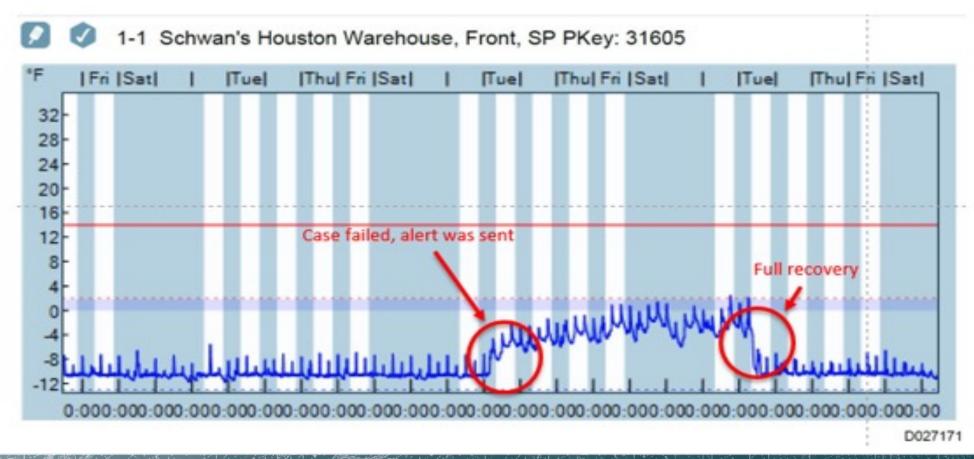
### Data downloaded from a truck once back at depot / bay

515783 - VE515783 Total Temperature Sensors: 1 141790 WE15579K3 Sensor ID 111790-1 VESSERBI. -03.TF DOMES 45 515790-2 -23.2°F VE305783 D080708 41.17 141790-1 VEXUS 183 strictionurs fiest. 0075342



#### Warehouse Temperature Save

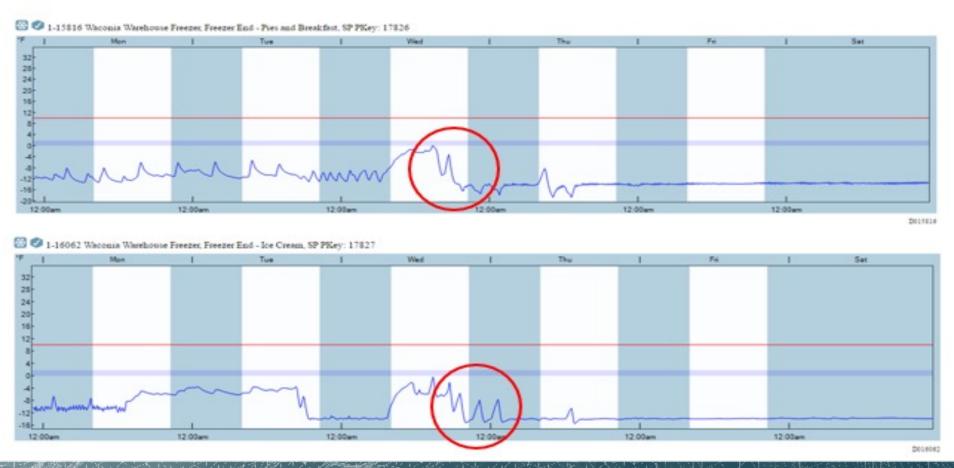
- Compressors failed at SHD Houston Warehouse
- Digi alerted employees to respond before product was lost





#### Waconia Walk-in issues found by Digi - SmartSense

Compressor units replaced Dec 7<sup>th</sup>





#### Warehouse: Accessing the SmartSense Dashboard

#### Logging into the SmartSense Dashboard

- Open Google Chrome
- Go to:

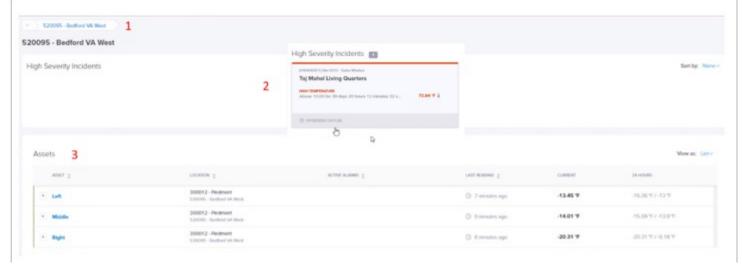
https://app.smartsense.co/

- Enter Username
  - o Facility number (52 number)
- Enter Password
- Click Log In

# Approx A Asser N NetSulte 48 admin tool SmartSense 48 Tempoldent 38A Service Channel My Driver-Google. SMARTSENSE BY BRUF All admin tool SmartSense 48 Tempoldent All Service Channel My Driver-Google. LOG-IN Use my company's login Forget password?

#### Dashboard View

- Those with Depot Level Access will only see their depot (1)
- Alerts will be displayed at the top (2)
- Assets (sensors) will be displayed at the bottom (3) and show:
  - o Last reading
  - o Current temp
  - o 24 hour highs & lows





#### Warehouse: Accessing the SmartSense Mobile Application

#### Download the Application

 Go to your Apple or Android store and download the SmartSense App



#### Access the Application

- Enter Username
  - o Facility number (52 number)
- Enter Password

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- Click Login
- Then, select your location (depots will only see their location, those with greater access will see multiple locations)

SMART SENSE av aliG!* Food Safety and Operations Management  Username  Password  Login  Use my company's login		
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Password  Login  Use my company's login	Food Safety and Operations Managemen	et.
Password  Login  Use my company's login		
Login Use my company's login	Username	
Use my company's login	Password	
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