





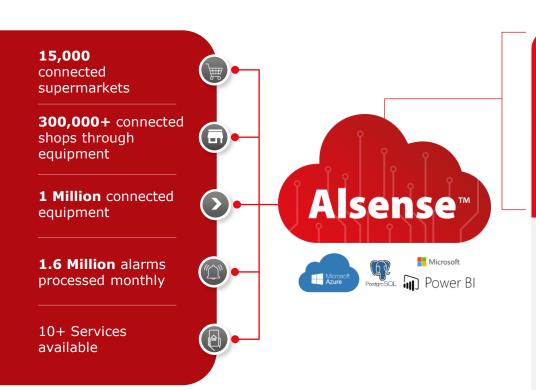


# Danfoss' leadership in delivering IoT solutions for Food Service & Food&Beverage markets

Michela Michielan – Sales Driver CR



# Strong Domain knowledge





#### **IOT SERVICES ECOSYSTEM**



Performance





Efficiency

























Management Management Certifications

Management

### Heterogeneus equipment, one IoT platform

Food Service & Food&Beverage applications



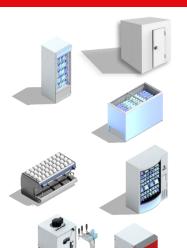
Connected **Solutions** 

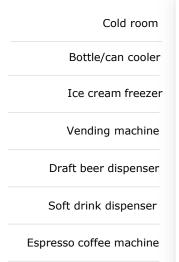


**Cloud Portal** 

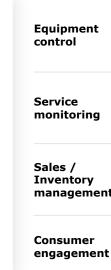


**Productivity** 

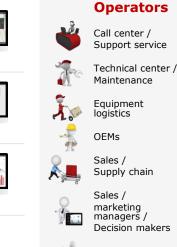














POS worker and consumer

# Connectivity: Always-on solution

- Our IoT solutions support a wide range of technologies:
  - 2G, 4G, LTE-M, CAT-M1, and NB-IoT
- Global SIM included and already active
- WiFi
- Bluetooth
- Bi-directional communication
- Data compression for cost-efficiency



### PR-SC4K - Food Service Applications

Cold Rooms, mobile cases, display cabinets





**PROSALINK APP** 



#### **FUNCTIONALITIES**

- FULLY CONFIGURABLE via the App itself (iOS and
  - 4 EQUIPMENT DIRECT 1 CONTROLLER MODBUS
- REMOTE MONITORING & PRE-DIAGNOSIS: ROOM TEMPERATURE ALARMS BY PUSH NOTIFICATION, AUTOMATIC DATA LOGGING
- **SERVICE SUBSCRIPTION VIA APP**

#### **VALUES**

**FOOD LOSS AVOIDANCE** 



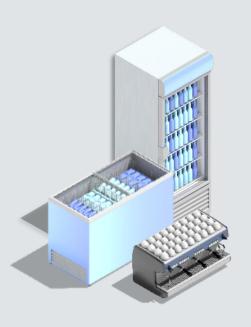
MAINTENCANCE COST REDUCTION

**QUALITY CONTROL** 



# OCTO: Food Service and F&B applications

# Coolers, Freezers



Information and operations managed by the thermostat



ERC111/112 controllers or 3rd party controllers

- TEMPERATURE notification
- ALARMS notification
- FAN management
- LIGHT management
- POWER management
- DOOR management (for stock and sales management)

Information and operations managed by the IoT Enabler



**PR-OCTO** 300B5071

- REMOTE ALARMS NOTIFICATION
- HACCP REPORT
- REMOTE SETTINGS

- LOCATION and lost cooler notification
- STOCK and SALES management

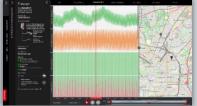


# A complete Asset Management System

#### LOGISTIC AND ASSET EFFICIENCY SERVICES



Logistic and geofencing support



Not Authorized Movement Alarms



Productivity dashboard

#### SALES AND MARKETING SERVICES



Sales trends



Sales reports



Worst performing locations

#### TECHNICAL ANSD ASSISTANCE SERVICES



Diagnostic (telemetry) dynamic charts



Alarm Monitor



Alarm Expert System (analysis and fixing)

### **VALUES**

#### **REDUCE LOSS OF EQUIPMENT**



- Asset traceability
- · Alarms on unauthorized movement

#### **INCREASE SALES**



- Monitor sales performance
- Engage consumers
- Manage stock remotely
- Improve equipment productivity

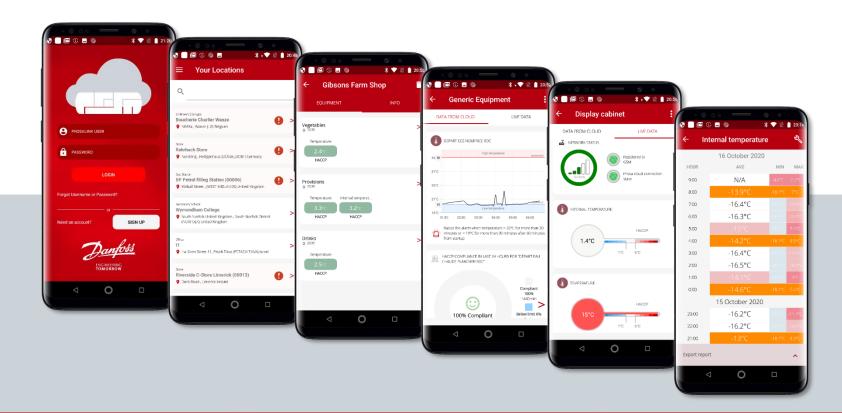
#### **REDUCE MAINTENANCE COSTS**



- Reduce technical visits
- Predictive maintenance
- Remote settings
- Real-time performance monitoring & equipment health



# ProsaLink App



**ENGINEERING TOMORROW** 

### PR-OCTO - Food Service via OEMs

#### **ORIENTED TO OEMs:**

TO IMPROVE AND DIFFERENCIATE THE OFFER TO THEIR CUSTOMERS

TO MONITOR THE **EOUIPMENT PERFORMANCE** DURING THE ENTIRE LIFETIME ALLOWING, A **CONTINUOUS QUALITY IMPROVEMENT** 

TO OPEN NEW BUSINESS LIKE: EXTENDED WARRANTY. EQUIPMENT RENTAL, MAINTENANCE SERVICES

IOT WITHOUT COMPLEXITY OF SERVICE MANAGEMENT



SERVICES FOR SMALL **END-USERS:** 

### Independent

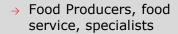
**Small end-users who** want to safeguard their products

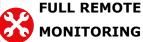


**FOOD LOSS AVOIDANCE** 



**HACCP REPORT** 





**MONITORING** (TEMP. AND **CONTROLLER PARAMETERS**)



# Alsense™ - A strong and agile Partner on Your digital journey



### **HARDWARE**

- Designed for our customers refrigeration environment
- · Lifecycle management
- Secure access



### CONNECTIVITY

- Global
- Flexible modes
- · Intelligence on Data Representation
- · Domain Essential Data



### INFRASTRUCTURE & DATA STORAGE

- Safe
- Secure
- Fail-safe
- 7x24 with highest SLA
- Data ownership is with our customers



### REMOTE FUNCTIONS ON WEB PORTAL

- Intuitive
- Big data oriented GUI.
- · Domain Processes already implemented
- · Logistics process control
- · User Profile oriented
- · Domain Profiles already mapped



### LOCAL PORTAL AND USER ENGAGEMENT

- · Intuitive
- Secure
- Sales processes oriented
- Technical & logistics process control
- · User Profile oriented
- Domain Profiles already mapped



### DOMAIN KNOWLEDGE

- Thermostat and cabinet integration
- Retrofit
- Prediction and analytics models / engines



