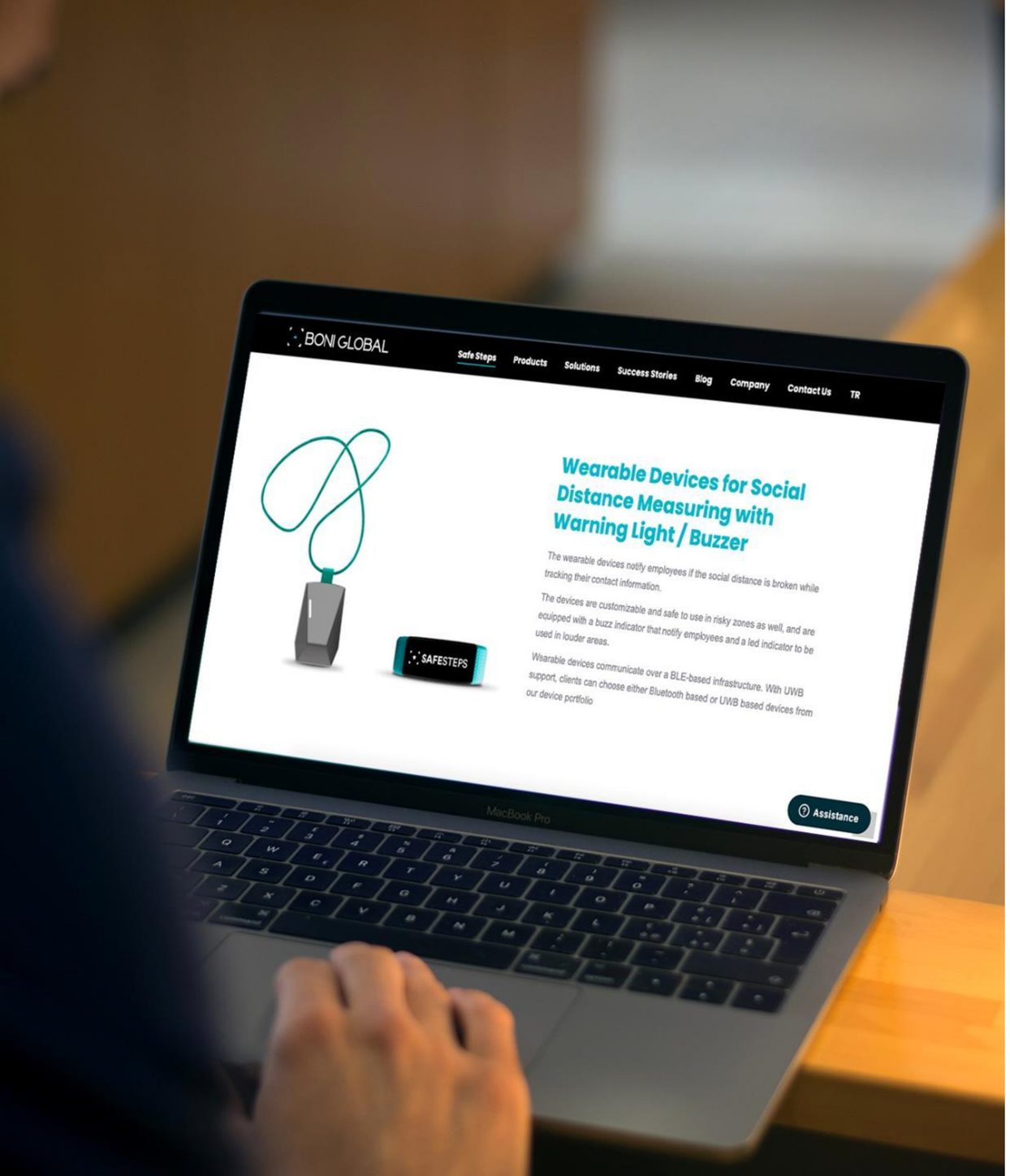
BONI GLOBAL

building
engagement

SCROLL DOWN



AGENDA

1. About Us
2. Discover SAFE STEPS
3. SAFE STEPS Modules
4. SAFE STEPS Contact Tracing
5. Solution Set & Features
6. Solution Walkthrough
7. SAFE STEPS Emergency
8. Solution Set & Features
9. Solution Walkthrough
10. Appendix

BONI GLOBAL

About Us

Introducing Boni Global The Leading IoT Provider For Digital Transformation

We leverage the most accurate, state of the art location-based technologies to provide the highest standard of safety and operational excellence for your business.

Visit our website for more information
https://www.boniglobal.com/about-us/

BONI GLOBAL

Facts

Building ENGAGEMENT

Patented Technologies

1st provider of navigation for blind

1st provider of covid19 tracking solutions

Multiple Award Winners

Strong industry Network

14 Integrated Smart Cities

6 Government projects

Installed in 7 Countries

100+ Active Venues

20+ Factories

5 Airports

14 Shopping Malls

2 Uni Campuses

100 k

Daily Users

BONI GLOBAL

They Trust Us

AIRBUS

O'HARE INTERNATIONAL AIRPORT

Fraport TAV ANTALYA Airport

LIMA AIRPORT PARTNERS

NEW YORK CITY DOT

iGA

MESS TÜRKİYE METAL SANAYİCİLERİ SENDİKASI

arçelik

Otokoç

M metro

İSTANBUL BÜYÜKŞEHİR

sydney METRO

ANTALYA METROPOLITAN MUNICIPALITY

مطار حمد الدولي Hamad International Airport QATAR قطر

İTÜ İSTANBUL TEKNİK ÜNİVERSİTESİ 1773

KARAMAN BELEDİYESİ 1977

cta

Minneapolis Saint Paul INTERNATIONAL AIRPORT msp

BOĞAZİÇİ ÜNİVERSİTESİ 1863

KARS BELEDİYESİ

Discover
SAFE STEPS

Simplified Safety Management

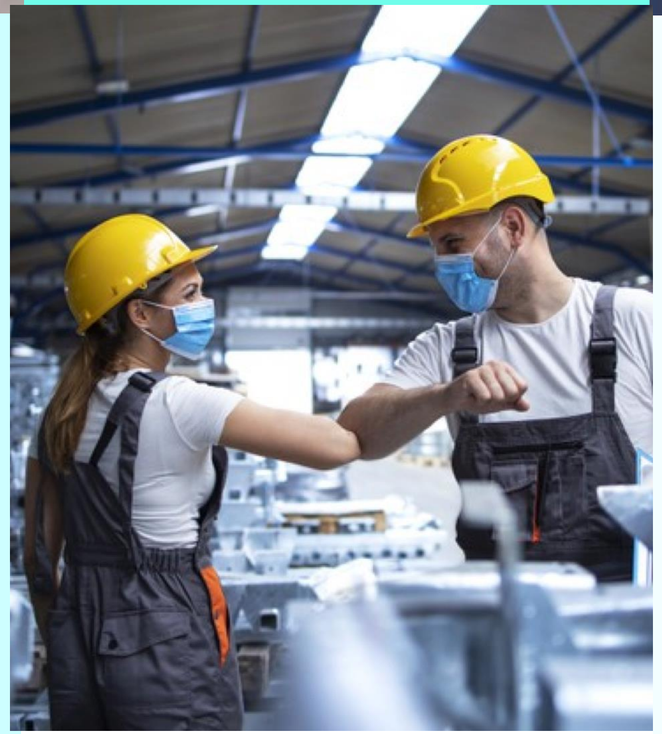
- Simplified user management
- Team-based system management
- HR Suite Integrations

Advanced Analytics

- SAP Analytical tools
- Meaningful report templates
- Customizable report skills

Ease of Deployment

- Plug & Play gateway installation
- Easily activated Wearables
- User friendly dahsboards



Business Continuity

- Allowing users to stay socially distanced with warnings in real time
- Risk assessment of the teams and their location
- Rapid emergency response and minimizing damage

BONI GLOBAL

Safe Steps Modules

Contact Tracing

Social Distance Tracker
Ministry of Health Integration (HES Code)
Filiation Reporting
Advanced Analytics
HR Suite Integration

Emergency

Management of Restricted Areas & Authorization
Location Tracking in Emergency Situations
Stillness/Fall Detection
Panic Button
Heat Mapping

BONI GLOBAL

References

All newly acquired 20 factories with 35.000 end users

arçelik	Largest Household Appliances Manufacturer
Otokoç	Car and Truck Distributor including Ford and Volvo
Türk Traktör	Tractor manufacturer, New Holland and Case
MAGNA	Canadian Mobility Company for Automakers
FESTO	German Industrial Control and Automation
EVYAP	Turkish Consumer Packaged Good company
mey DIAGEO	Turkish subsidiary ofBritish Beverage Alcohol company
Pipeline: 100+	Prospects alone in Turkey

Customer Feedback

Otokoç Otomotiv

"MESS Safe proved to be a crucial tool to help us navigate these unprecedented times and make sure our workforce is safe without sacrificing producitivity. Thanks to the Boni Global team we were able to safeguard our facilities with more than 300 employees to keep them safe and motivated, meanwhile avoiding any financial losses by continuously maintaining our operations. Due to the success of the trial period, we provided MESS Safe protection to a total of 3600 uses ocross 86 locations"

https://www.boniglobal.com/project/otokoç-contact-tracing/

Arçelik

"Worker Safety is always a priority for ArçeliK. When the COVID-19 pandemic started, we desired a viable solution that will help us mitigate the risk of spread between our empliyees. With MESS Safe, we were able to ensure company-wide compliance to social distancing regulations. Starting from the concept phase, we have worked together in our manufacturing plants to get the product ready ti be industrialized. For the mass production, Arçelik also granted it's manufacturing capabilities to provide scalable solution. MESS Safe is helping us accurately trace back contamination to make sure everyone exposed to the virus is identified and solated in time, which was crusial to keep operations going"

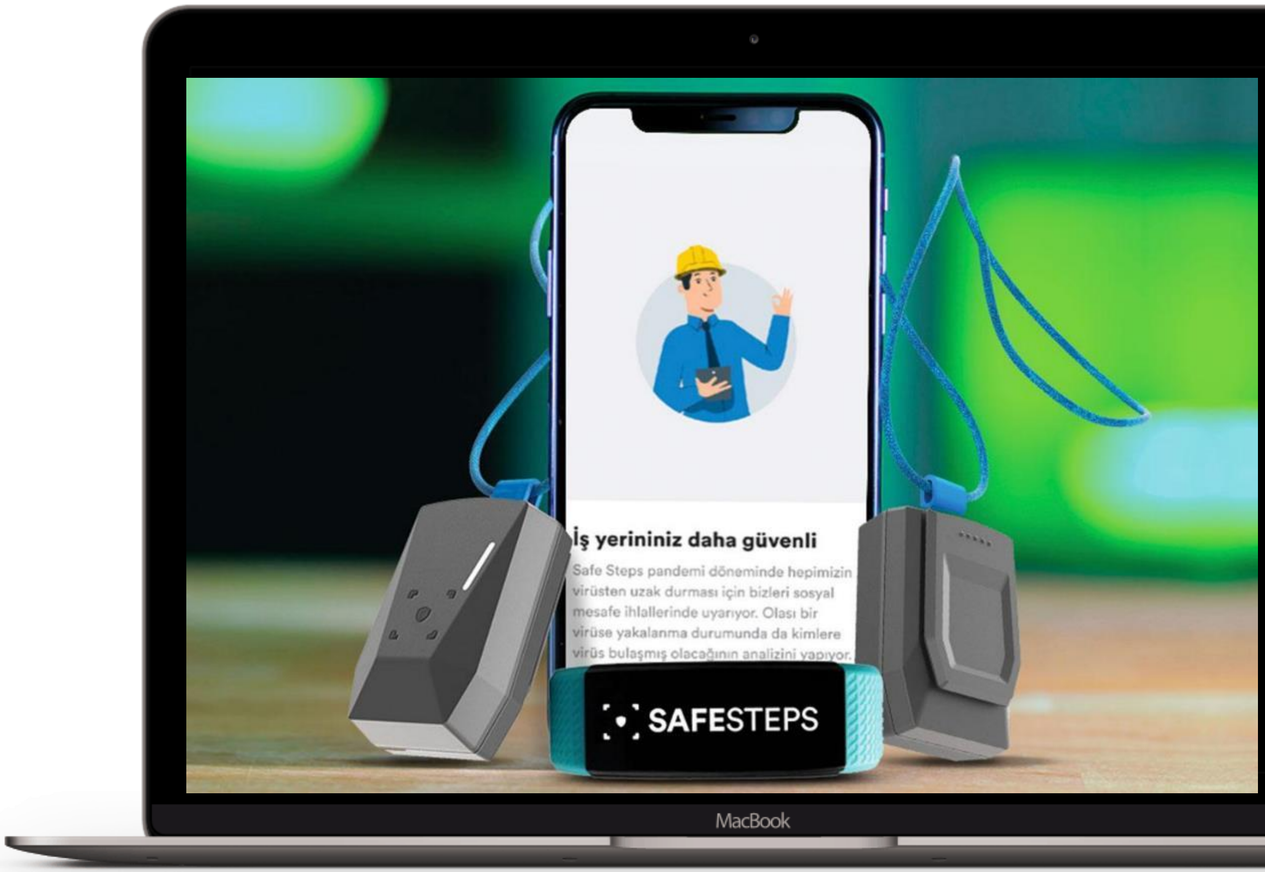
https://www.boniglobal.com/project/arcelik-contact-tracing/

BONI GLOBAL

SAFE STEPS
Contact Tracing

- Safe Steps is an integrated solution for businesses that includes necessary tools to enforce social distancing measures and conduct contact tracing when needed.

- Using wearable technology, the solution aims to warn employees when they break social distance and allow management to monitor close interactions for risk analysis.



BONI GLOBAL

Social Distancing and
Contact Tracing Automation for Businesses

Challenge

- Workforce safety from COVID-19
- Maintaining business continuity
- Costs associated with sick leaves, health compensation, reduced workforce
- Preparing for future health crises

Ideal Solution

- Social Distance Alterts in various forms, LED light, Vibration, Buzzer via wearable devices
- Accurate Contact Tracing reports by collecting and analyzing interaction data
- Afforable and Scaleable Solution that can be installed remotely

Desired Outcome

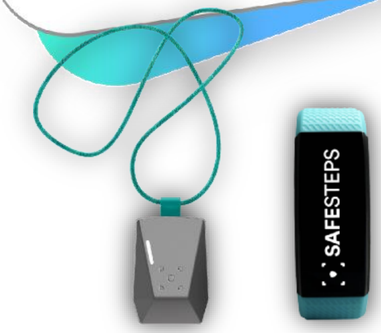
- Fast adaptation to the new way of working
- Comprehensive protection of employees/visitors
- Reduced risk of transmissions
- Maintaining business continuity
- Immediately identify people under risk

Solution Set

Wearable Device

Social Distance Measuring with Warnings: Light / Buzzer / Vibration

- The wearable devices notifies the employees if the social distance is broken while tracking their contact information.
- The devices are customizable and safe to use in risky zones as well and are equipped with indicators that notify employees.



Gateway

GSM or WiFi Gateway receives sensor data from sensors and forwards it directly to the cloud via GDPS or WiFi.

- 80 m2 range (400 m2 optional)

Mobile Application

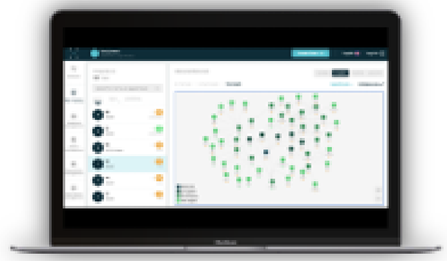
Safe Steps with Mobile

- App The application uses gamification and scoring specifically designed to motivate employees to keep social distance.

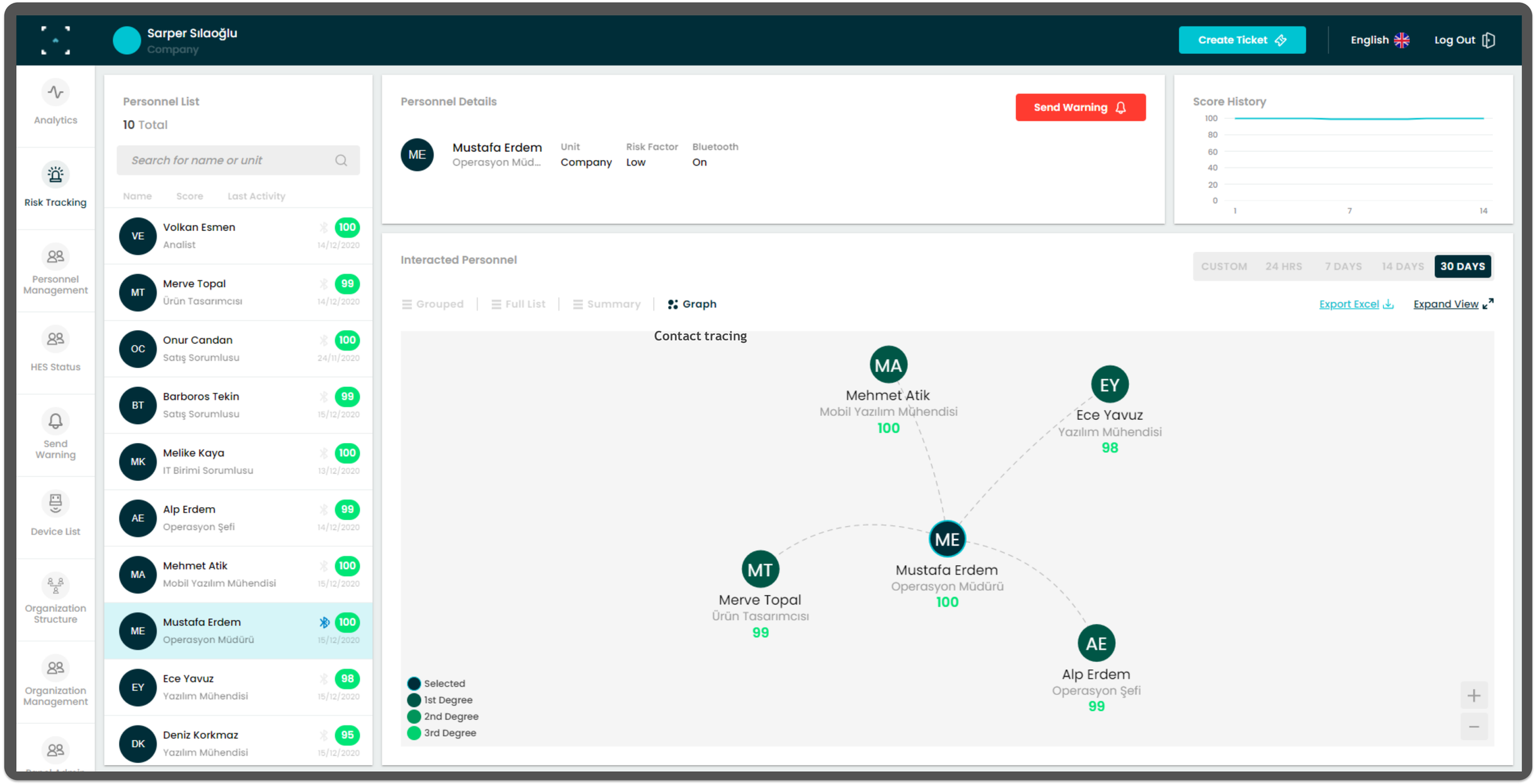
Management Panel

Reporting Platform for Contact Tracing and Social Distance Measure

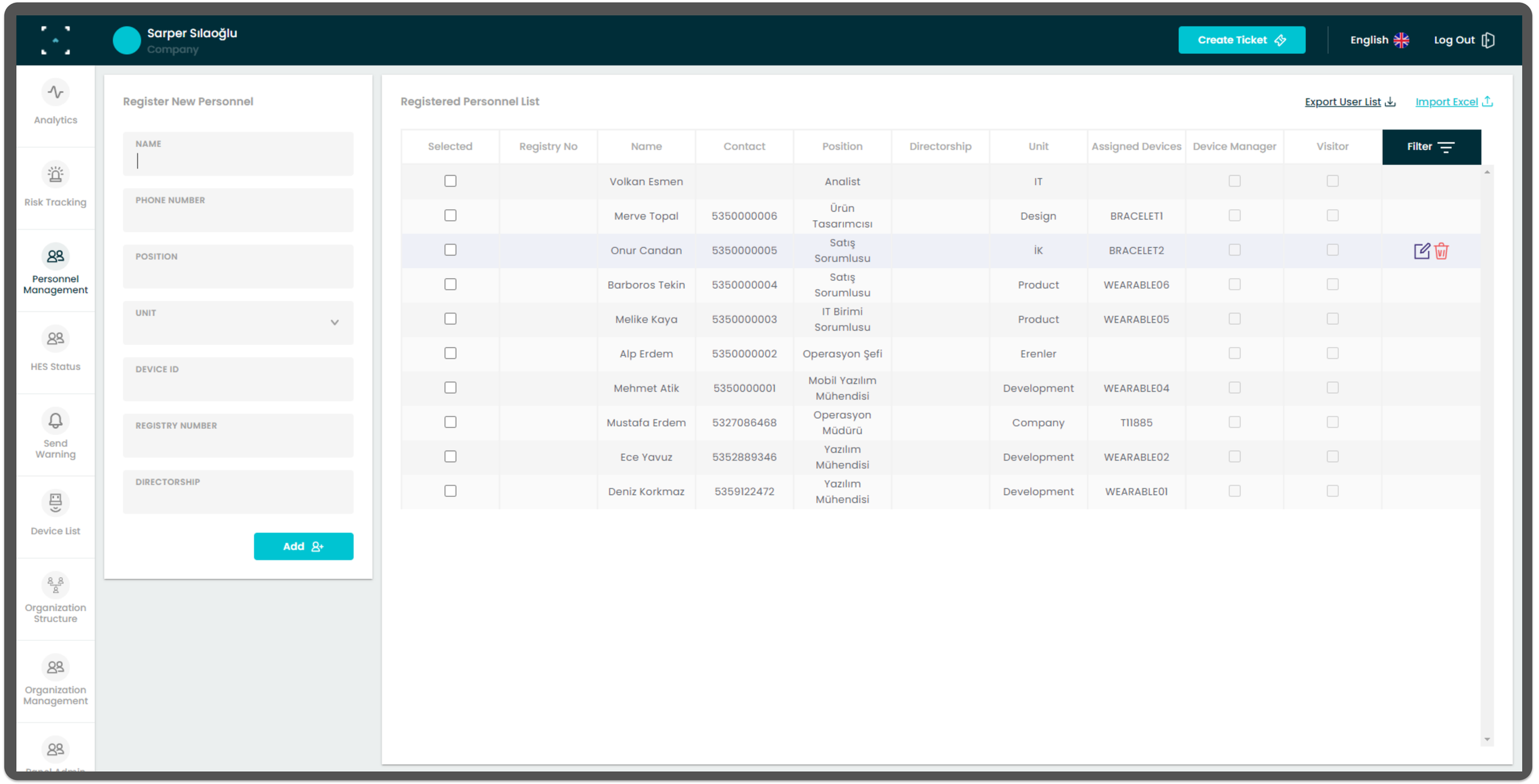
- The platform measures and saves close interactions in the system that observes social distance and physical interactions between the employees or visitors through the mobile application or wearable devices and traces backward the interactions of its users



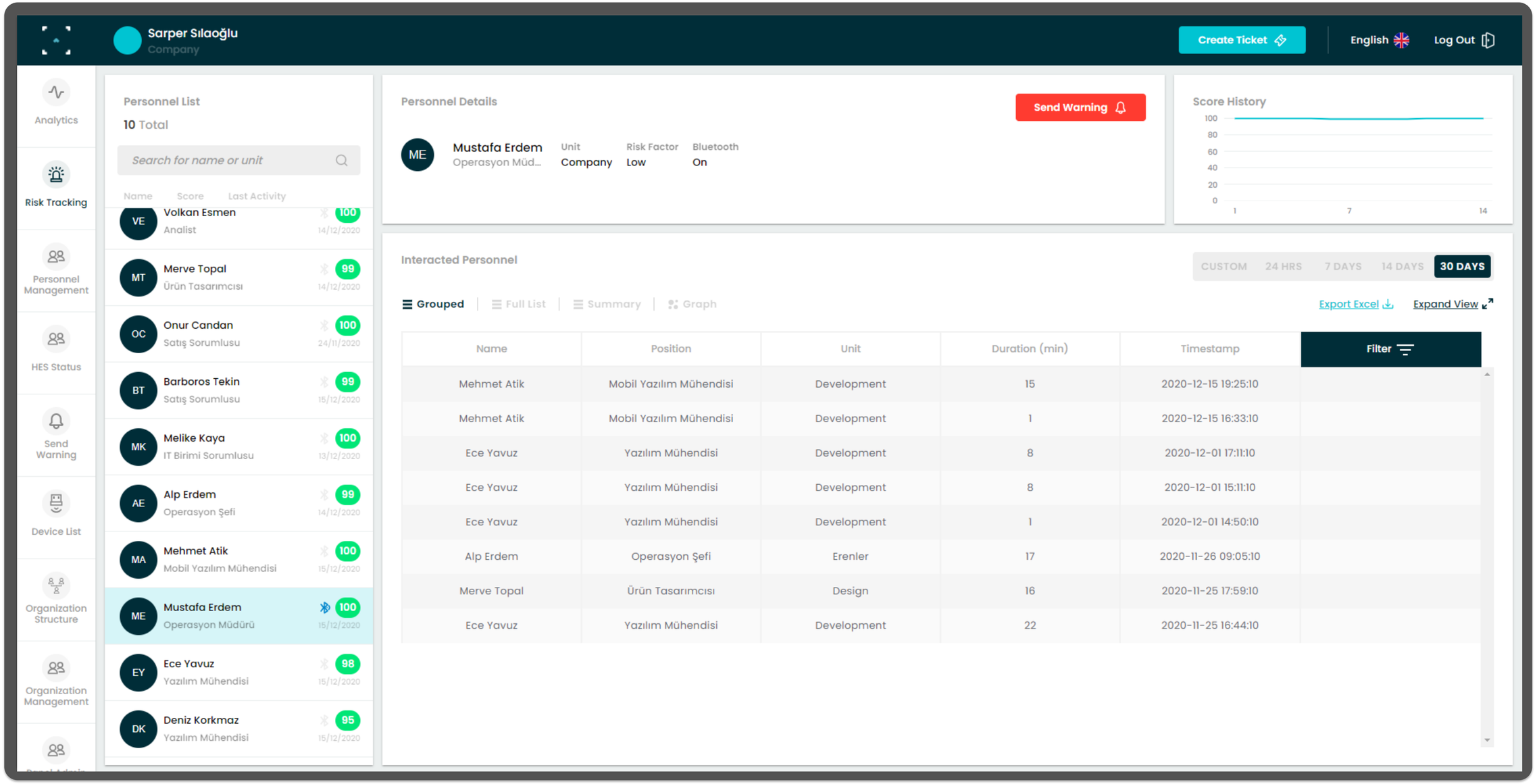
Walkthrough - Management Panel



Walkthrough - Management Panel



Walkthrough - Management Panel



Walkthrough - Management Panel

Success Story with MESS

- MESS: Turkish Employers' Association of Metal Industries
- Founded in 1959 by leading indutrialists
- Members include, Siemens, Bosch, B/S/H, Mercedes Benz, Ford, Fiat, Renault, MAN, Gestamp
- World Economic Forum Industry 4.0 Partner
- Mission: Operationalize the new vision to enable member companies in their digital transformation journey
- Invested to MEXT, Industry 4.0 Technology Center
- Sponsored Safe Steps under MESS Safe brand

Business Needs

- Agile adaptation to the new normal
- Regulations and compiancy needs
- Robust and Agile Product Development
- Identifying and isolating employees at risk to continue operations

Strategy & Solution

- Involvement of the union members
- Live test during MVP phase
- Mass production with members' support
- Acceptance of Labor Unions
- Future plans for post-pandemic use cases

The Results

- Boost in employee morale and productivity by ensuring their safety
- Informing the workforce about social distance requirements to adopt healthy habits
- Prevention of the spread of the virus within facilities
- Digitally transformed facilities that rapidly adapt to the post-COVID19 world before going back to work.
- Preparation for possible future health crises

BONI GLOBAL

SAFE STEPS
Emergency

- SAFE STEPS Emergency is a technology solution that helps increase safety for employees and business owners.

- This product is a blend of hardware and software that work together to create a network capable of overseeing the movement of wearable devices to provide safer work conditions.

Create Safer Workplaces

Risk Management

Better risk management with instant detection of unsafe situations and logging.

Faster Accident Response

Cost and time effective tool for use in emergency situations.

Assist With Evacuation

During emergency situation such as fire, natural disaster etc. easily detect and monitor employees, provide reduction in evacuation time.

Reports

Flexible and customizable reports based on meaningful data and user friendly dashboard screens.

Safe Steps Emergency
Features

Panic Call

Provide employees with additional safety with a panic button easily accessible when under duress.

Man Down Detection

Detecting stillness/fall by the accelerometer in the wearable device. Safe Steps will notify the relevant monitors to ensure the worker receives the support they need.

Heat Map

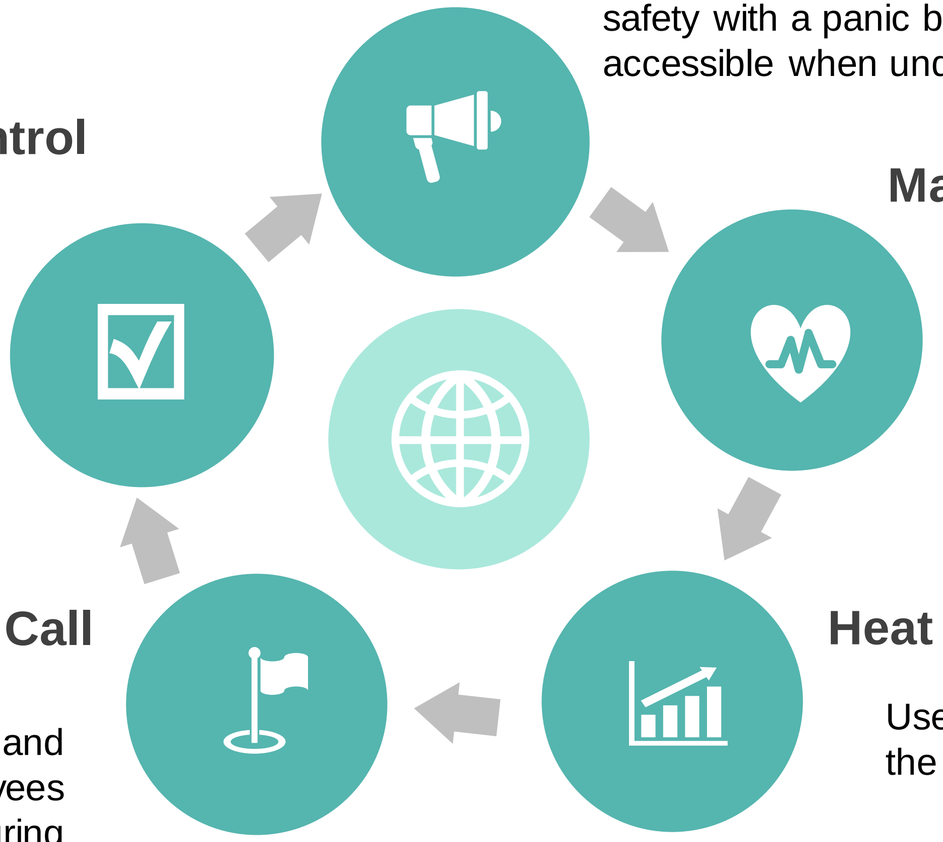
Useful analytical charts to optimize the conditions of the work place.

Emergency Roll Call

Instantly identifying and reporting the missing employees to minimize the risk during evacuation.

Resticted Area Control

Monitoring and logging the entry of personnel to prevent unauthorized access to specific areas.



Accident Prevention and Fast Emergency Response For Businesses

Challenge

- Manufacturing industry is prone to accidents and emergency situations due to the complexity of operations
- There were 431.276 occupational accidents reported in Turkey in the past year.
- 80 Bn TL was the amount of financial losses due to work accidents in 2019

Ideal Solution

- Digitalization of emergency processes to minimize damage
- Customizable for specific operational needs
- Afforable and Scaleable Solution that can be installed remotely

Desired Outcome

- Reduced risk of accidents or minimizing the damage
- Fast emergency response and efficient contingency planning
- Comprehensive protection of employees
- Maintaining business continuity

Solution Set

Wearable Device

The devices are equipeed with a panic button to be used when an employee needs emergency assistance.

Wearable devices are designed to be used in any working situation and are waterproof and dust resistant.

Location Sensor

Location
data collected with the sensors are used to ensure all employees are safe at work or during emergency situations.

Gateway

GSM or WiFi Gateway receives sensor data from sensors and forwards it directly to the cloud via GDPS or WiFi.

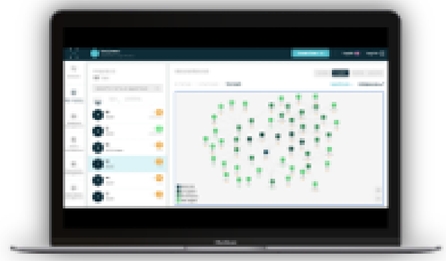
- 80 m2 range (400 m2 optional)

Management Panel

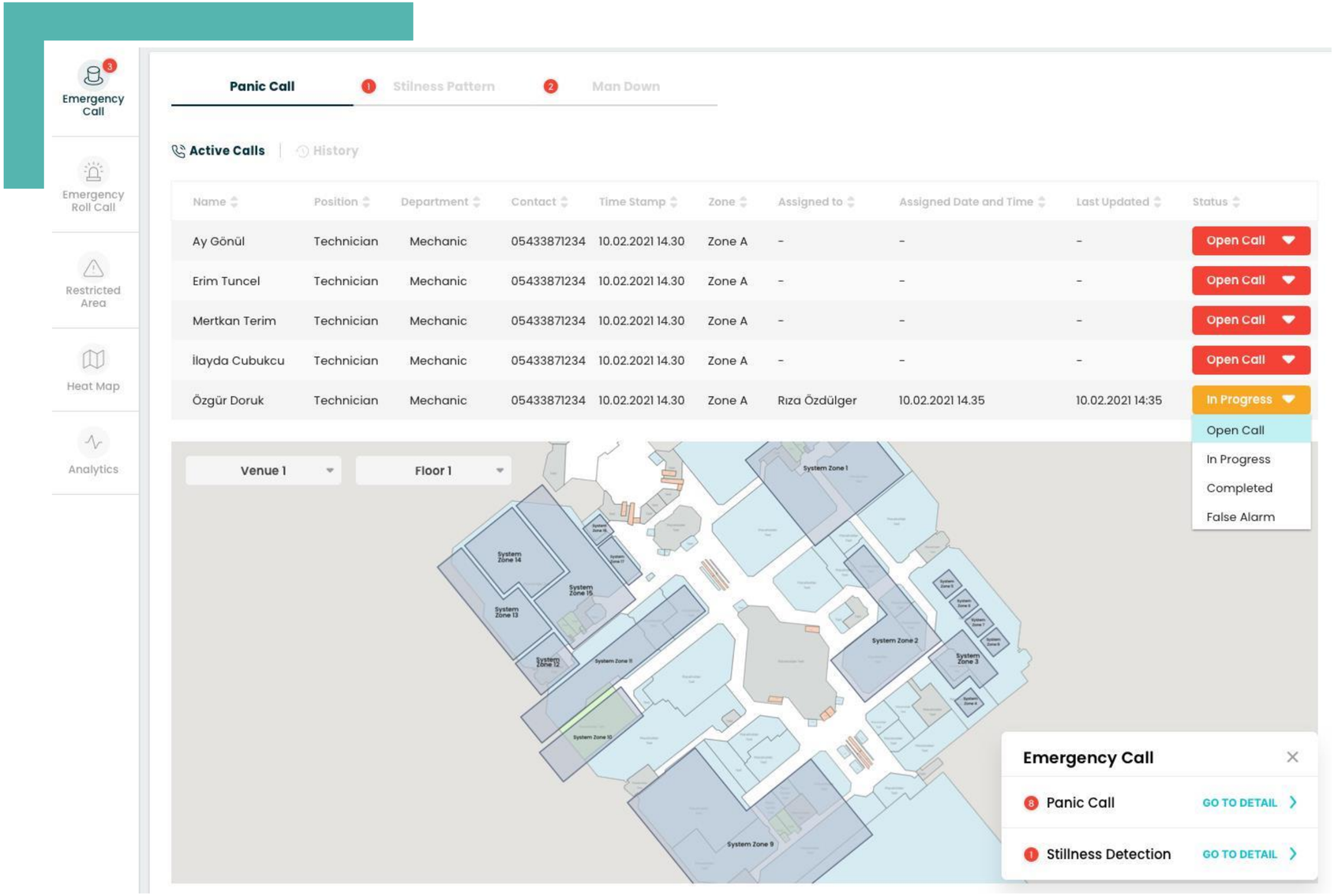
All related data is shown instantly at the dashboard.

Features:

- Batter monitoring of the devices
- User friendly screens
- Flexible analytical tools



Walkthrough - Emergency Call



Panic Call

Man Down Detection

Stillness

Walkthrough - Emergency Call

- These 3 kind of emergency situations happens, certain panel admins will receive notification via SMS, E-mail and Dashboard notification.
- Both **«active»** and **«historical»** calls will shown on dashboard.

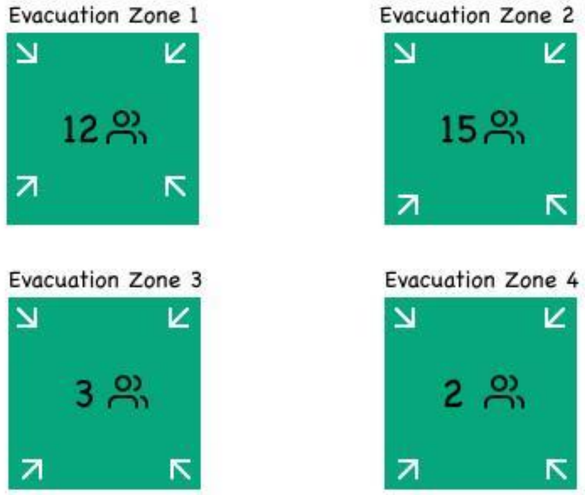
Notification Details
- Device User's Name and Surname
- Device User's Position/Title
- Device User's Department
- Device User's Device ID
- Device User's Phone Number

Analytics
- Zone and time range details that are most emergency situation happens
- Duration of stillness and man down
- Followin up the call pick up KPIs
- Customizable KPIs
- False alarm total number

KPI
- Time between pushing panic call button and changing state from "Open Call" to "In Progress"
- Time between "In Progress" to "Completed"
- Total Action Time

* Unless an emergency situation happens, the live location of user will not be detected.

Walkthrough - Emergency Roll Call



List

Name Surname	Position	Department	Device ID	Phone Number	Button Pushed by	OK Button Clicked	Location of Panic Button	Time
----	----	----	----	----	----	----	----	----
----	----	----	----	----	----	----	----	----
----	----	----	----	----	----	----	----	----

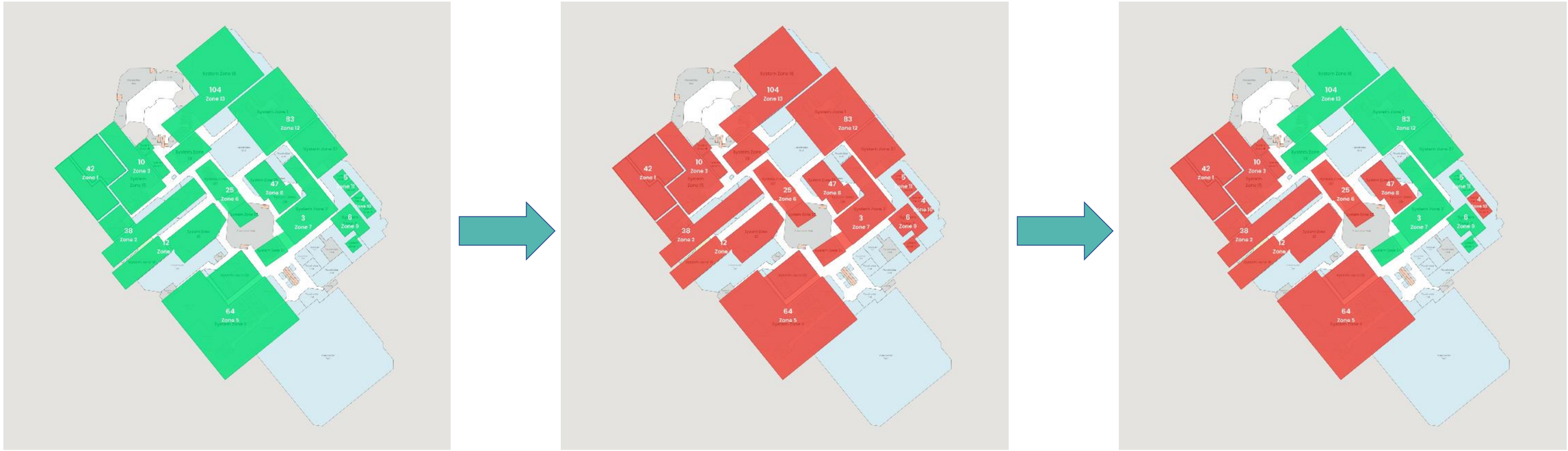
Evacuation Process starts on dashboard.

- Detection of all users in the venue and the evacuation zone.
- Sending notification to all users is optional.

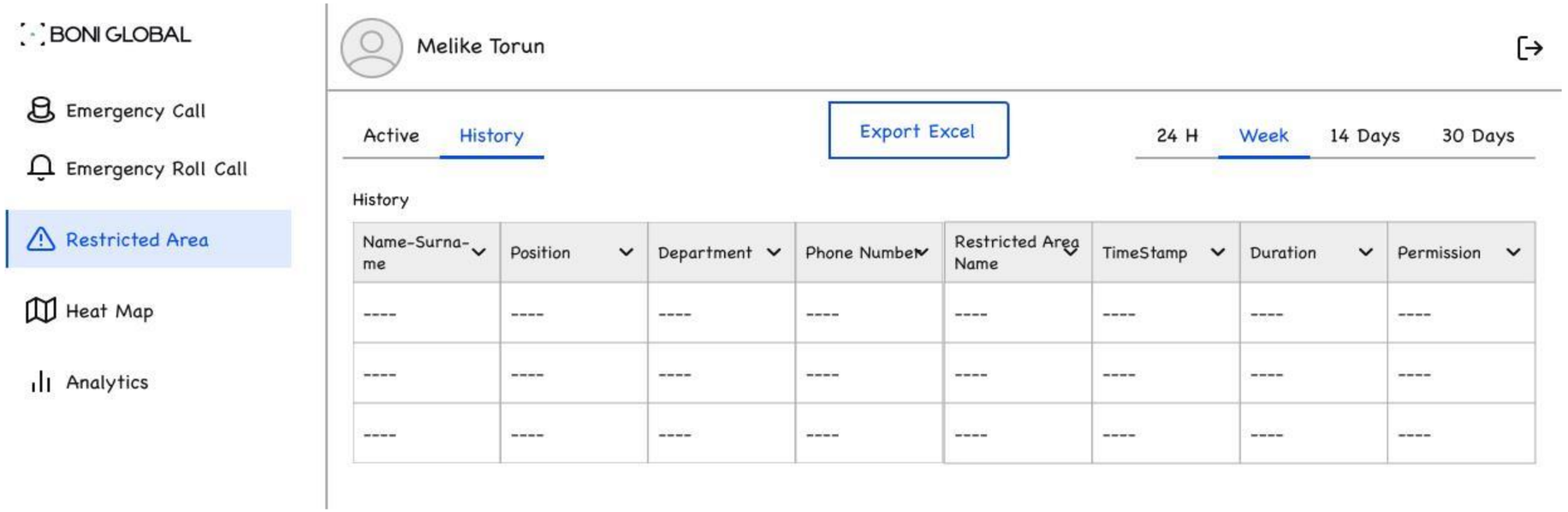
* Unless the evacuation process is started on dashboard, the live location of users will not be detected.

Walkthrough - Emergency Roll Call

While evacuation process continue, clean zones will be followed on dashboard

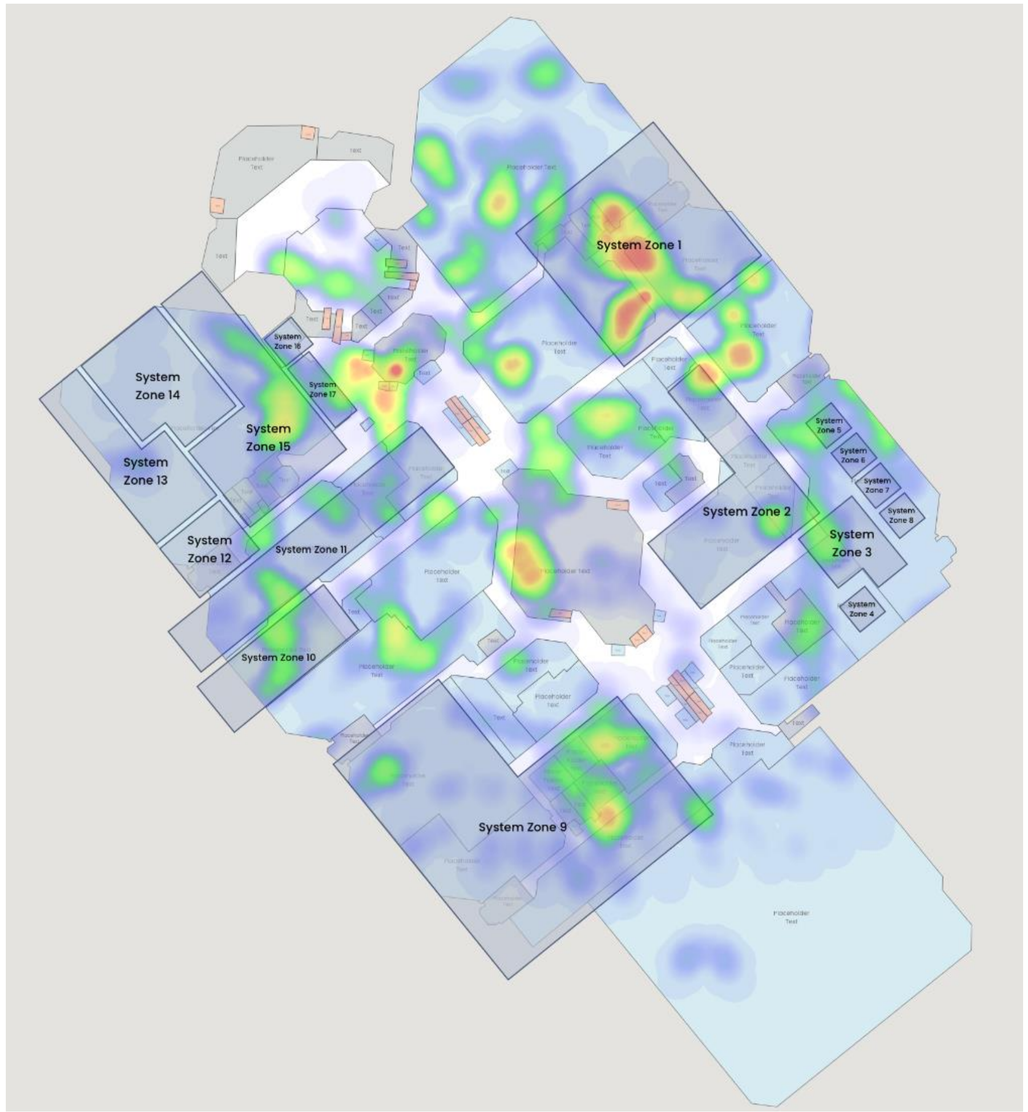


Walkthrough - Restricted Area Monitoring



- Identifying «Resticted Areas» on map
- Logging of all enterences based on authorization
- Following up all enterence info actively and hictorically
- Changeable zone management

Walkthrough - Heat Maps



- Heat Map of venue and floor will be based on the density of users.
- The filter mechanism according to the time range and zones.
- Instantly and historically heap map reviewing.
- Only autorized people will review heap map of venues

BONI GLOBAL

Appendix

About Boni Global

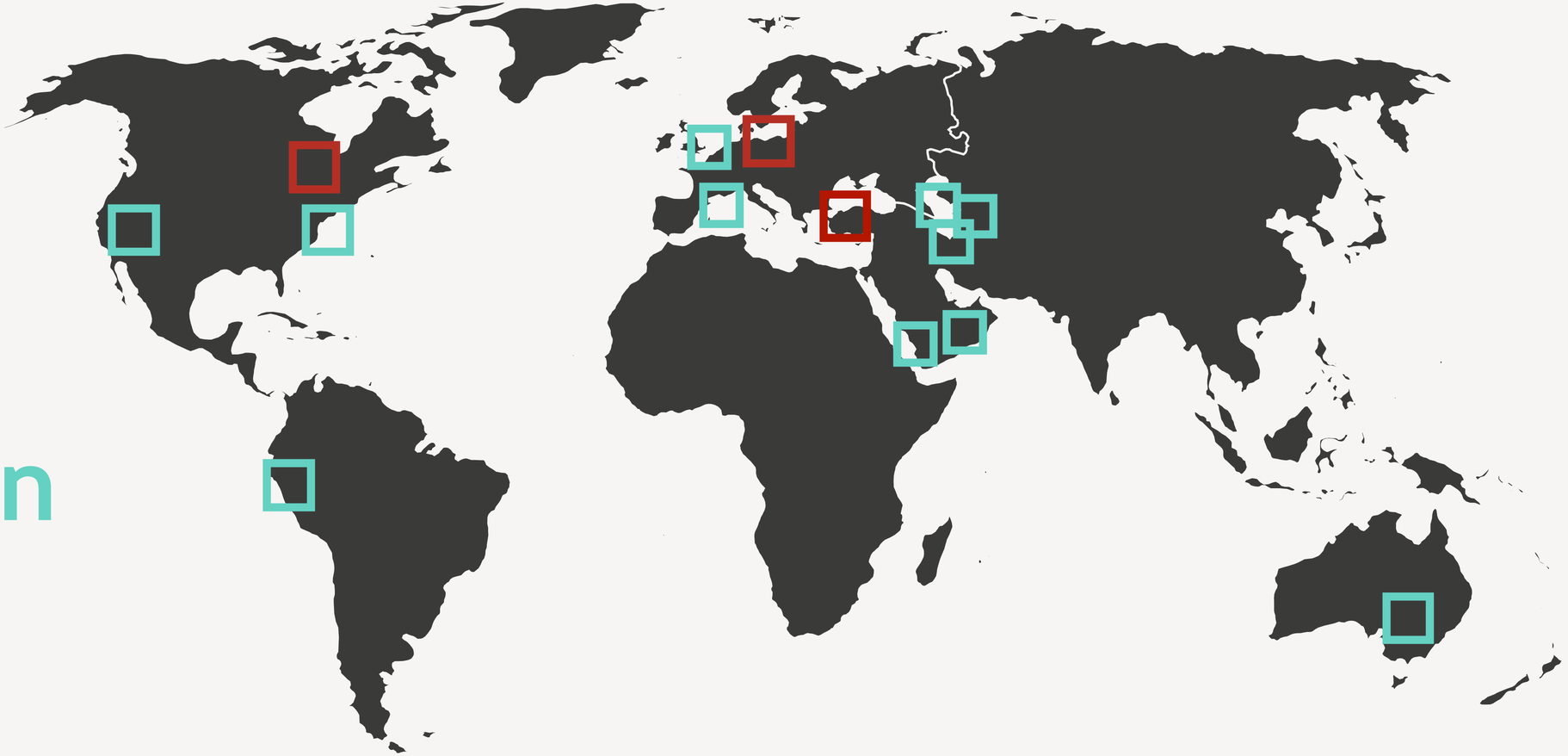
Safe Steps Contact Tracing Technical Details

Safe Steps Emergency Technical Details

Product Portfolio

- Indoor mapping
- Indoor navigation
- Indoor tracking
- Accessibility solutions
- Indoor analytics
- Geofencing services

Global Expansion



OUR OFFICES

Istanbul
Berlin
Chicago

OUR PROJECTS

San Francisco
St. Paul
Baltimore
New York

London
Berlin
Hamburg
Barcelona

Dubai
Sydney
Lima
Wichita

Istanbul
Antalya
Bursa
Ankara

Patents

A Measuring System

A Location Detection System and Method

An Evaluation System and Method

A System for Contact-Tracing and Filiation Method

Technology Partners

Microsoft

SAP

Mapping Partners

Apple

Google

here

R&D Projects

- ✓ Indoor navigation device: design and development
- ✓ Computer vision-based location with neural network and machine learning
- ✓ Digital twin and facility management Contact tracing

BONI GLOBAL

Development Partners

MESS

Metal Employers Union with 240 companies and 140k employees

Project sponsor & granted discount for its members

SADE.IO

IoT device designer & manufacturer

Co-designed Wearables and providing IoT Gateways

arçelik

3rd Largest Household Appliances Manufacturer in Europe

Provided Live Test Environment

Manufacturing Machinary Provider

ARBURG

Provided Plastic Injection Moulding Machines for prototypes

Electronic product manufacturer

ASKEY®

Mass production with 2.000 pieces per day

Awards & Recognitions / Acknowledgements

2015 : Indoor Navigation Challenge from the National Federation of the Blind - Baltimore | USA

2015 : **Corporate** Social Responsibility from the International Council of Shopping Centers - New York | USA

2015 : Best Use of Mobile for Accessibility & Inclusion from GSMA - Barcelona | Spain

2016 : Responsible Business Awards from Ethical Corporation - London | UK

2016 : Wholesale Service Innovation from Global Telecom Business Awards - London | UK

2017 : Smart Urban Pioneers Urban Living Solutions , Smart and SXSW - USA

2018 : BizLab Aerospace Accelerator from Airbus - France

2019 : Future Hamburg Awards Finalist - Germany

Sales Partners

Fixed and Mobile Network Operator

120+ leads from Strategical and Large Segments,

60 Account Executives actively presenting Safe Steps

System Integration Company with $300mn revenue in 2019

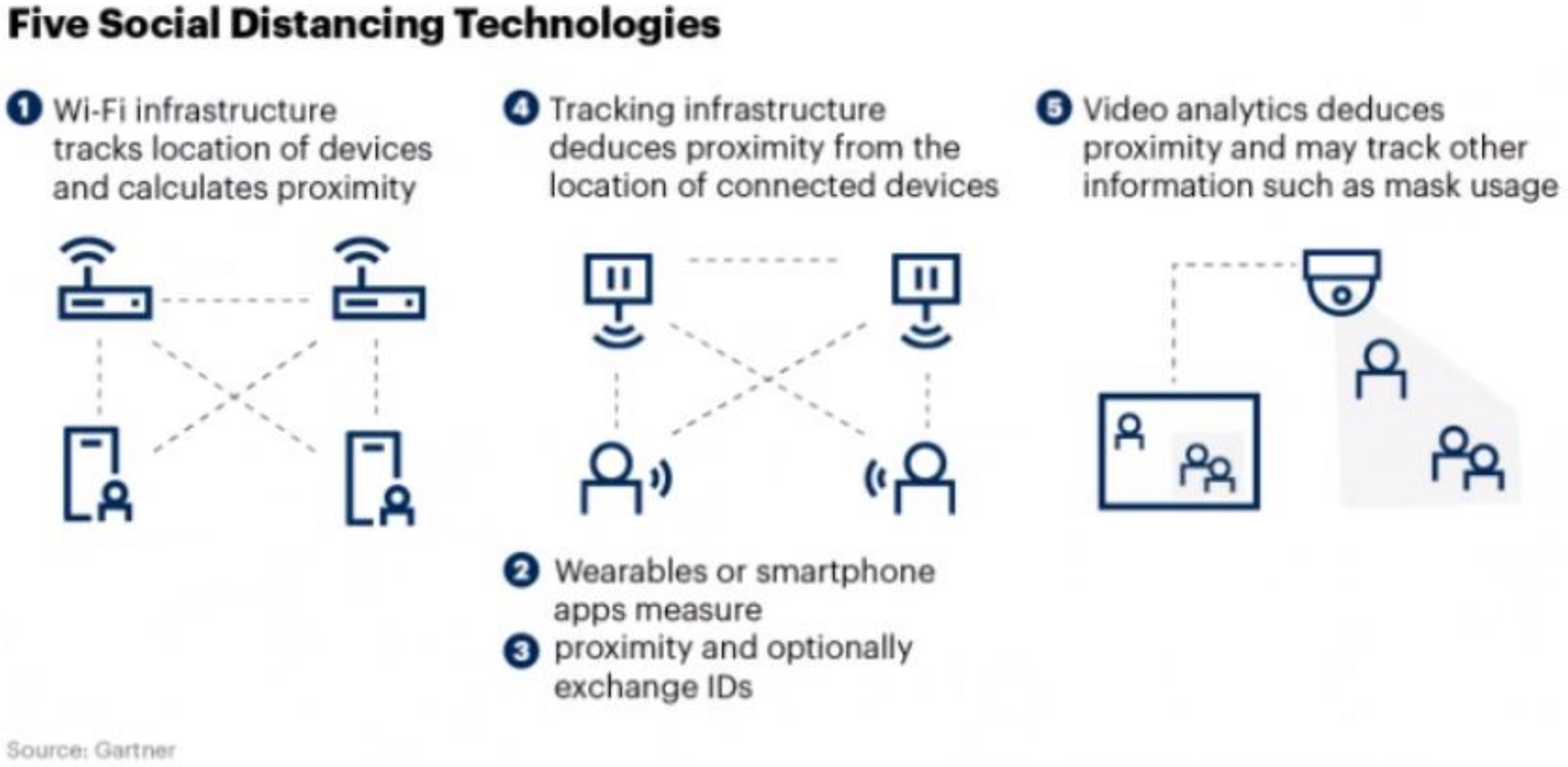
Integration, Operation and Sales Agreement,

Koç Digital, IoT Platform Integration (JV by Koç Sistem and Boston Consulting Group)

Digital Security Solutions company of Securitas

Access Control System integrations

Technology Selection - Contact Tracing



Our solution is based on Proximity and ID Exchange (3)
Additionally Tracking Infrastructure (2021-Q1) for advance Health & Safety solutions (4)

HOW IT WORKS

Microsoft Azure

SAP HANA

Integrations
- HR Suits
- Access Systems

SAP® Analytics Cloud

Web App

Health & Safety
Executive

Contact Tracing - Technology Comparison

Item	COST	DEPLOYMENT	ACCURACY
NBIOT	High Cost	Fast Deployment	Good Accuracy
GPS	Low Cost	Fast Deployment	-
WI-FI	Low Cost	Fast Deployment	Medium Accuracy
UWB*	Very High Cost	Slow Deployment	Very Good Accuracy
RTLSVIABLUETOOTH**	High Cost	Slow Deployment	Medium Accuracy
PROXIMITYVIABLOOTH***	Low Cost	Fast Deployment	Good Accuracy

Good Medium Low

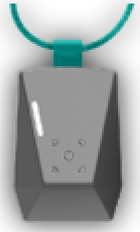
Position accuracy is less than 1 meter in systems using UWB. Therefore, a sensitive solution is provided with RTLS. But as UWB is new, both a device and as a GW (gateway), is an expensive system. ** To determine the location of a Wearable Device, this device must see at least 3 different GW from everywhere. This requires both the need for extra GW and energy to be drawn separately for each GW. In RTLS systems via Bluetooth, the sensitivity can reach a minimum of 3 meters, and the total error margin in two devices can reach 6 meters. This may provide incorrect information for the filiation. *** In proximity systems developed via Bluetooth technology sensitivity is around 1.5 meters.

Contact Tracing - Device Technical Details

Item	Bracelet	Wristband	Badge (soon)
Mobile Connection	Yes	Yes	Yes
Data Transfer	Gateway / Mobile	Gateway / Mobile	Gateway / Mobile
Data Storage	3000 recorded data	20000 recorded data	3000 recorded data
Indicator	Buzzer / light / vibration	Light / vibration	Light / vibration
Battery	1 year battery life (Replaceable)	3 days battery life (Chargable)	1 year battery life (Replaceable)
Working Temperature	-20 ˚C ~ +60 ˚C	-15 ˚C ~ +45 ˚C	-20 ˚C ~ +60 ˚C
Waterproof Rate	IP56	IP67	IP 67
Length / Weight	5 x 3 x 2 cm / 24 gr	30.5 x 11 x 7.5 cm / 24.5 gr	6 x 9 x 1,5 cm / 24 gr.

Emergency - Device Technical Details

Item	Industrial GW	Office GW	Location Sensor
Connection	Wi-Fi or GSM	Wi-Fi or GSM	N/A
Data Transfer	BLE or UWB	BLE ow UWB	BLE
Power	12V AC with Rechargable Battery	12V AC	Rechargable Battery
Waterproof Rate	IP67	IP56	IP 67

Item	Bracelet	Badge
Data Transfer	Gateway / Mobile	Gateway / Mobile
Indicator	Buzzer / light / vibration	Light / vibration
Battery	1 year battery life (Replaceable)	1 year battery life (Rechargable)
Waterproof Rate	IP56	IP 67
Length / Weight	5 x 3 x 2 cm / 24 gr	6 x 9 x 1,5 cm / 24 gr.
		

BONI GLOBAL

Thank You!

Sarper Sılaoğlu

CEO

+90 (532) 583 73 63
ssilaoglu @boniglobal.com