Members of:

AIOTI
ALLIANCE FOR INTERNET OF THINGS INNOVATION
IoT·Forum

DUNAV NET

Lessons learnt in the field…

We are creating turnkey IoT solutions

agro NET

We are...

Established in 2006

- Offices in Dublin (Ireland) and Novi Sad (Serbia)
- 30+ university educated software, telecom, embedded engineers, 3 PhD

IoT pioneers

- 10+ years in IoT
- Drivers of first early smart city IoT deployments (ekoBus, SmartSantander)

Microsoft IoT partners

- See next slide :)

IoT experts

- Digital transformation
- LPWAN, cloud and advanced analytics
- Smart city, smart agriculture, smart manufacturing

Investing in research and innovation

- 11 FP7 projects, 5 Horizon 2020 projects (our budget share ~5milEUR)

Innovators

- Thought leaders
- Founding member of International IoT Forum (iotforum.org) and member of Alliance for IoT Innovation (AIOTI) www.aioti.eu

RESEARCH & INNOVATION PROJECTS

2008

Citi Sense

IoT Lab

Smartie

Sociotal

Clips

Fi Content

Finesce

MobiWallet

Pijaca na klik

pestNET

irrigNET

FI-Space

Privacy Flag

WeLive

TagItSmart

U4IoT

2018

OUR TURNKEY IoT SOLUTIONS

SMART AGRICULTURE

agroNET

fleetNET

trapNET

boxNET

alertNET

irrigNET

Pijaca na klik

SMART CITY

ekoNET

fleetNET

wasteNET

parkNET

SMART MANUFACTURING

glueNET

From a Microsoft presentation at Ignite: https://www.microsoft.com/en-us/ignite/default.aspx

Microsoft IoT is already delivering tangible results across industries

RAC

By analyzing driving trends on its own patrol fleet, RAC has **reduced its accident rate by 25%, and reduced fuel usage by 20% - reporting annual savings of $1.8 million**

Rockwell Automation

Improves **access** to production and supply chain **data** worldwide, reducing downtime costs by as much as **$300,000 per day**

Tetra Pak

Tetra Pak's IoT business results show down-time cut down by up to 48 hours for each packaging line saving up to 30,000 Euros for customers. "

Johnson Controls

Chillers restart **9x faster** than unconnected equipment, avoiding more than **$300,000** in hourly downtime costs

DUNAV NET

By telling farmers such things as when to irrigate, how to control diseases and where to fight pests, agroNET provides an action plan to maximize efficiency. This solution has seen yield increases of 30% due to data & machine learning informed irrigation decisions and reductions in water use by 20%."

thyssenkrupp

Gathers data from sensors and systems to create valuable business intelligence and **reduce downtime by 50%**

FINNING

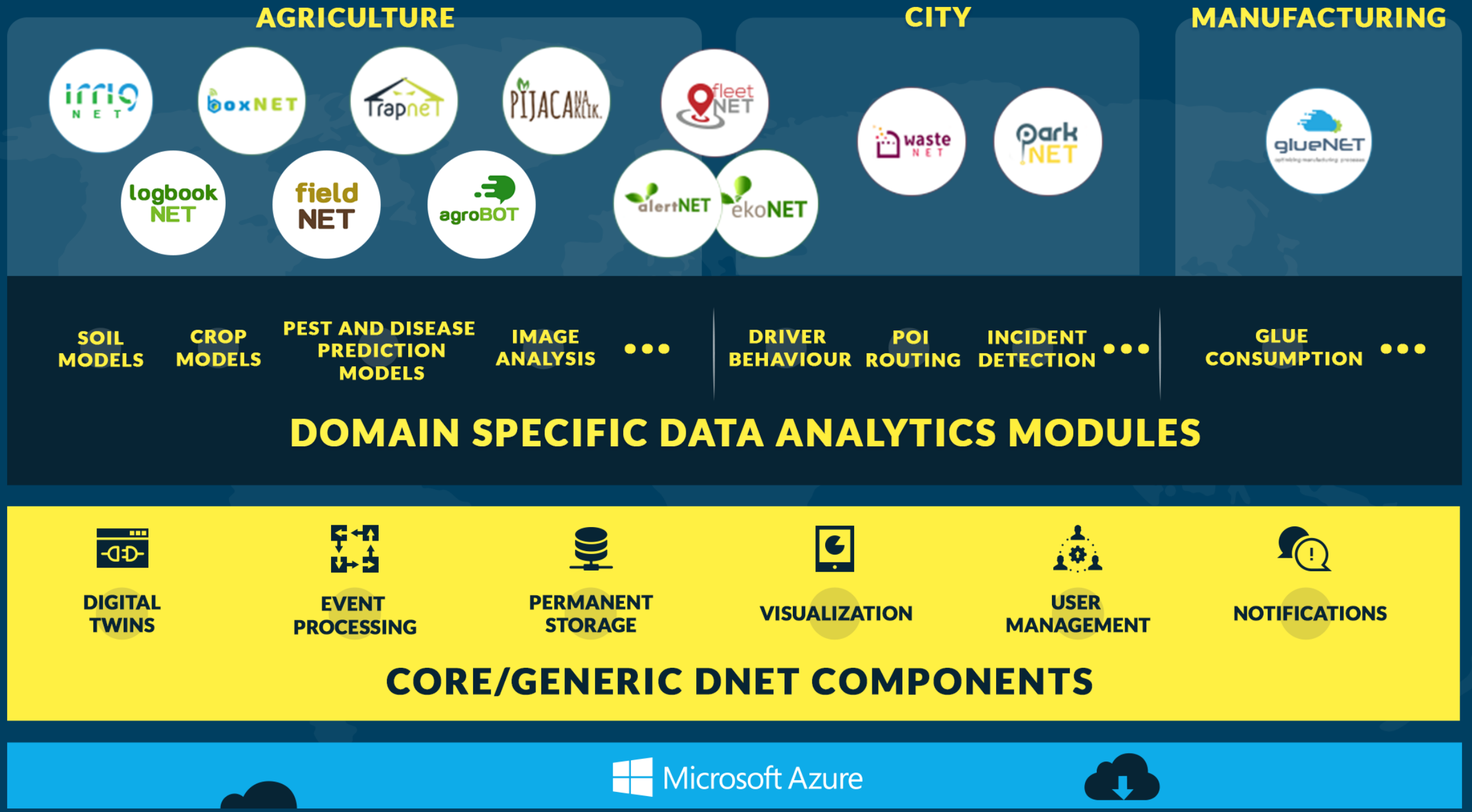
"Finning's IoT solution has enabled customers to quickly solve business problems from a dashboard, transport more than 1 million additional tons of cargo via machine learning, reduce fuel consumption by reducing ideling by 17%, and increase ROI and competitiveness for the long term."

Rolls-Royce

Cutting fuel usage by 1 percent could save **$250,000 per plane per year**

HERSHEY'S

Ensure the licorice extruders on Twizzler's production line are **performing at peak optimization, saving over $500K/year** on licorice alone.


AGRICULTURE
CITY
MANUFACTURING
irrig NET
boxNET
Trapnet
PIJACA
fleet NET
waste NET
park NET
glueNET
logbook NET
field NET
agroBOT
alertNET
ekoNET
SOIL MODELS
CROP MODELS
PEST AND DISEASE PREDICTION MODELS
IMAGE ANALYSIS
DRIVER BEHAVIOUR
POI ROUTING
INCIDENT DETECTION
GLUE CONSUMPTION
DOMAIN SPECIFIC DATA ANALYTICS MODULES
DIGITAL TWINS
EVENT PROCESSING
PERMANENT STORAGE
VISUALIZATION
USER MANAGEMENT
NOTIFICATIONS
CORE/GENERIC DNET COMPONENTS
Microsoft Azure

agroNET Data Analytics

agroNET FARM INTEROPERABILITY DATA HUB

JOHN DEERE CLOUD

CNH

3rd PARTY SYSTEM

ASSETS

INSECT TRAP

IRRIGATION SYSTEMS

TRACTORS/ MACHINERY

ERP

WEATHER STATION

AgroNET

portal.v2.agronet.solutions

Srdjan

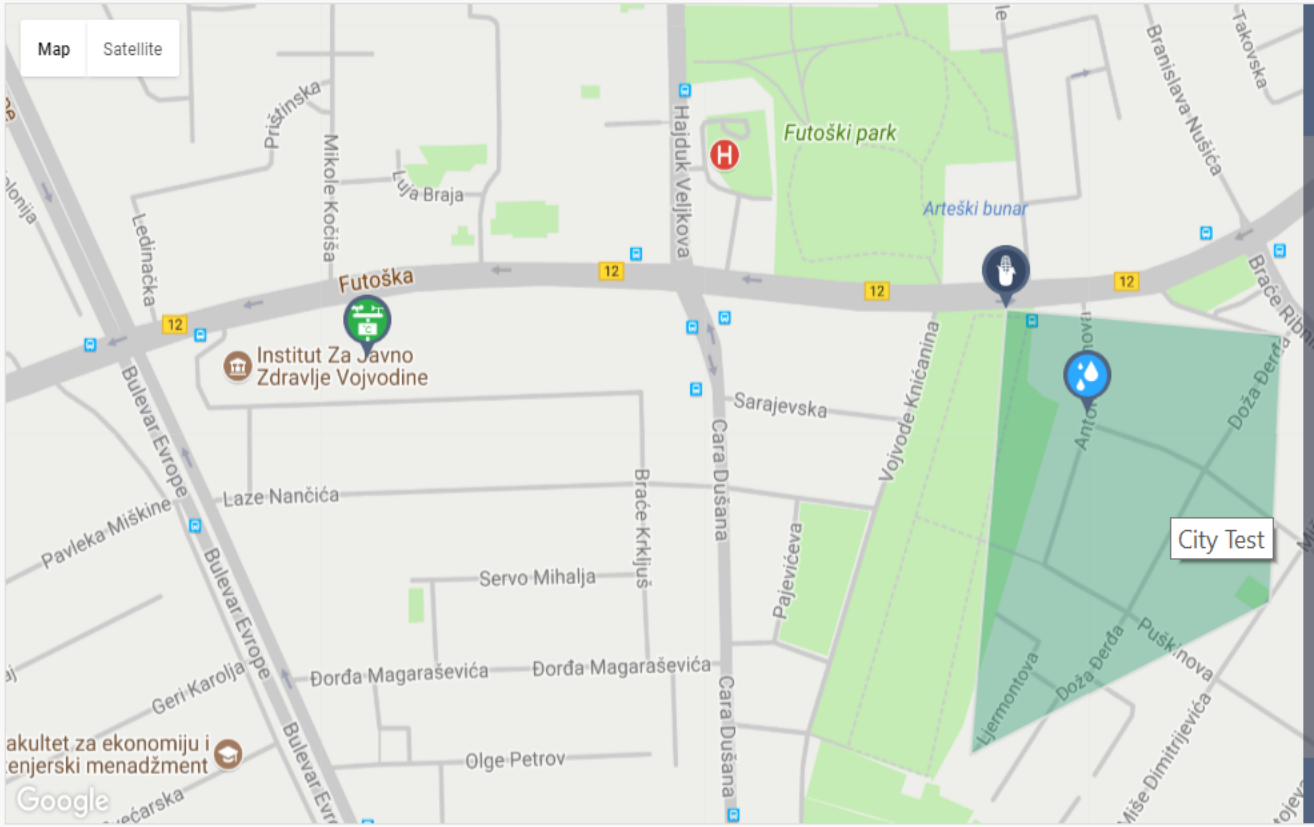
agroNET

Weather forecast | English | demodnet

- Irrigation
- Smart trap
- Prediction models
- Satellite images
- Poultrynet
- FleetNet
- activityBook

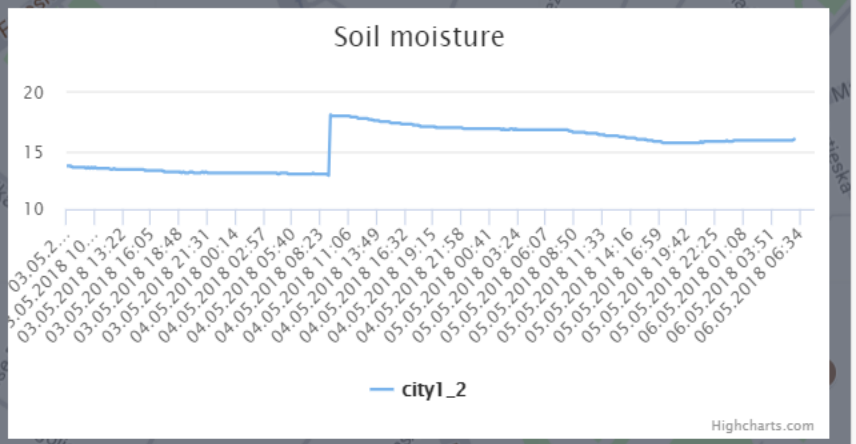
TAG IT SMART

DUNAV NET



City Test

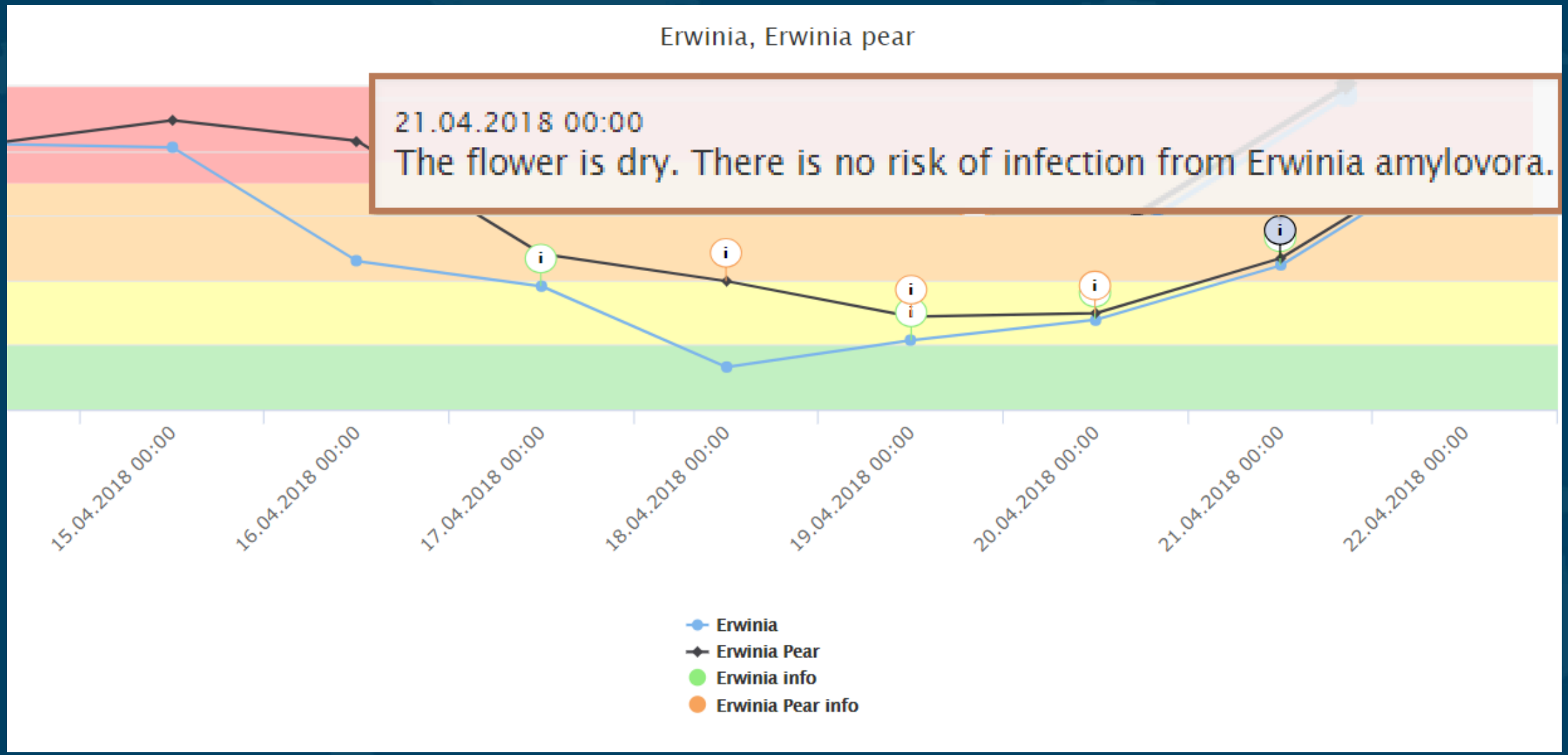
5/6/2018 4:00:01 AM



See more

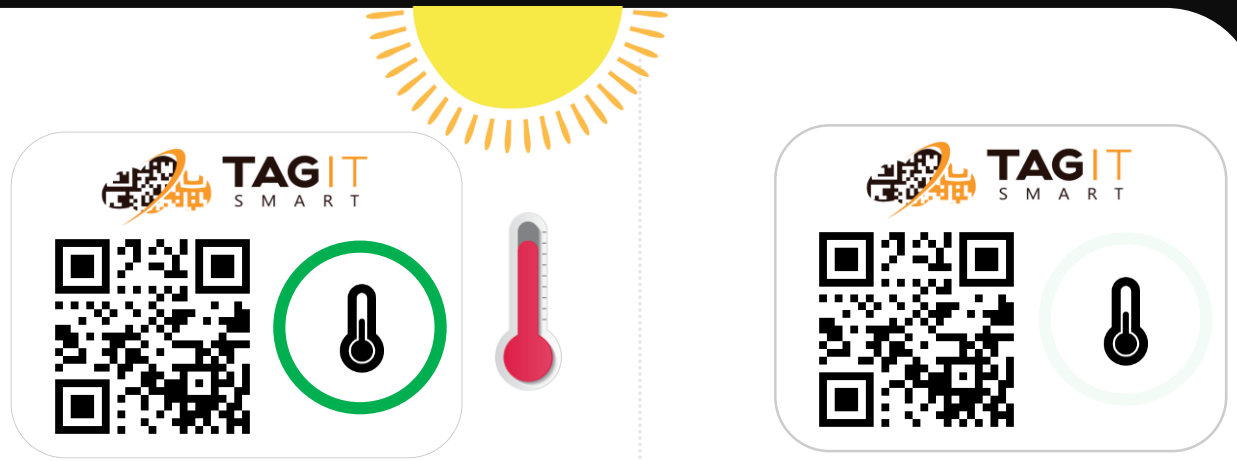
	Device name	Notification	2	View all
!	City Test	Irrigate with 5l of water per m2. Soil moisture: 15.9% . Threshold for the field: 16.9%. Expected p...		
!	RHMZ Novi Sad	There is a possibility of infection.		

AgroNET assistant


Erwinia, Erwinia pear
21.04.2018 00:00
The flower is dry. There is no risk of infection from Erwinia amylovora.
15.04.2018 00:00
16.04.2018 00:00
17.04.2018 00:00
18.04.2018 00:00
19.04.2018 00:00
20.04.2018 00:00
21.04.2018 00:00
22.04.2018 00:00
Erwinia
Erwinia Pear
Erwinia info
Erwinia Pear info

Smart tags – it’s how they speak!

+ thermochromic functional ink =



+ photochromic functional ink =

In-store consumer interaction with products

UNIVEREXPORT

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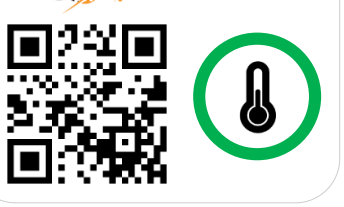

Normal tag

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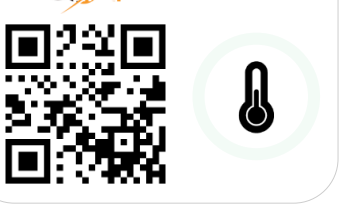

Compromised tag

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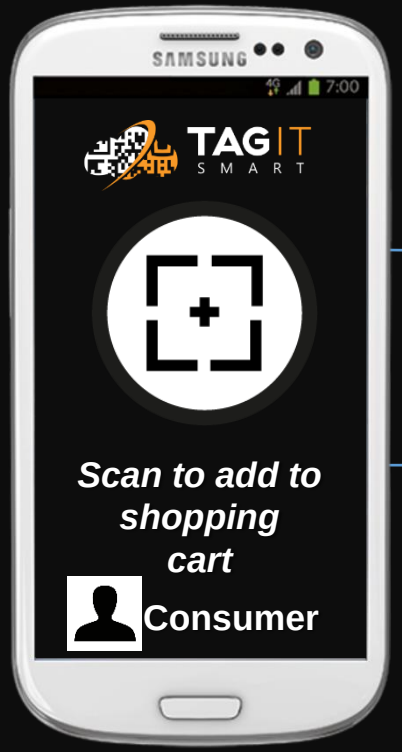
Normal tag

TAG IT SMART

Compromised tag

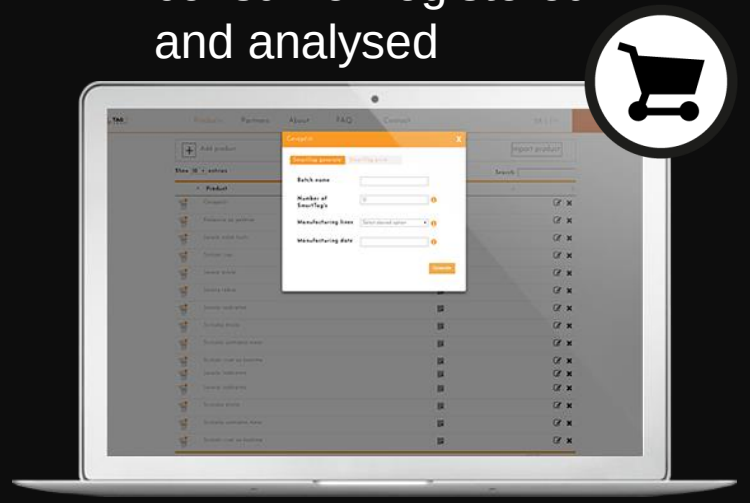
Plantaže

1) Products are scanned by the consumer



2) Different results from scanning good or compromised tag

3) Actions of the consumer registered and analysed



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Lessons learnt…

…from deployments and interactions with customers and users

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Having a lot of choice is great…

…but can cause a lot of headache as well.

TAG IT SMART

Cloud is great and complex…

…”default” vs. customized configuration…

Know what you're measuring…

…to avoid surprises.

Users have to be educated…

…set expectations, explain benefits…

Smart agriculture solutions are sold to agronomists, not to IT departments…

…do your homework, learn the lingo.

Overcoming internal relationships and processes…

…can have significant impact.

Deployment requires skills and time…

…be ready to get your hands dirty, literally ☺.

TAG IT SMART

Reality is not a direct replica of development labs…

…plan for unexpected.

Ecosystem, ecosystem, ecosystem…

…partners, partners, partners.

www.dunavnet.eu

agronet.solutions

www.tagitsmart.eu

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