



BRINGX

PREMIUM DELIVERY

FI-PACOLO

Securing passive cooling by cloud based temperature prediction

CHALLENGES

Temperature Monitoring

- Temperature loggers can only document past conditions
- No possibility to prevent damage
- Additional costs for logger handling



SAVE TIME

Cold-Chain Logistics

- Growing market of online food stores
- Specific handling of perishable goods eliminate potential for synergies
- Passive Cooling opens door to standardized handling



SAVE COSTS

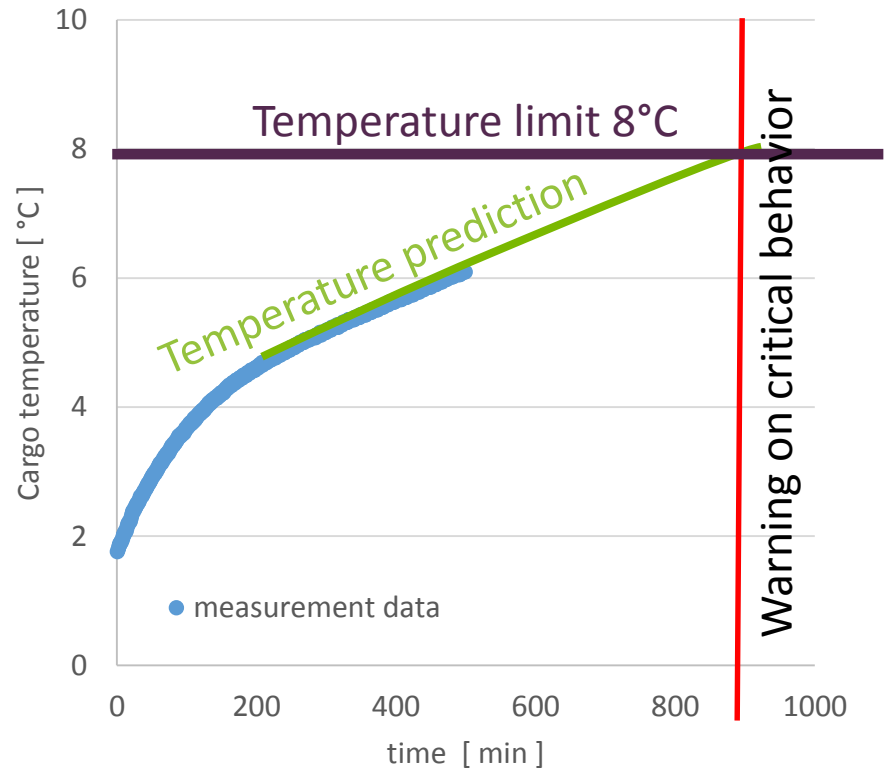
WIRELESS TEMPERATURE SENSOR

- Bluetooth Low Energy protocol
 - High energy efficiency and secure encryption
 - Easy handling by any smartphone
- High accuracy ($\pm 0.5^{\circ}\text{C}$) temperature sensing
- Compact housing and easy installation
- One year battery life, incl. battery monitoring
- Temperature prediction in the PACOLO cloud, accessible for external systems via API



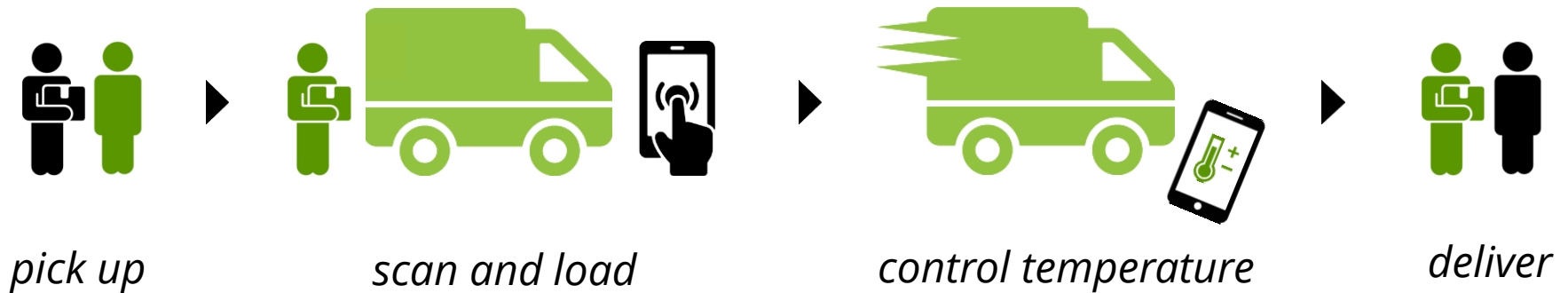
TEMPERATURE PREDICTION

- Evolution algorithm to predict transportation risks in the cool chain before they occur
- Early warning in case of abnormal changes
- Real-time information on remaining transport time before reaching the limit



FI-PACOLO

Basic functionality

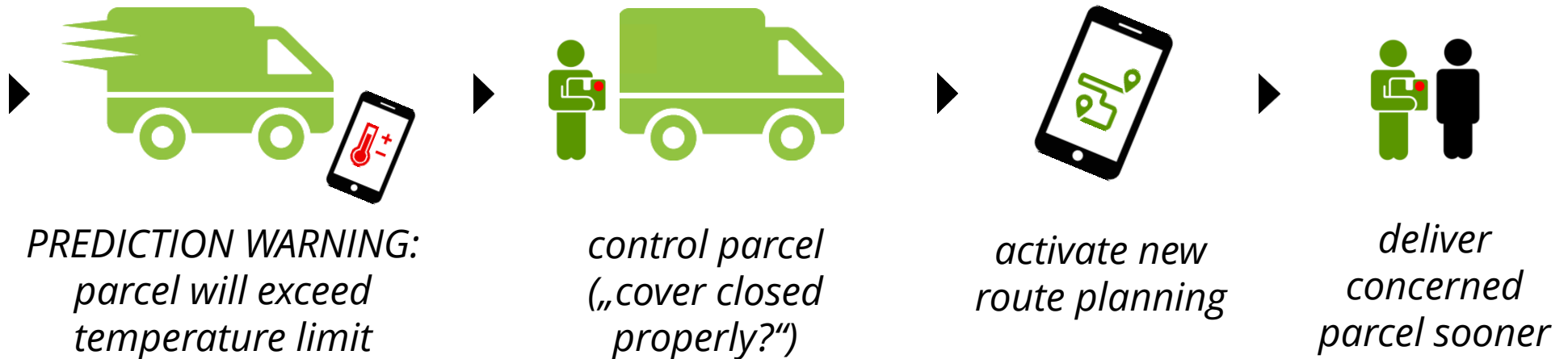


The delievery work-flow is guided by the mobile app.

- It shows to the driver an optimized route for delivery
- Driver can accept new orders which fit in his route
- Real-time monitoring of cargo temperature

FI-PACOLO

case example: **parcel temperature increases too quickly**



In the case of abnormal or undesired temperature changes:

- App warns driver and suggests remedial actions
- Online tracking by secure loud

OUR VISION: PASSIVE COOLING FOR LAST MILE LOGISTICS

Cooled truck:

„Driving downtown for just a few deliveries makes me lose money...“



Uncooled parcel service:

„Give it to me! I go there anyway and have capacities left..“



Real-time temperature monitoring & prediction



BRINGX - Cloud based disposition platform

Fully automated planning within seconds



„Wow! Right on time at half the cost!“

WHO WE ARE

FI-PACOLO Team

CEO, Sales



DR. MATTHIAS BRUNNER

9 years of automotive sales and project management

Marketing



VERONIKA TOMASU

Marketing

Technology



RAHUL TOMAR

Geo-engineering, Software development



EMANUEL PUSCALAU

8 years of software engineering at INTEL

Mc Students



DEEPAK SRINIVASAN

Master student, Software engineering

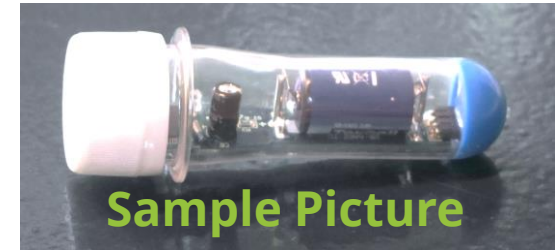


GANESH RAMAKRISHNAN

Master student, Embedded systems

FI-PACOLO offers:

- Easy and robust wireless sensor
- Real time tracking of cargo temperature
- Powerful temperature prediction to avoid scrap
- Save costs on last mile distribution by passive cooling



IMPROVING THE COOL CHAIN

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