# edp IoT hackathon

Microsoft

EDP STARTER

BizSpark

NARROW NET
LINKING THINGS

# Welcome!

38 participants
in 15 teams

JORGE SIMÕES
HEAD OF DATA LEAP AT EDP INOVAÇÃO

PEDRO GEIRINHAS ROCHA
DIRECTOR AT EDP COMERCIAL

FRANCISCO SANTOS
TECHNOLOGY ANALYST AT EDP INOVAÇÃO

LUÍS CALADO
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PEDRO COSTA
ECOSYSTEM DEVELOPER AT NARROWNET

JOÃO PIMENTA
COUNTRY MANAGER AT NARROWNET

12 mentors

ANTÓNIO VIDIGAL
CEO OF EDP INOVAÇÃO

PAULA PANARRA
GENERAL MANAGER AT MICROSOFT PORTUGAL

ANTÓNIO COUTINHO
EXECUTIVE DIRECTOR AT EDP COMERCIAL

JOSÉ FERRARI CARETO
EXECUTIVE DIRECTOR AT EDP MARKETING

JASON NADAL
LEAD EVANGELIST AT MICROSOFT PORTUGAL

ENRIQUE ZORZANO
CEO AT NARROWNET

6 members
of the jury

# What you are getting into: two weeks of teamwork, including…

**Hardware challenges**

**Software challenges**

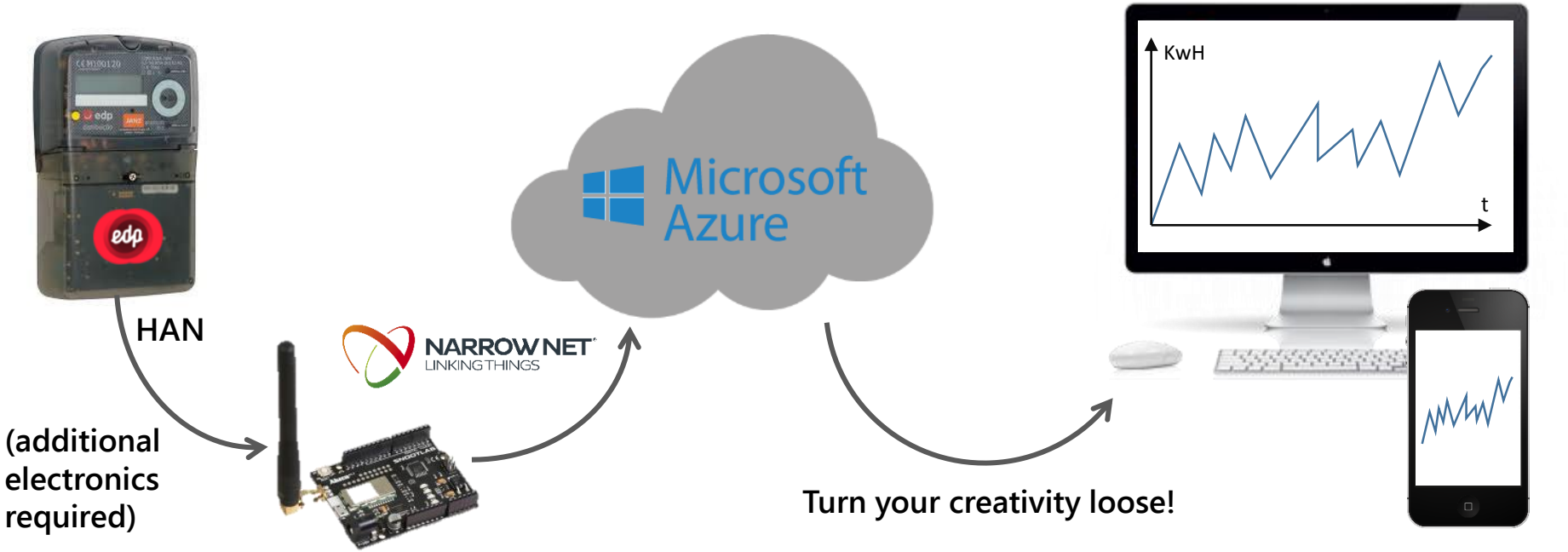
**Presentation to executives**

**Hacking**

**Turning your creativity loose**

**Lots of fun!**

# What's the EDP IoT Hackathon all about?




Today — Feb 8

Week 1

Checkpoint — Feb 17

Week 2

Final pitch — Feb 24

**We are looking for the "minimum loveable product" enabling home energy consumption monitoring.**

# Minimum viable product vs. minimum loveable product

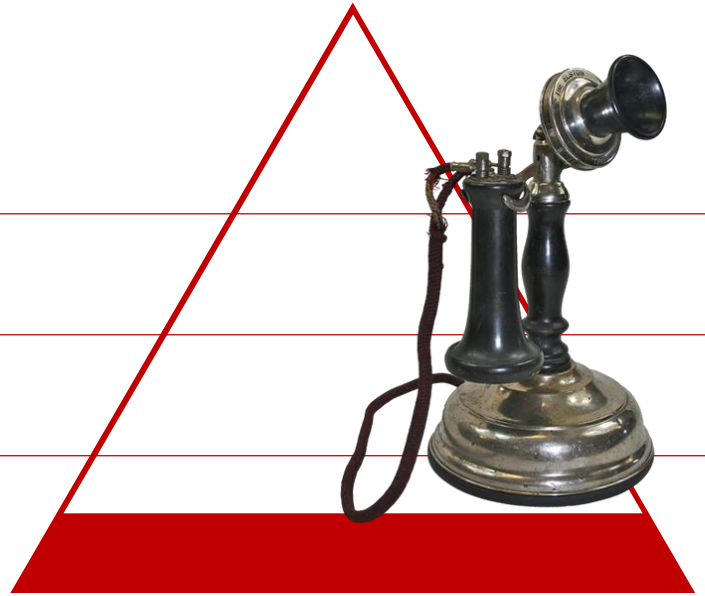
Goal

Delightful

Valuable

Usable

Feasible



Minimum Viable Product (MVP)

Minimum Loveable Product (MLP)

# What you are supposed to deliver – week 1

**Minimum requirements**

- Your board should be reading values from the EB
- Your board should be powered by the HAN interface
- The data should be reaching Azure via Sigfox

**Want extra points?**

- Build your own shield
- Use your own libraries to build extra functionality
- Read and store extra values adding value to the final product (e.g. maximum daily power used)
- Build a physical enclosure for the product
- Surprise us!

Extra points will be awarded to the teams going from MVP to MLP!
Take advantage of the mentor network to know what features would be valued most.

# What you are supposed to deliver – week 2

**Minimum requirements**

- Live readings from the EB will be visible on the web
- Load profiles will be transmitted
- Azure IoT Hub and Stream Analytics will be used to enhance data processing

**For extra points…**

- Build a good-looking smartphone app
- Compress data to make more effective use of the Sigfox daily allowance
- Use advanced analytics to show insights from data
- Delight us!

In the final session you are expected to give a short presentation (5 minutes) describing the full feature set of your product.

# How your work will be assessed

- You will be scored for attaining each of the minimum requirements in hardware and software features.
- You will be awarded extra points for additional valuable features.
- Only built and demonstrated features will be awarded points; planned enhancements and future product roadmaps will not be scored.
- The integrated solution (hardware + software) will be evaluated and outstanding products will be granted extra points.
- Your final presentation will also be scored.
- The team with the highest score wins.

# Your final pitch – use the power of persuasion!

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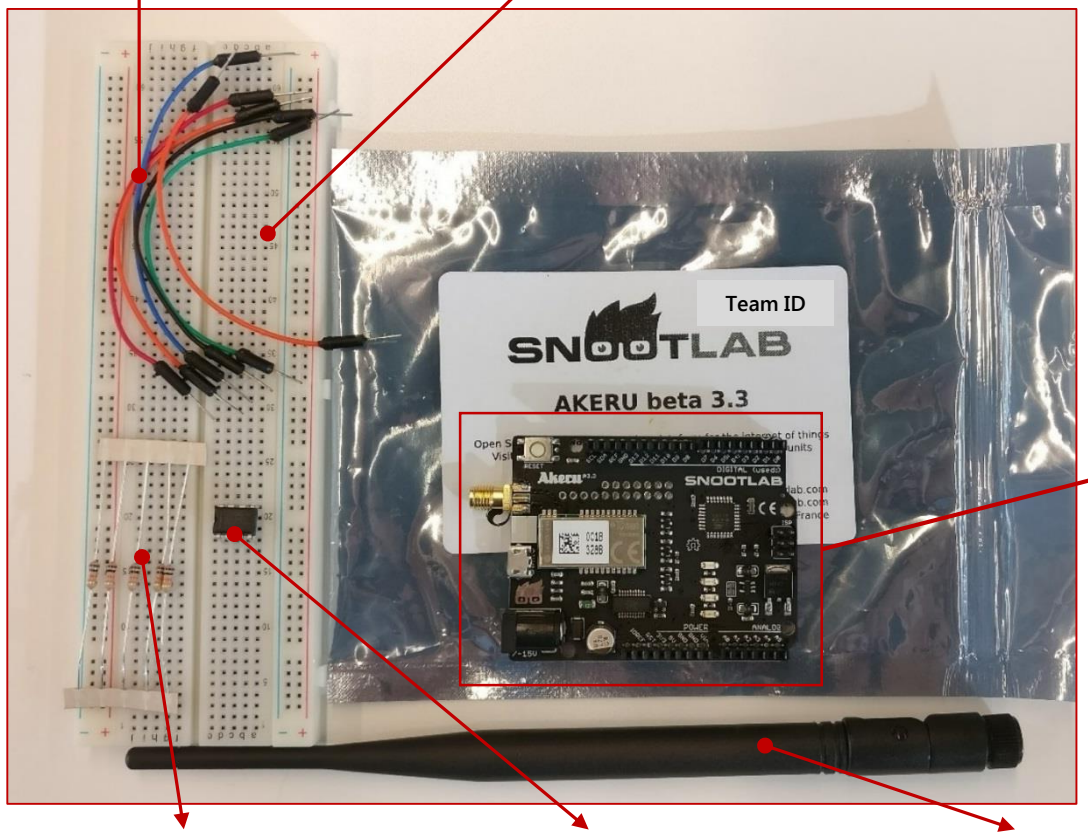
CEO AT NARROWNET

**You will present your product to senior executives from EDP, Microsoft and Narrownet.**
**Do not underestimate the time it takes to prepare for a powerful pitch!**

# Your hackathon kit – shall you accept this mission…

Jumper Wires

[1] Breadboard



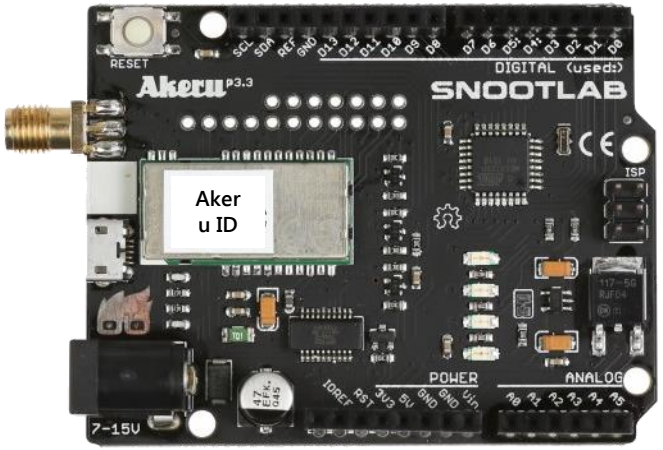

[2] 10K Ohm Resistors

[1] Integrated Circuit MAX 385

[1] Half-Wave Antenna

Akeru Beta 3.3

sigfox + ARDUINO




The Akeru Beta 3.3 board is a modified version of an Arduino Uno. You can use all Arduino tools with it.

Not included: Micro-USB to USB cable

# Today's onboarding process

1. Get your hackathon hardware kit and make sure it's complete.
2. You will get an email with a link to activate your hardware.
3. You will get an email with a code to enable your Microsoft Azure account.

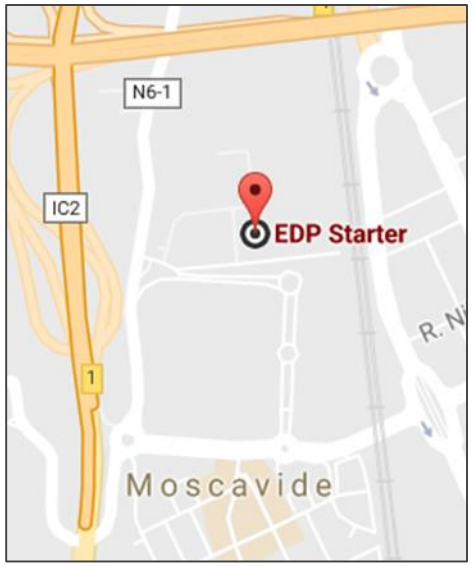
We will use the email address you provided on sign-up. If you prefer to receive emails on a different address, please let us know when you receive your kit.

# Hack central: EDP Starter

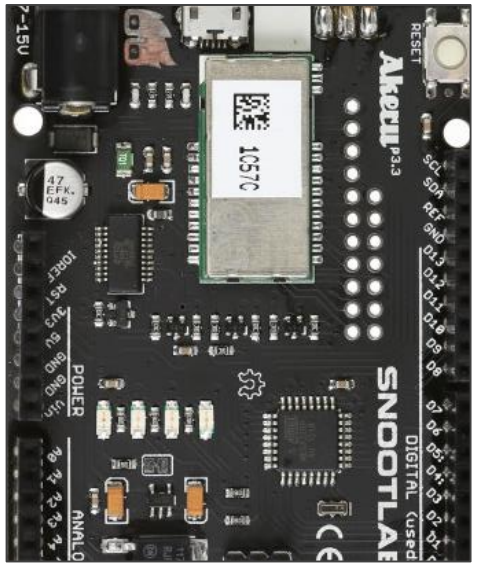
**Support will be available onsite at EDP Starter during working hours (8x5).**
**10 smart meters with HAN plugs are available on a first come, first served basis.**

# Essential information resources…

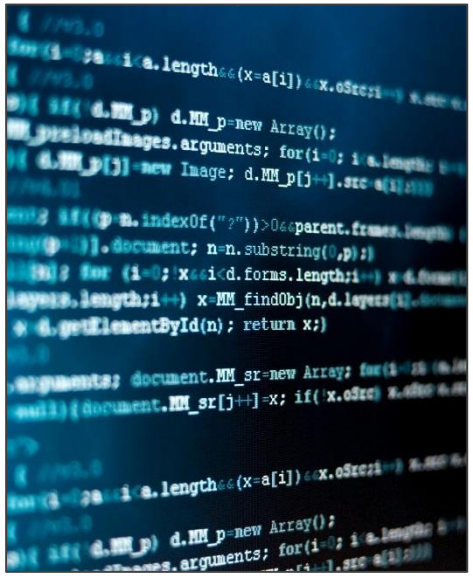
**Hackathon mechanics & logistics**



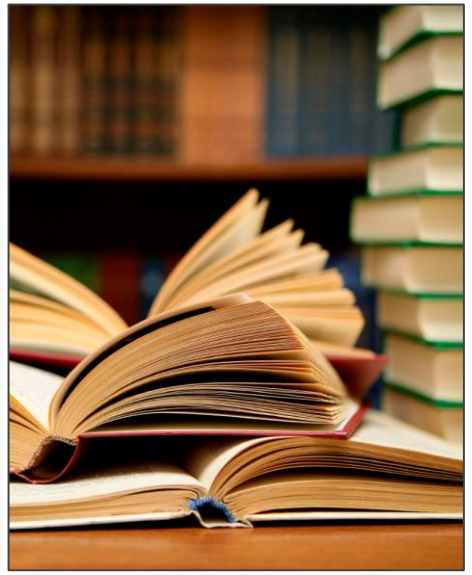

**Hardware documentation**




**Software libraries and code examples**



**Tutorials and extra resources**



[https://github.com/edphackathon/EDPIoTHackathon2017](https://github.com/edphackathon/EDPIoTHackathon2017)

**It is strongly recommended that you carefully go through the documentation.**
**All you need to complete the hackathon is available here.**

# …and a team of mentors ready to help you

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COUNTRY MANAGER AT NARROWNET

**Email edpstarter@edp.pt**

**It is possible to schedule meetings with mentors. Please describe your need in detail and we will put you in contact with the right mentor at a suitable time.**

# Security advice

- Don’t do this at home! Use the smart meters at EDP Starter ONLY.
- Remember you are working with electrical and electronic equipment – protect yourself from electric shocks.
- Use only one feeding power source at a time.
- There will be no replacement Akeru boards provided in case of damage such as current overload;
  Take good care of your materials.

*Don't* FORGET

# TO BE AWESOME.

*Good luck!*

Microsoft

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