NEW CHALLENGES FOR DHC NETWORK OPERATORS

**DHC NETWORKS ARE TURNING MORE COMPLEX**

More distributed (*more sub-stations, more clients, heat exchanges…*)

More players in the value chain

Faster evolution

Economical pressure

**AND GENERATING MASSIVE AMOUNTS OF UNSTRUCTURED DATA**

Everyday, networks produce **billions of unstructured data**
HOW ARE THESE CHALLENGES CURRENTLY FACED?

Classical IT tools such as Excel or EMS do not allow operators to face these challenges optimally:

- Not able to exploit large amounts of data
- No visibility on the network > reactive
- Manual analysis > time-consuming
- Few recommendations > non-optimized conduct
DCBRAIN TURNS YOUR DATA INTO ACTIONABLE INSIGHTS

DCbrain gathers these billions of measures to **digitalize, optimize and model** networks thanks to **Artificial Intelligence**

- Visualize substations & Forecast Demand
- Anomaly Detection & Fine-tuning recommendations
- Optimized Network
- Optimized Processes
How we improved DHN performance through data and AI

**Project scope**
- More than 250 Sub Stations
- 8 internal production points
- 1 external production point (incinerator)
- Evolving network

**Main activities**
- On site data audit of the historic data sets
- Creation of a digital twin network using graph data base
- Fine tuning and implementation of the different models *(by using Auto Machine learning = more than 10 000 different models tested)*
- Training users
- Deployment time : 10 Weeks

⇒ Increase of network output (5 – 10%)
⇒ Processes optimization
MAJOR COMPANIES USE OUR TECHNOLOGY

Our technology is aimed for physical networks in utility and industrial networks such as gas, steam but also for District Heating Networks.
DCbrain’s technology is based on 2 key pillars:

**Graph models** and **Deep Learning**

Our technological partners

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5 KEY MACHINE LEARNING FEATURES

Auto Data analysis & cleanup
Data Generation
Auto ML (+ XAI)
Anomaly Detection
Optimisation

Most of our datas are physical measures (Time Series)
WHO ARE WE?

Arnaud de Moissac
CEO – Infrastructure expert

Benjamin de Buttet
Sales and marketing Director

François-Olivier Martin
CTO – IT Architecture

+ 25 Collaborators

2015 – Creation of our technology

2016 – Industrialization of our tech + Integration “Plant 4.0” incubator @ Total

Prizewinner of several competitions

2017 – Incubation at STATION F

2018 – 1.5M raised

+ Internationalization in Benelux
LET’S SMART THINGS UP TOGETHER!

We're looking for DHCs who understand the power of data to better manage their networks.

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