



Corporate Presentation

June 2021

OUR COMPANY



Kenmei Technologies



About Us

Applying AI to real Use Cases

Spanish company based in Valencia founded by telecoms and software experts that provides an AI-based solution for network / customer intelligence and network operations automation



The Management Team

An experienced team



VICENT SOLER

CEO & CO-FOUNDER



JAVIER GRAU

COO & CO-FOUNDER



JAVIER LÓPEZ

CTO & CO-FOUNDER

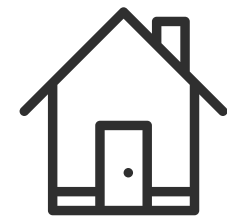


ALI WANSA

EVP SALES

Our Expertise

An experienced team...



GROWING A COMPANY

...under challenging scenarios



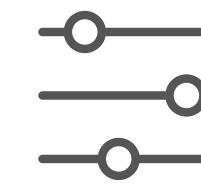
MOBILE COMMUNICATIONS

With the highest expertise
from 2G to 5G



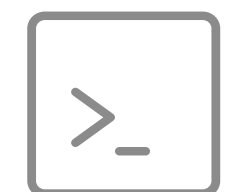
CREATING TEAMS

Fostering and developing
talent, motivated high-
performance teams



PROJECT MANAGEMENT

Managing big, complex
international projects



SW DEVELOPMENT

...in Agile mode to create our
own solutions



BIG DATA

Introducing Big Data in our
solutions



DATA SCIENCE

Applying data science
techniques and machine
learning to innovative
projects

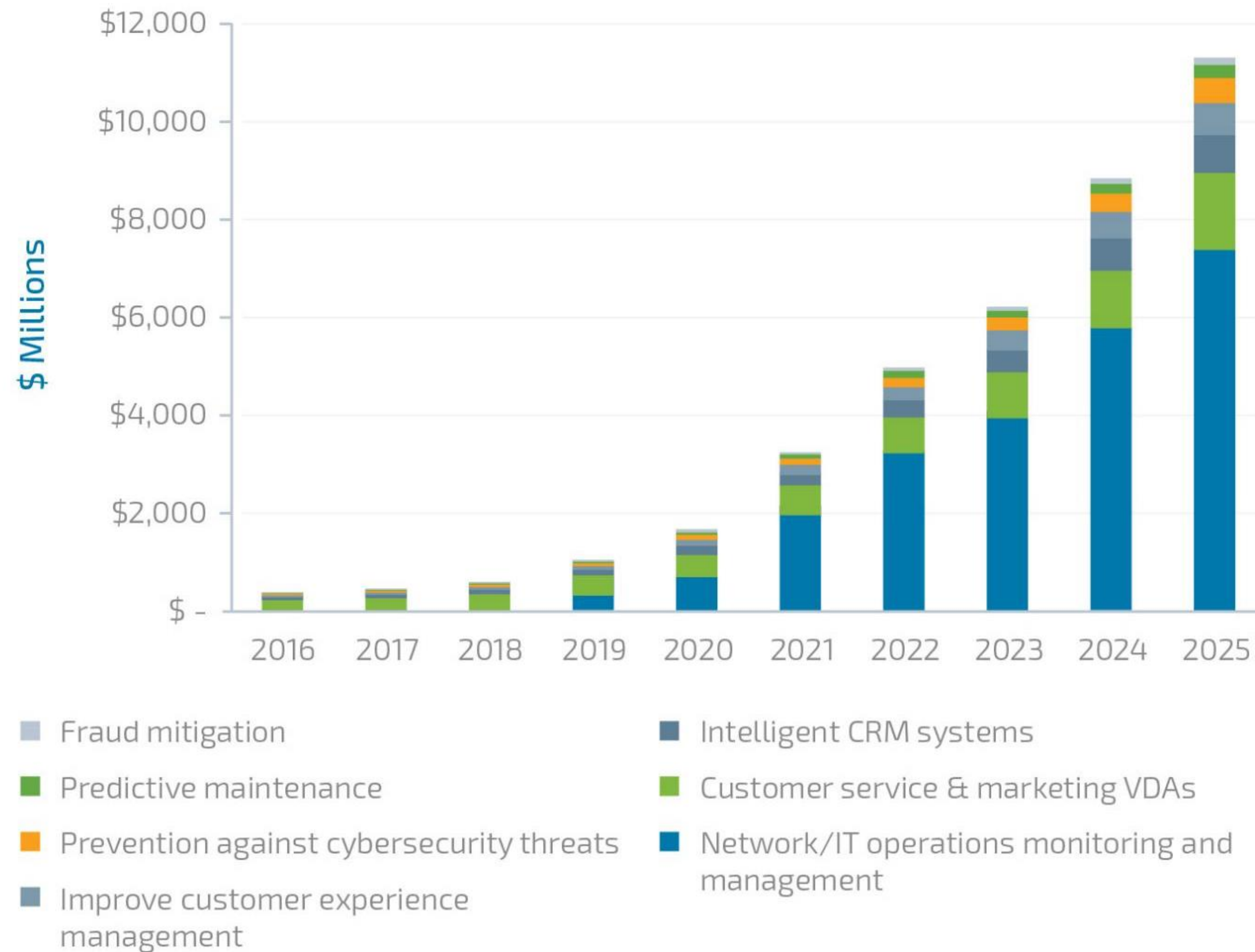


INNOVATION

Internationally recognized as
an innovative team in close
relationship with prestige
universities

Potential market for IA in telecom

Market estimation per Use Case type



Source:  Tractica



DEEP TELECOM EXPERTISE DEVELOPED IN BIG DATA

ADELE® IS A FLEXIBLE PLATFORM
NATIVELY DEVELOPED IN BIG DATA



PROVEN TIER-1 TRACK RECORD

DEVELOPING TOGETHER THE PATH
TO MAXIMIZE THE VALUE OF THEIR
BIG DATA PLATFORMS



CROSS-DOMAIN DATA CORRELATION

MULTIPLE DATA SOURCES ARE
MASSIVELY CORRELATED TO
BRING ADDED-VALUE USE CASES



AUTOMATION & SCALABILITY

BOTH ROOT-CAUSE ANALYSIS AND
NETWORK TUNING ACTIONS ARE
AUTOMATICALLY PROVIDED

OUR PRODUCT



ADELE® (Autonomous Decisions and Learning) is Kenmei's solution to automate decisions based on AI techniques



ADELE® Platform

A future-proof architecture

DATA CORRELATION IN BIG DATA

Our solution is natively developed in **Big Data** enabling cutting-edge Use Cases by **correlating** multiple data sources such as Crowdsourcing, Counters, Parameters, Call Traces, Probes and Open Data



Differentiators of our solution

A future-proof solution with advanced Use Cases for MNOs



CLOUD-NATIVE, MULTI-CLOUD, BIG DATA ARCHITECTURE

Our solution is developed using open-source components of the Big Data ecosystem that can run in any existing Cloud infrastructure



20+ ENTERPRISE AND EXTRAPRISE SOURCE DATA INTEGRATIONS

Multi-vendor network data sources are natively decoded and processed by the platform



CROSS-DOMAIN & UNIFIED DATA MODEL

Unified Data Model integrates every field of the processed cross-domain data sources

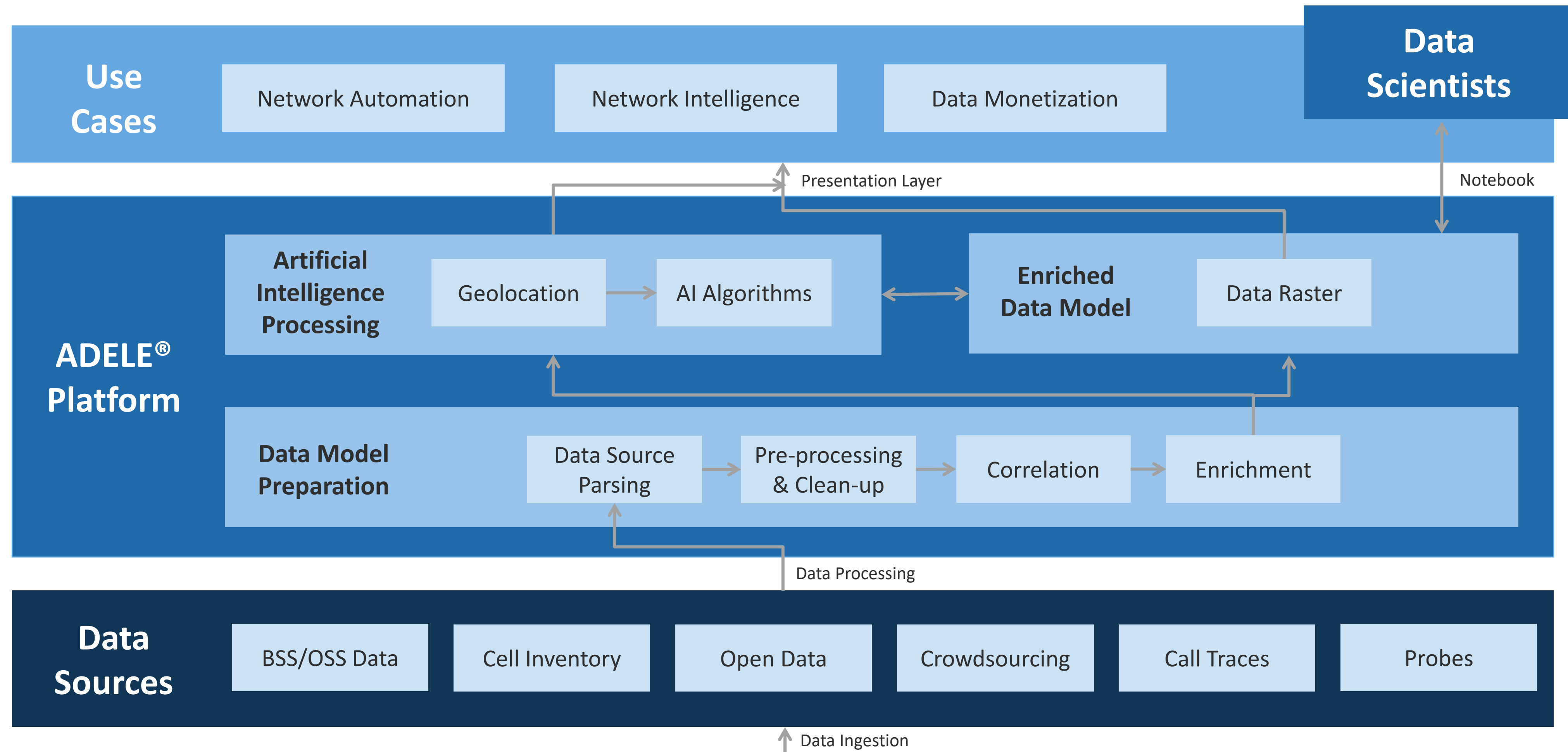


ADVANCED PRE-BUILT USE CASES

The solution comes with a set of pre-defined Use Cases with advanced telco logic

Logical Architecture

ADELE® architecture based on BDP



Supported multi-vendor data sources

What data is being used?

BSS/OSS Data

KPIs and parameters are extracted from network elements:

- Performance Mgmt. Counters (PM)
- Configuration Management (CM)

Cell Inventory

Existing and planned sites' position and antenna parameters are extracted from the design database:

- Network Topology
- Simulation Tools data

Crowdsourcing

Data is obtained from mobile agents using the most relevant tools in the market:

- Commercial Mobile Agents data
- Proprietary mobile SDK data

Call Detail Records

This data source category includes the support of signaling CDRs of:

- Probes
- Call Traces

Open Data

Relevant points of interest of each country are extracted from:

- OpenStreetMaps
- EU: GeoStat, Copernicus

NOKIA

ERICSSON

HUAWEI

TEOCO

VISMON
MANAGER

umlaut

TUTELA

NetPerform

OOKLA

NETSCOUT

ERICSSON

HUAWEI

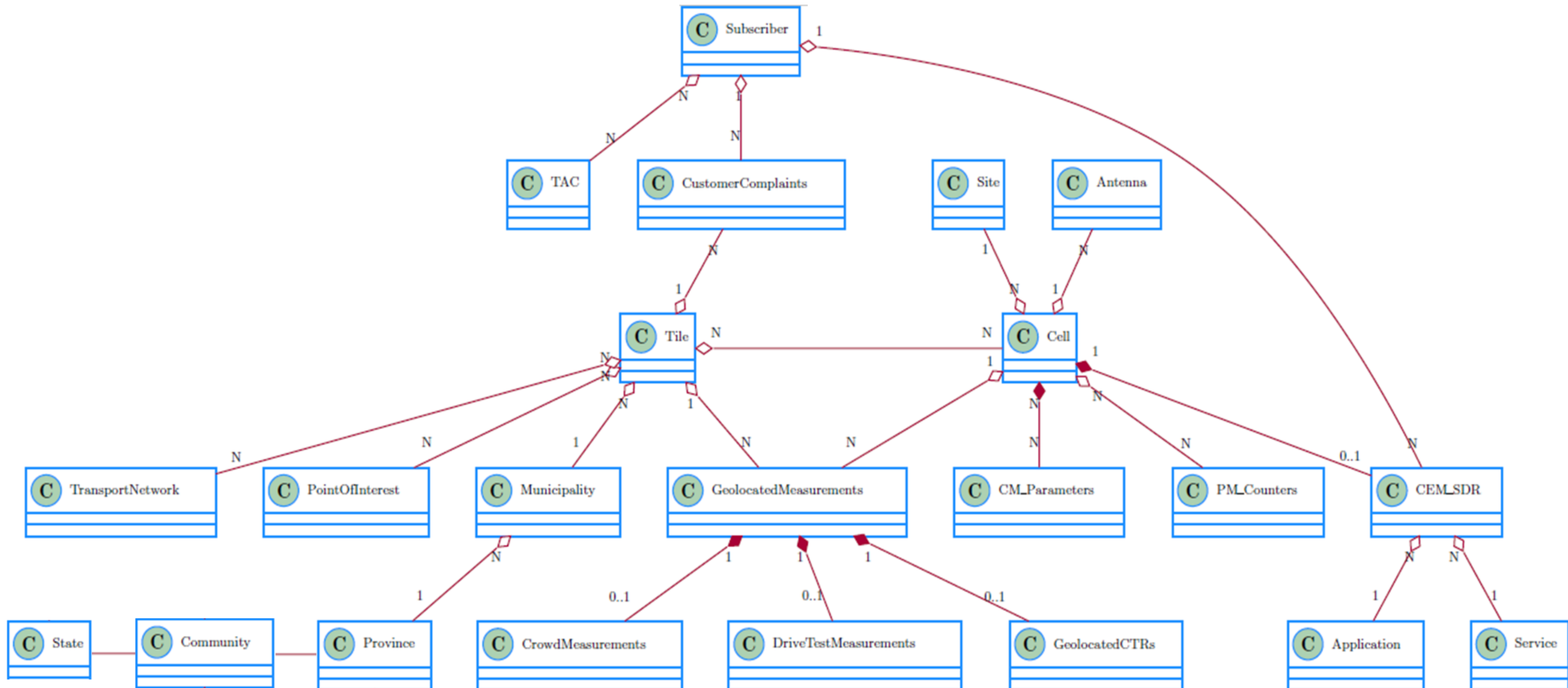
OpenStreetMap

Copernicus
Europe's eyes on Earth

**EUROPEAN
STATISTICAL
SYSTEM**

Advanced Data Model

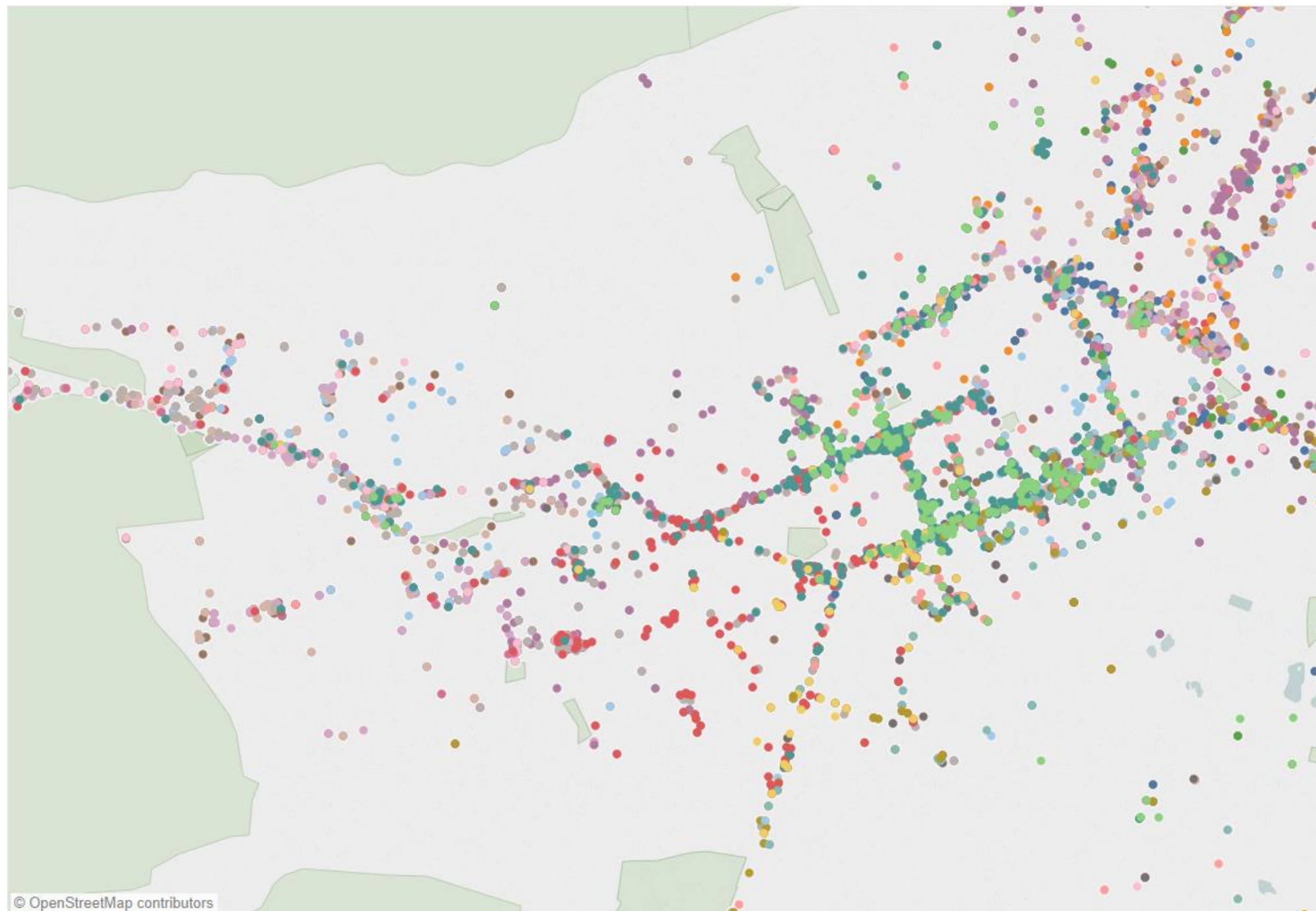
How raw data is processed to be reused by the algorithms?



Raster creation

Aggregating and simplifying data

Original Geolocated Data



i.e. 10.770 raw samples in the area

1. Data aggregation
per CGI



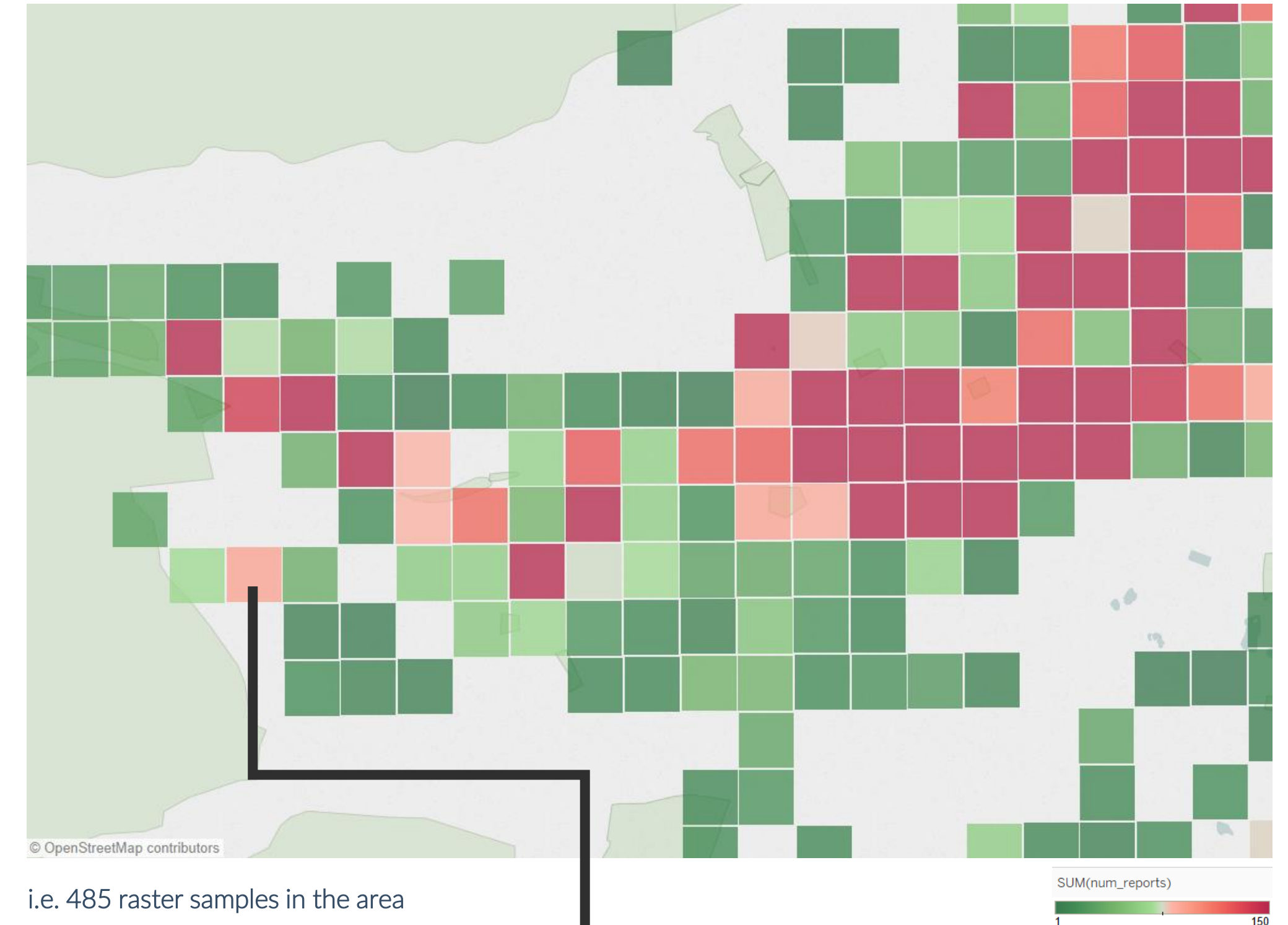
2. KPI calculation
(Avg., Median, %Tiles)



3. Clean-up for data
inconsistencies



ADELE® Data Raster



i.e. 485 raster samples in the area

Each tile contains: RF, tput, users,
capacity, indoor, PoI, population,
IMSI, roamers, etc.

Support Big Data Architectures

Multiple alternatives

ON-PREMISE

ADELE® solution is installed on operators' physical servers that are installed in the data center. The integration is done with both Cloudera and Hortonworks architectures based on Hadoop systems.

cloudera®



PRIVATE / PUBLIC CLOUD

ADELE® solution is installed on available cloud providers such as Google Cloud Platform (GCP), Microsoft Azure, Amazon Web Services or Cloud Foundry. The integration of the solution is done with proprietary tools of the cloud provider such as DataProc, BigQuery, etc.



Google Cloud Platform



CLOUDFOUNDRY





Use Cases

ADELE® Use Case catalogue

Family of Use Cases

Main Use Cases



NETWORK AUTOMATION

Network fine-tuning by using advanced automated algorithms



NETWORK INTELLIGENCE

Network analytics based on real customers' data to gain visibility of network performance



DATA MONETIZATION

Leverage operator's data to support the creation of new revenue streams and disruptive business models



OPEN PLATFORM

Create your own analysis based on Jupyter Notebooks and standard BI tools



Conclusions





DEEP TELECOM EXPERTISE DEVELOPED IN BIG DATA

ADELE® IS A FLEXIBLE PLATFORM
NATIVELY DEVELOPED IN BIG DATA



PROVEN TIER-1 TRACK RECORD

DEVELOPING TOGETHER THE PATH
TO MAXIMIZE THE VALUE OF THEIR
BIG DATA PLATFORMS



CROSS-DOMAIN DATA CORRELATION

MULTIPLE DATA SOURCES ARE
MASSIVELY CORRELATED TO
BRING ADDED-VALUE USE CASES



AUTOMATION & SCALABILITY

BOTH ROOT-CAUSE ANALYSIS AND
NETWORK TUNING ACTIONS ARE
AUTOMATICALLY PROVIDED



THANK YOU