

IoT driving the 5th Play

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Euskaltel Group

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Sensors operator: our IoT vision



Smart Home and Office



Smart Health

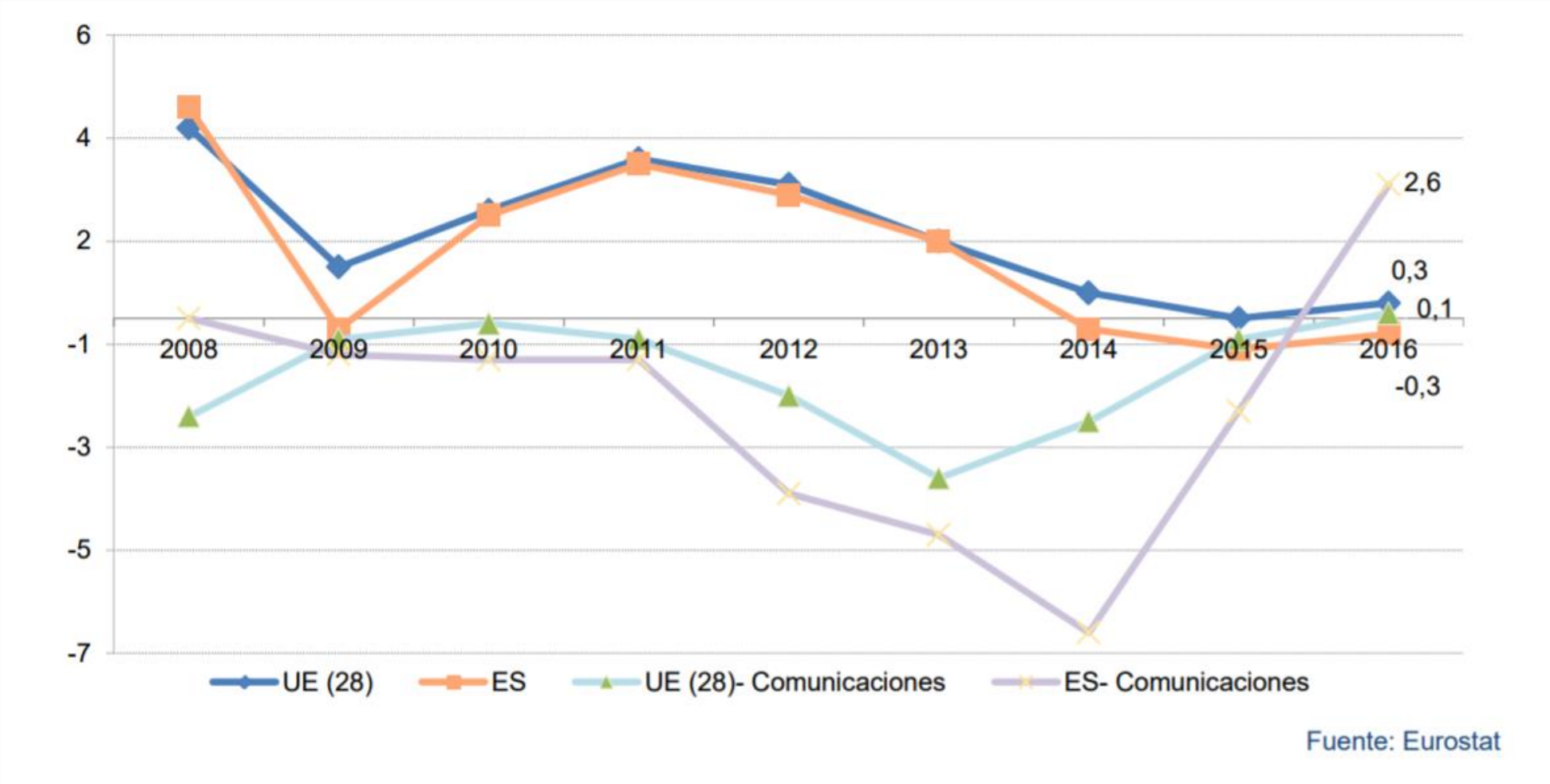


Smart Cities

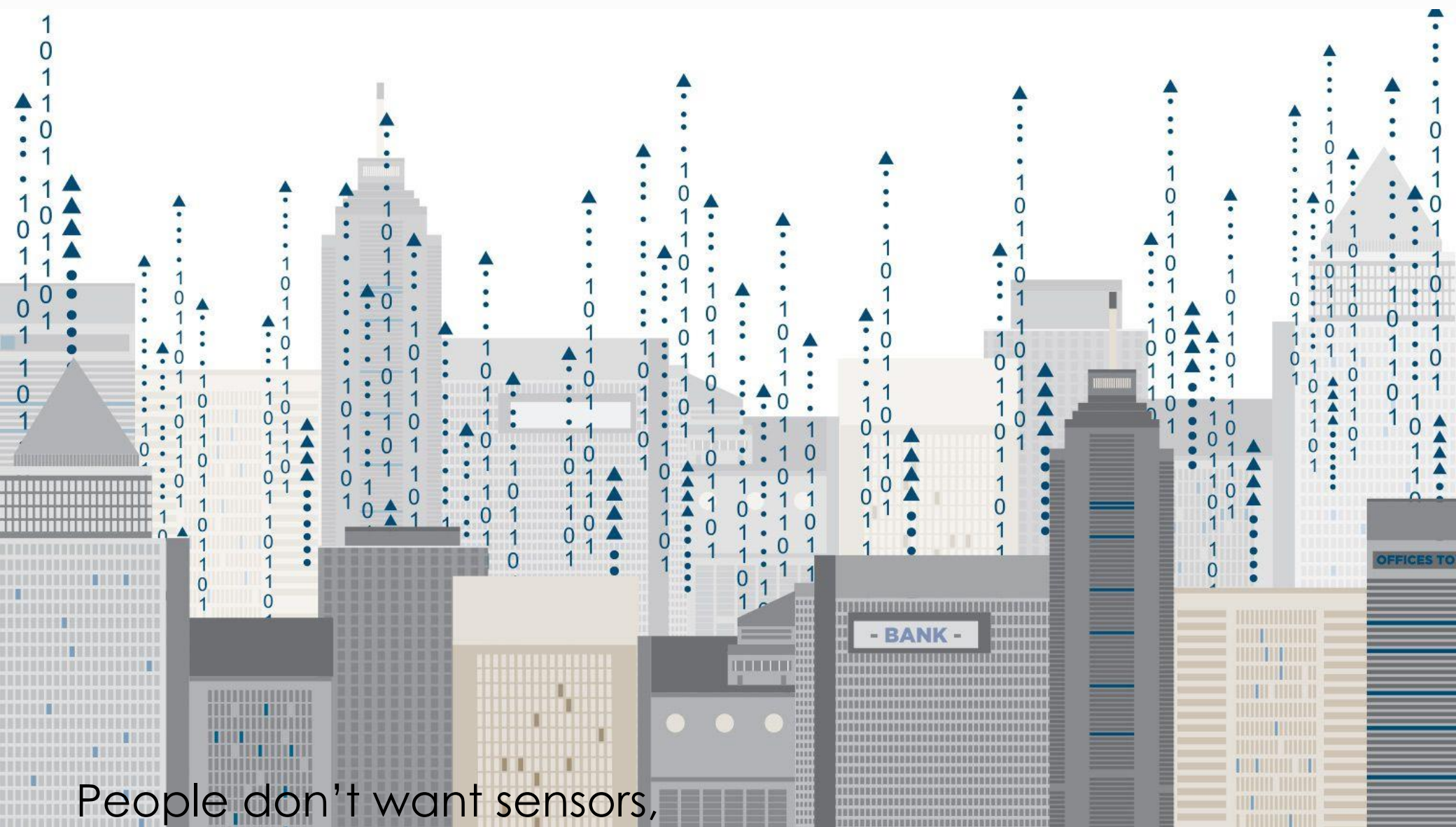


4.0 Industry

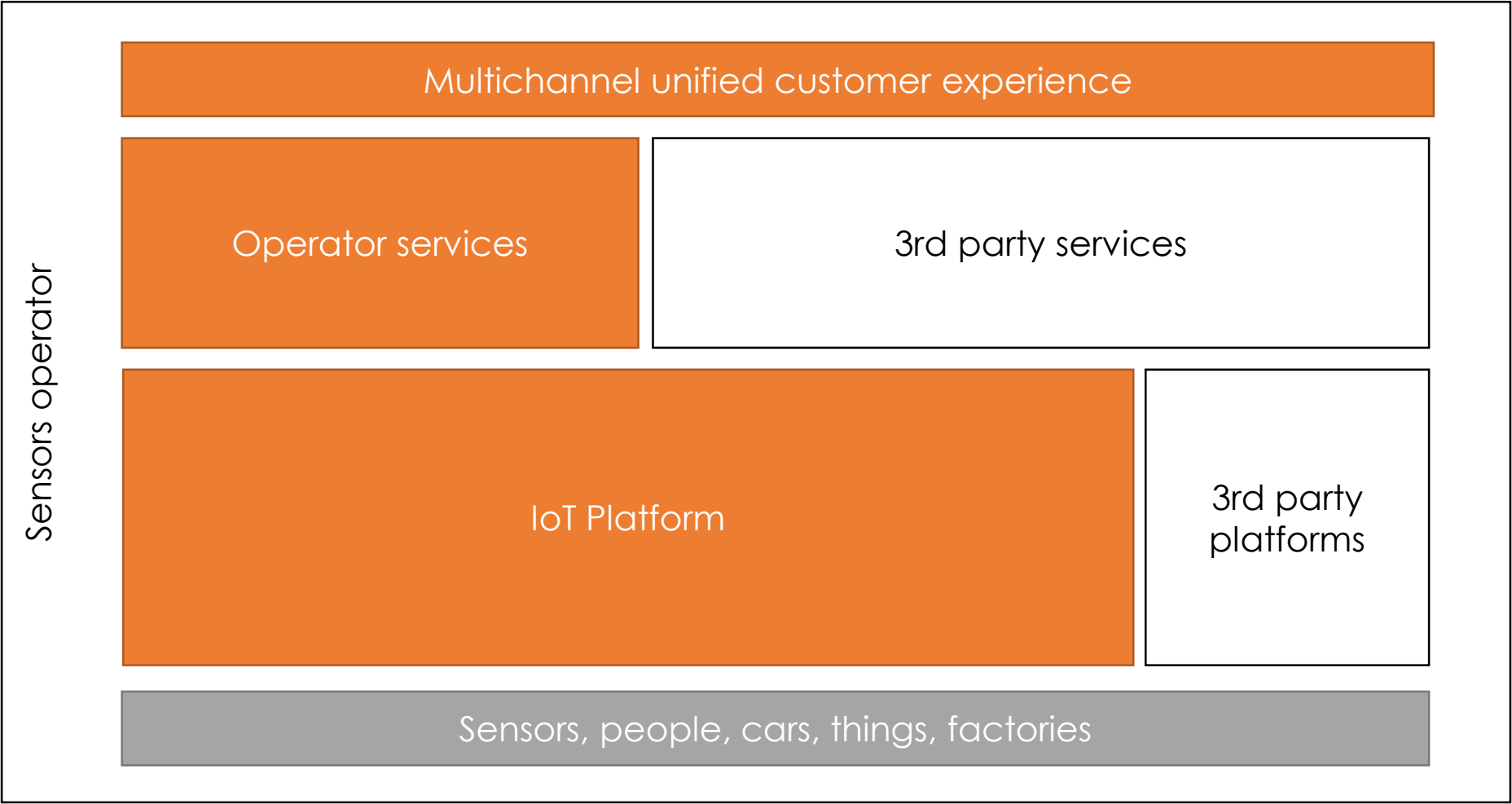








People don't want sensors,
people want the **information** they provide



Internet of Things Landscape 2018

APPLICATIONS (VERTICALS)

[illegible]

PLATFORMS (HORIZONTALS)

SOFTWARE		SECURITY	CONNECTIVITY	ANALYTICS	DEVELOPER	PAYMENTS & MONEY	INTERFACES	3D
FULL STACK 	MIDDLEWARE 				DEVELOPER DEVELOPMENT PLATFORMS OPEN SOURCE 	PAYMENTS & MONEY 	INTERFACES VIRTUAL REALITY AUGMENTED REALITY BRAIN / MACHINE INTERFACES & OTHER 	3D PRINTING / SCANNING CONTENT / DESIGN

BUILDING BLOCKS

HARDWARE		INFRASTRUCTURE		CONNECTIVITY		PARTNERS							
<p>PROCESSORS / CHIPS</p> <p>SENSORS</p>		<p>CLOUD</p> <p>EDGE COMPUTING</p> <p>EDGE X FOUNDRY</p>		<p>PROTOCOLS</p> <p>M2M</p>		<p>TELECOM</p> <p>WIFI</p>		<p>CONSULTANTS / SERVICES</p> <p>ALLIANCES</p>		<p>RETAIL</p> <p>MANUFACTURING</p>		<p>INCUBATORS</p> <p>FUNDING</p>	

BIG DATA LANDSCAPE 2017

INFRASTRUCTURE

HADOOP ON-PREMISE

cloudera Hortonworks
MAPR Pivotal
IBM InfoSphere
bluedata jethro

HADOOP IN THE CLOUD

amazon web services Microsoft Azure
Google Cloud Platform
IBM InfoSphere BigInsights
treasure data
duoble altiscale
CAZENA CenturyLink

STREAMING / IN-MEMORY

amazon web services databricks
confluent strim
GridGain METAMARKETS
DATATORRENT dataArtisans
ORACLE
hazelcast TERRACOTTA

NOSQL DATABASES

Google Cloud Platform
ORACLE
Microsoft Azure
mongoDB DATASTAX
KERO SPIKE Couchbase
redislabs influxdata

NEWSQL DATABASES

SAP Clustrix nuodb
Cockroach LABS
memeSQL splice
citusdata Triforce
doopdb paradig4

GRAPH DBS

neo4j
ORACLE
OrientDB
Objectivity

MPP DBS

TERADATA
VERTICA
Microsoft Azure
Microsoft Azure
Pivotal
snowflake
Infoworks

CLOUD EDW

amazon web services
Google Cloud Platform
Microsoft Azure
Pivotal
snowflake
Infoworks

DATA TRANSFORMATION

talend pentaho
alteryx TRIFACTA
tamr Paxata
StreamSets UNIFI

DATA INTEGRATION

informatica snaplogic
MuleSoft
segment
podium data
xplenty Import
Stitch

DATA GOVERNANCE

informatica
IBM
skyhigh
collibra
Alation Waterline

MGMT / MONITORING

amazon web services New Relic
APPDYNAMICS actifio
WAVEFRONT
splunk univention
Trocon Anodot
pagerduty Numerify

STORAGE

amazon web services
Google Cloud Platform
Microsoft Azure
ALLUXIO
nimblestorage
Dumilo COHO
parases

CLUSTER SERVICES

amazon web services
Google Cloud Platform
Microsoft Azure
ALLUXIO
nimblestorage
Dumilo COHO
parases

APP DEV

lightbend
rainforest
CRSK

CROWDSOURCING

amazon web services
upwork
WorkFusion
CrowdFlower

HARDWARE

Google GPU ARM
nervana
MYTHIC
NVIDIA
Movidius SCORTEX

ANALYTICS

DATA ANALYST PLATFORMS

Microsoft pentaho alteryx
Digital Reasoning guavvus AYASDI
MATTIVO Datameer Quid
ClearStory OrigamiLogic interana
Bottlenose ARIMO ENDOR MODE

DATA SCIENCE PLATFORMS

IBM KNIME data iku
DOMINO yhat rapidminer
CONTINUUM ANALYTICS
Alpine
Angoss

BI PLATFORMS

Microsoft
amazon web services
Google Cloud Platform
looker Wave Analytics
ARCADIA DATA
GoodData

VISUALIZATION

tableau SAP
Google Cloud Platform
Qlik CELONIS
Periscope ZEPL
CHARTIO plotly

VERTICAL ANALYTICS

PREDIX
Giot CAPE
UPTAKE
Debut Insight
TACHYUS
Alluvium
Biorama

STATISTICAL COMPUTING

SAS
SPSS
MATLAB

DATA SERVICES

Palantir
CONSCIENCE OPERA
DATA SCIENCE
kaggle
EXL
DataKind
FF

MACHINE LEARNING

Alteryx
Google Cloud Platform
H2O
DataRobot
context relevant
VIZENSE
bonsai DATASTAX
deepinsight Ionian

HORIZONTAL AI

IBM Watson Cortana
Face++ 可视 sentiment
Voyager
Affective
Voronomic
nara
OSARO
PETUUM
CURIOUS AI
BLUE VISION

SPEECH & NLP

Google Cloud Platform
NarrativeScience
semantic machines
Mindfield ARRIA
Talkio
snips
Gradescope
Soundhound Inc.

SEARCH

elastic
ORACLE
EXALEAD
ThoughtSpot
Lucidworks
swiftype MAANA
alphasense
Searchlink SINEQUA

LOG ANALYTICS

splunk
sumologic
loggly
kibana
logzio

SOCIAL ANALYTICS

Hootsuite
sprinklr
NETBASE
DATA SIFT
synthesio
simplereach
bitly predata

WEB / MOBILE / COMMERCE ANALYTICS

Google Analytics
mixpanel
sumall
retention
SIGOPT
grify
custora

APPLICATIONS - ENTERPRISE

SALES

einstein CHORUS
INSIDESALES.COM
conversica
clarif AVISO TACT
fuse machines TROOPS

MARKETING - B2B

RADIUS App Annie
EVERSTRING Lattice
infer HINTIGO
sense tubular Reflection
DataFox JENAGIO

MARKETING - B2C

bloomreach
blueyonder PERSADO
kahuna ACTIONIQ
SAILTHRU BLUECORE
mparticle Ampero

CUSTOMER SERVICE

MEDALLIA
CLARABRIDGE
CLICKFOX
DigitalGenius
AUTOMAT
msgl INTERCOM

HUMAN CAPITAL

HireVue entelo
hiIQ GIGSTER
RESTLESS HANDED
Wade & Wendy
Cluster Stella
pymetrics

LEGAL

RAVEL Seal
Everlaw
JUDICIAL
Brevia
R&SS
casetext

FINANCE

anaplan
Zuora
bidmark
TRADESHIFT
TRADESHIFT

ENTERPRISE PRODUCTIVITY

slack
facebook
ORACLE
lumata diffbot
Clara talla
butter KASIST

BACK OFFICE AUTOMATION

HyperScience
Captricity
AppZen

SECURITY

TANUUM
CYLANCE
illumo
CODE 42
DataPath
DARKTRACE
Thecal Metrix
Guardian Analytics
cyberSense
ANOMALI
sift science
BlueTalon
Recorded Future
feedzai
SOCURE
FORTISCALE
Kaggle
sparkognition

APPLICATIONS - INDUSTRY

ADVERTISING

AppNexus
critico
rocketfuel
theTradeDesk
drawbridge
TAPAD
Oppler

EDUCATION

KNOWTON
Clever
Declara
kidaptive
PANORAMA
knowit
gradescope

GOVERNMENT

Socrata
OPENGOV
mark43
FEN
OpenDataSoft

FINANCE - LENDING

OnDeck
affirm
Kreditech
INSIKT
TALA
TrueAccord
cignifi
aire

FINANCE - INVESTING

Quantmin
KENSIC
Quantopian
NUMERAL
ISENTUM
claritymoney
ALGORIX ADVIA
RavenPack

REAL ESTATE

Opendoor
VTS
CREDDIO
reonomy
COMPSTAK

INSURANCE

Metromile
Lemonade
CYENCE
Shift Technology
Tractable

HEALTHCARE

FLATIRON
HealthTap
Gingerio
Glow
COTA
AICure
imago
Kary Health
Treena

LIFE SCIENCES

23andMe
color
zymergen
BenevolentAI
ZEPHYR
Citire
twoAR
Atomwise

TRANSPORTATION

UBER
TESLA
CLEARPATH
drive.ai
nautobot
pilot.ai
TIMUS
nexar
comm.ai
netrodyne

AGRICULTURE

FARMERS
FarmersEdge
BLUEGRIVER
mavrx
terrotron
prospero

COMMERCE

instacart
STITCH FIX
RetailNext
HowGood

OTHER

eHarmony
stem
rithem
robotics
BIOBEVER
collect
VERIDIGES
duetto
Unbabel
Second Spectrum

CROSS-INFRASTRUCTURE/ANALYTICS

amazon web services Google Cloud Platform Microsoft IBM SAP Hewlett Packard Enterprise SAS DATA VMWARE TIBCO TERADATA ORACLE NetApp

OPEN SOURCE

FRAMEWORK

hadoop HUE
YARN TEZ
Flink MESOS
Spark CDAP

QUERY / DATA FLOW

Spark SQL presto
SLAMDATA
Google Cloud Dataflow

DATA ACCESS

nifi mongoDB
cassandra
CouchDB
HBASE
Spanner
accumulo

COORDINATION

talend
Apache Zookeeper
Apache Ambari

STREAMING

Spark
Flink
kafka
druid
STORM

STAT TOOLS

python
ScalaLab
Nussey
SciPy

AI / MACHINE LEARNING / DEEP LEARNING

theano
Caffe
TensorFlow
Apache SINGA
OpenAI
neon
FeatureFu
DSSTNE
mlilb

SEARCH

elasticsearch
Solr

LOG ANALYSIS

elasticsearch
kibana
logstash

VISUALIZATION

BEAKER
Rodeo

COLLABORATION

jupyter
Zeppelin
ANACONDA

SECURITY

Apache Ranger
KNOX
Sentry

DATA SOURCES & APIS

HEALTH

JAWBONE
VALIDIC
practicefusion
fitbit GARMIN
Human API kinsa

IOT

GE Digital
UPTAKE ThingWorx
helium
samsara
Autify

FINANCIAL & ECONOMIC DATA

Bloomberg THOMSON REUTERS
DOW JONES
S&P CAPITAL IQ
CB INSIGHTS
xignite
quandl
YODLEE
PREMISE
estimote
Eagle Alpha
StockTwits
PLAID
mattermark

AIR / SPACE / SEA

PLANET
Airware
spire
SKYCATCH
AIROBOTICS
UNDERSTORY
WINDWARD
DroneDeploy
Mapbox

PEOPLE / ENTITIES

acxiom
Experian
EPSILON
InsideView
Crimson Hexagon
BASIS
SAFE GRAPH

LOCATION INTELLIGENCE

FOURSQUARE
Sense360
esri
CARTO
Mapillary
STREETLINE

OTHER

qualtrics
DATA.GOV
data.world
panjiva
enigma

DATA RESOURCES

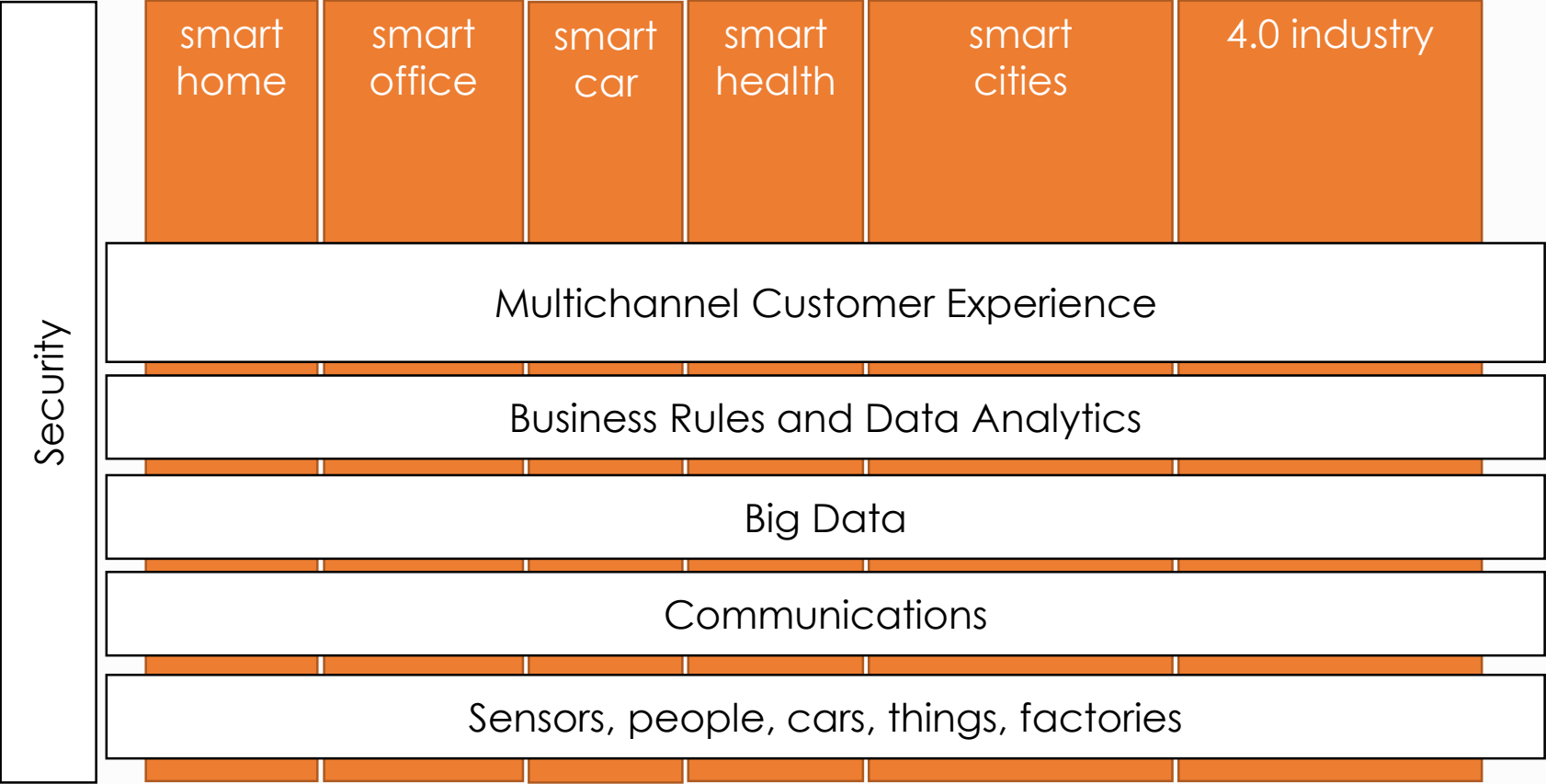
INCUBATORS & SCHOOLS

PLURALSIGHT
DataCamp
DataElite
INSIGHT
The Data Incubator
METIS

RESEARCH

facebook research
OpenAI
MIRI
CSAIL
ALLEN INSTITUTE
ARTIFICIAL INTELLIGENCE

**KEEP
CALM
AND
BE
AGNOSTIC**



Smart Home (and Office)

Our **product proposition**

Are you worried about **who enter in your home/office?**

Do you want to know **where the people** you
care about / employees **are?**

Do you want to **manage your home /office from an app?**

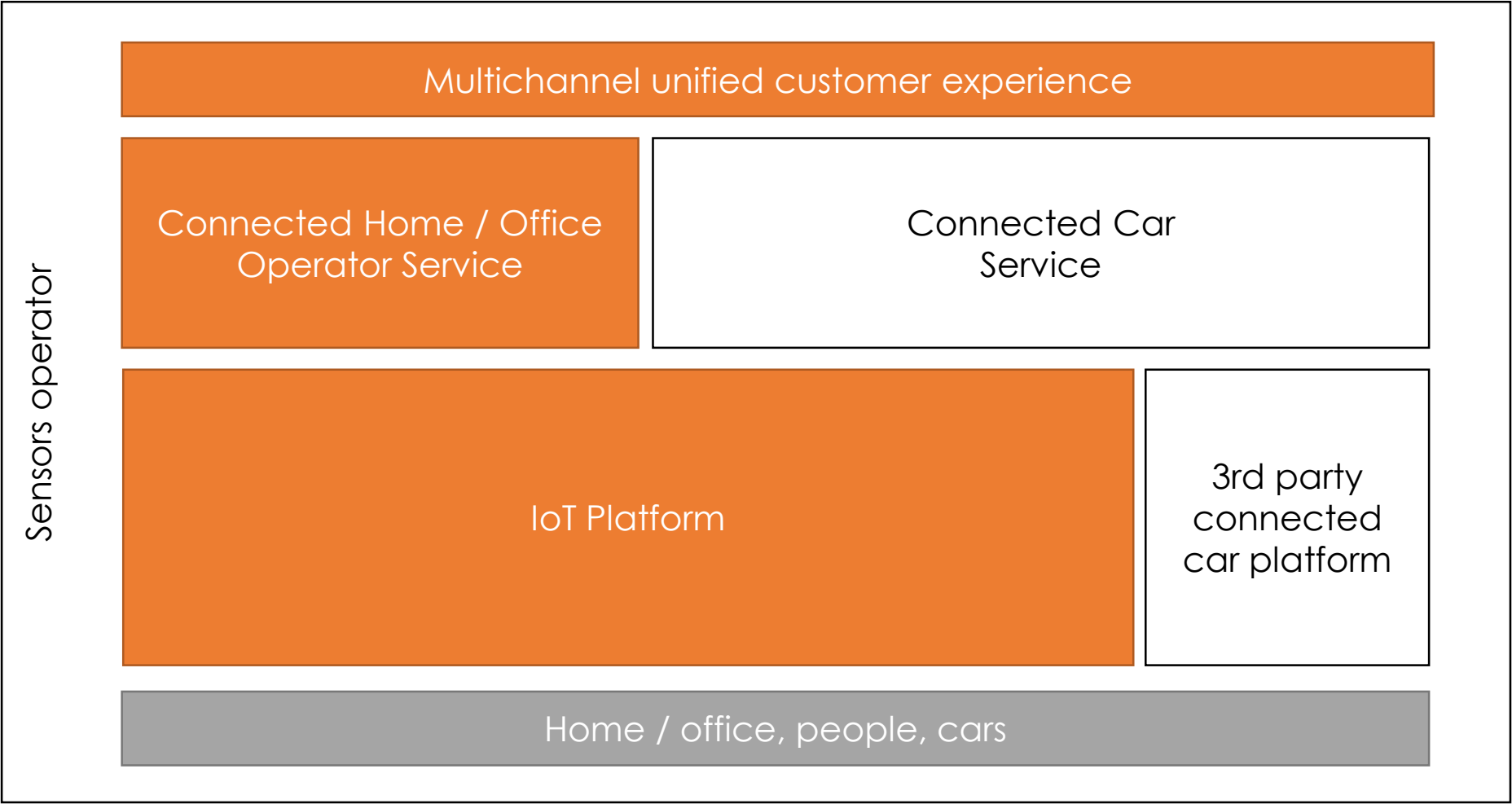
Do you care about **flood and fire** at home/ office?

Do you want to **switch off things** and **save money?**

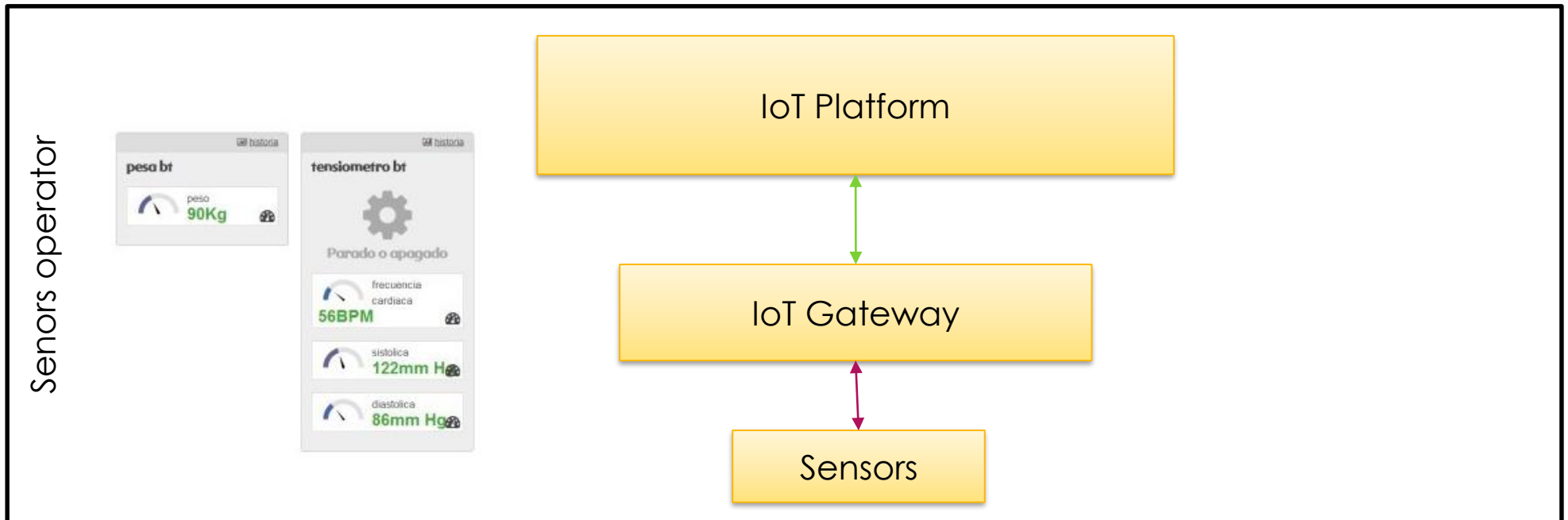
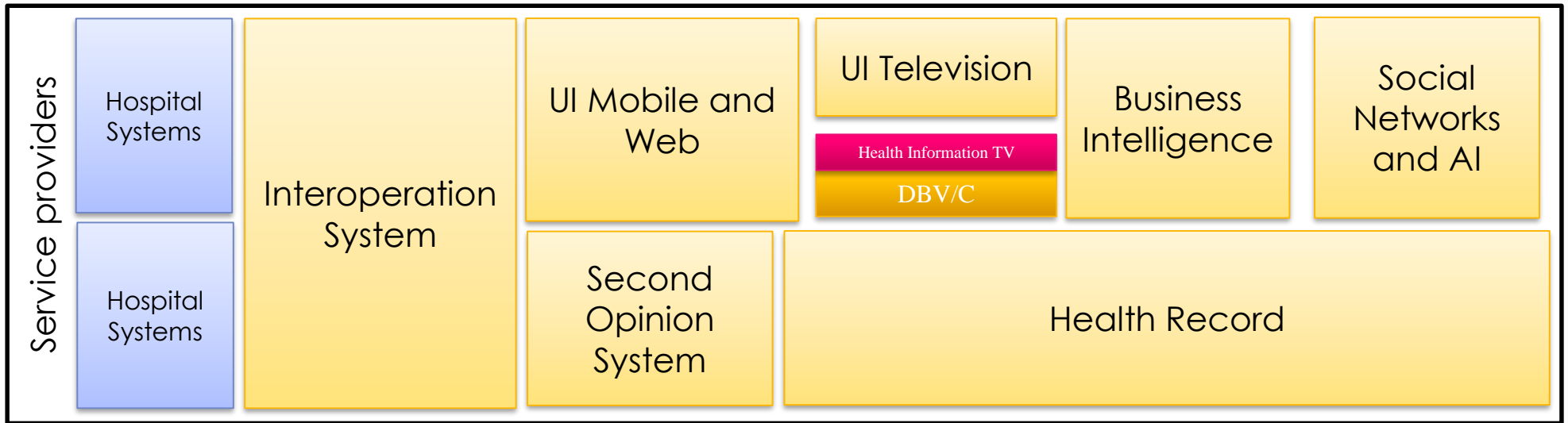
3ellos R



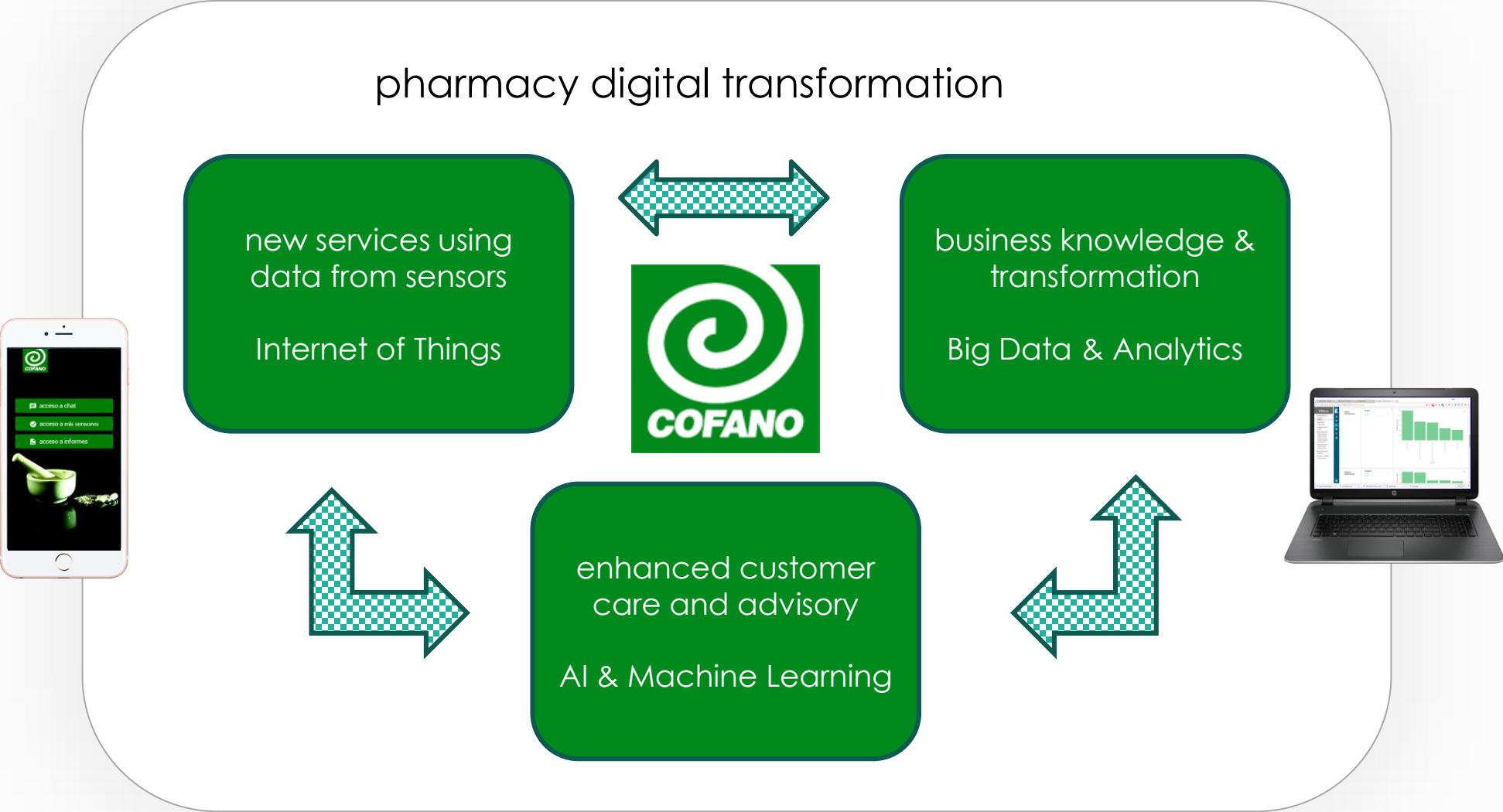
Launched may 2017

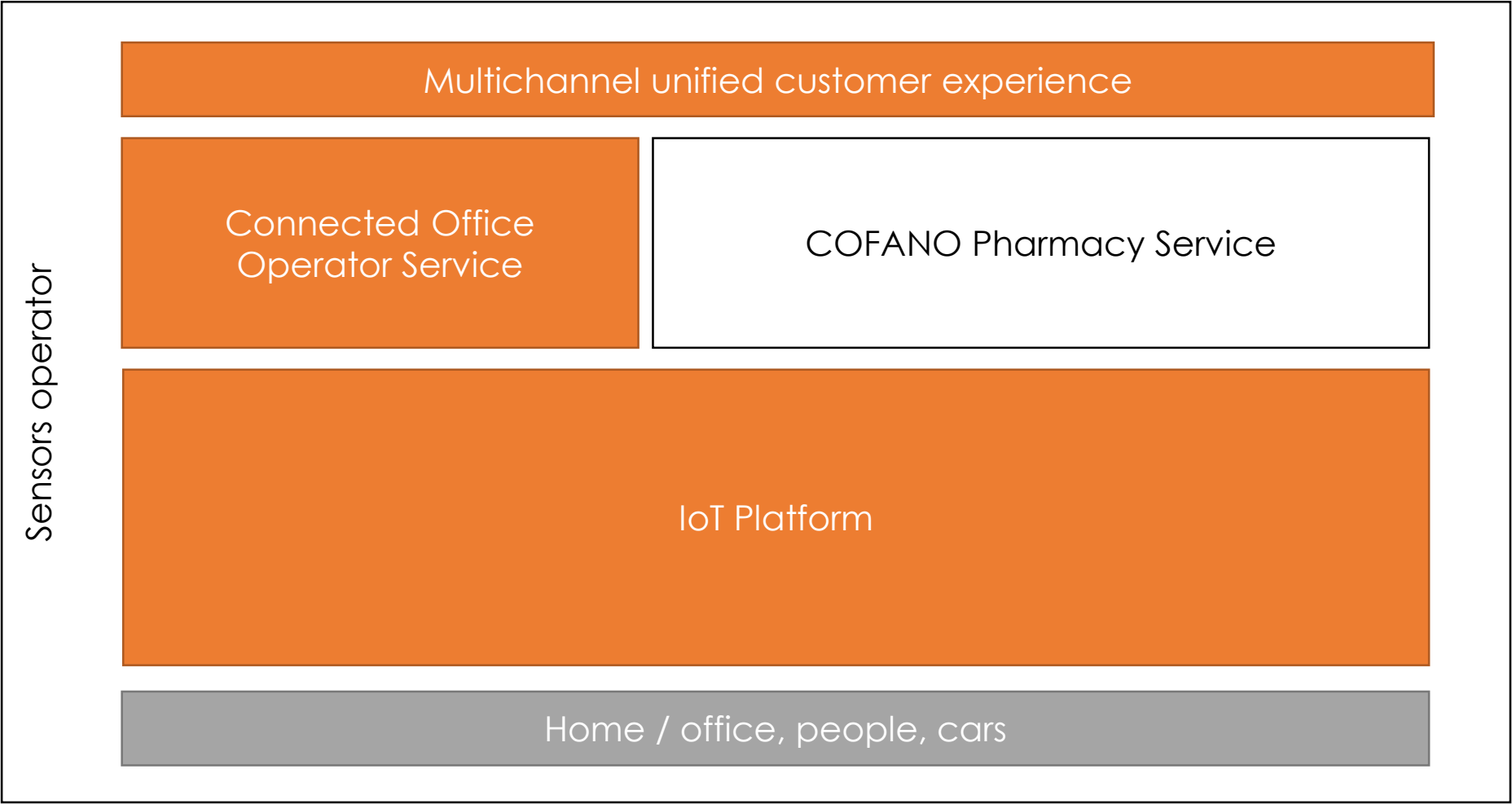


Smart Health

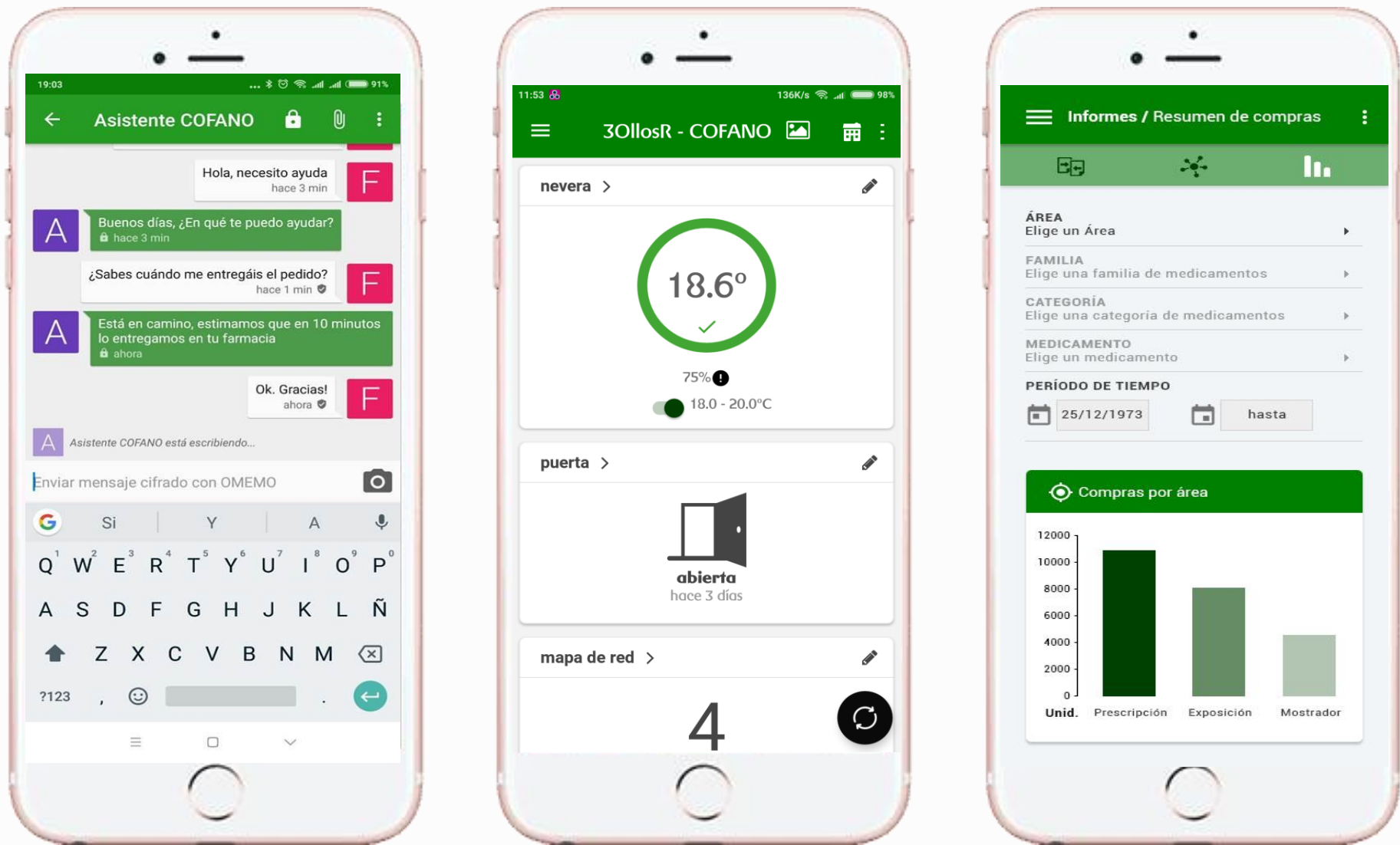


Product and value proposition – example **COFANO**





Product and value proposition – COFANO

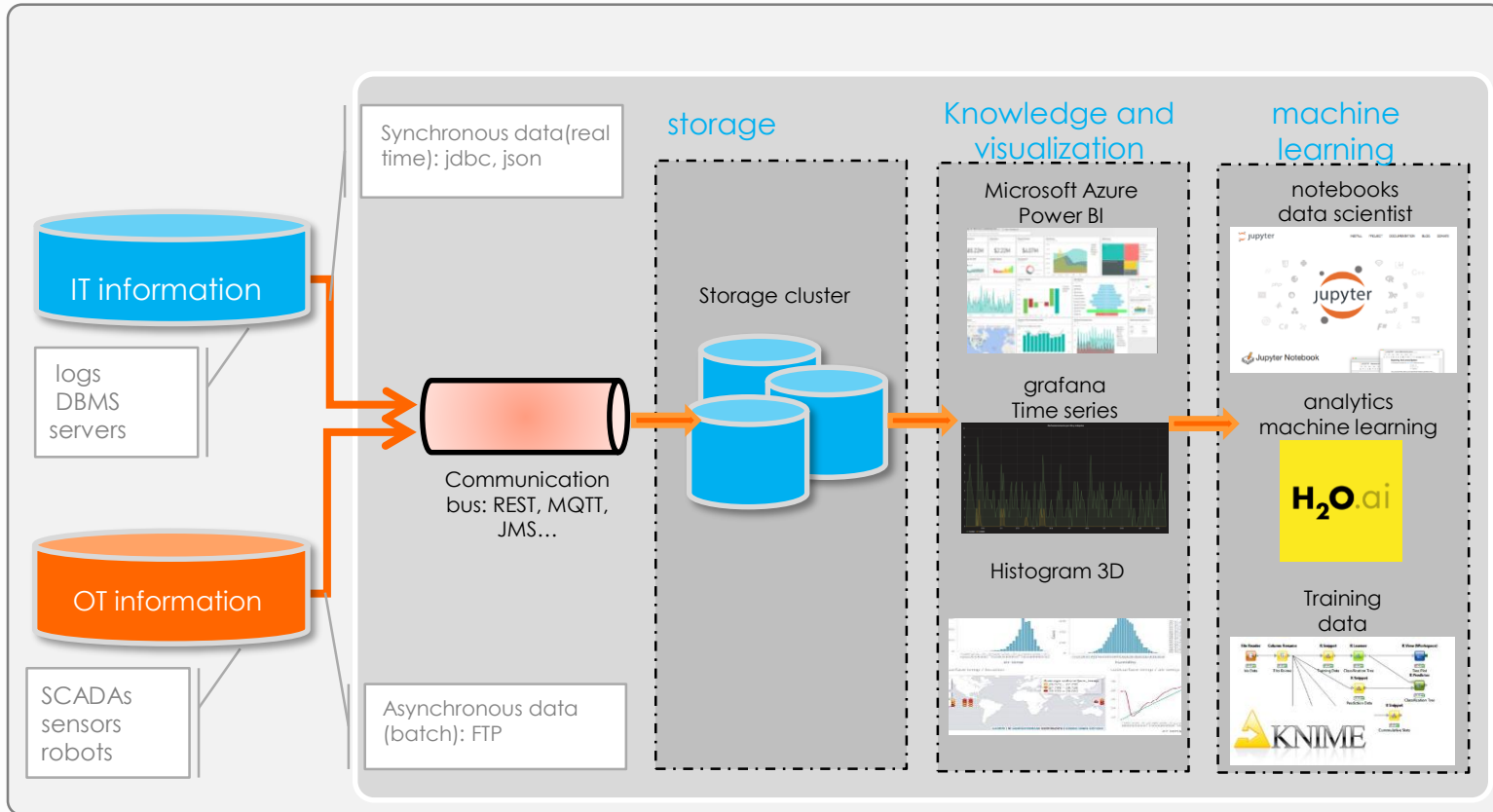


Smart Cities



4.0 Industry





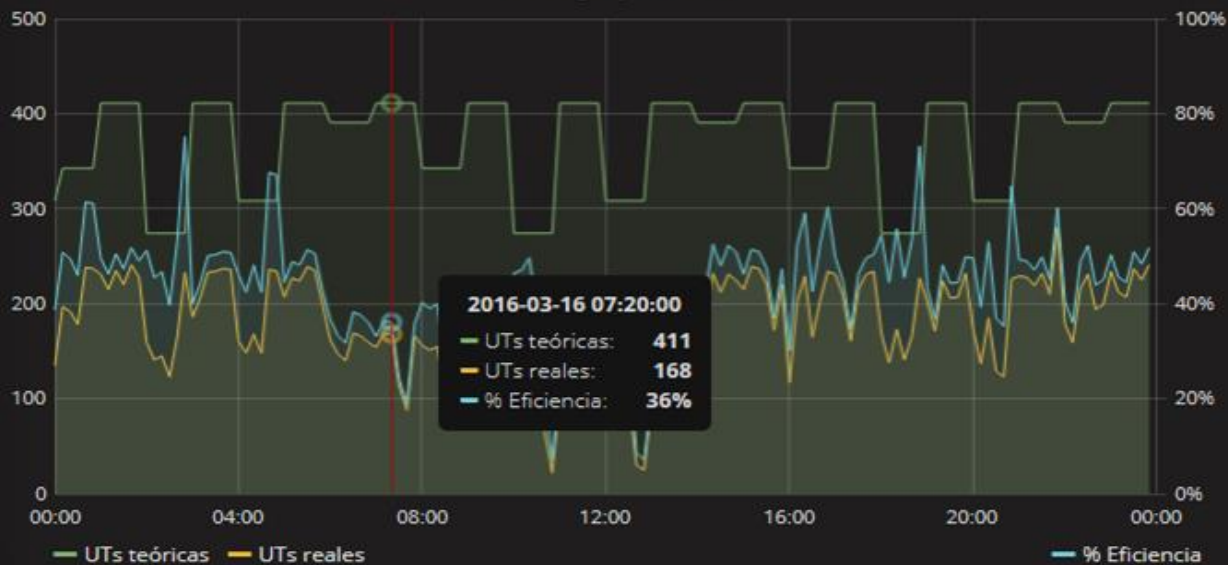
Centro de trabajo

All ▾

Ventana tiempo

10m ▾

UTs Agrupadas All



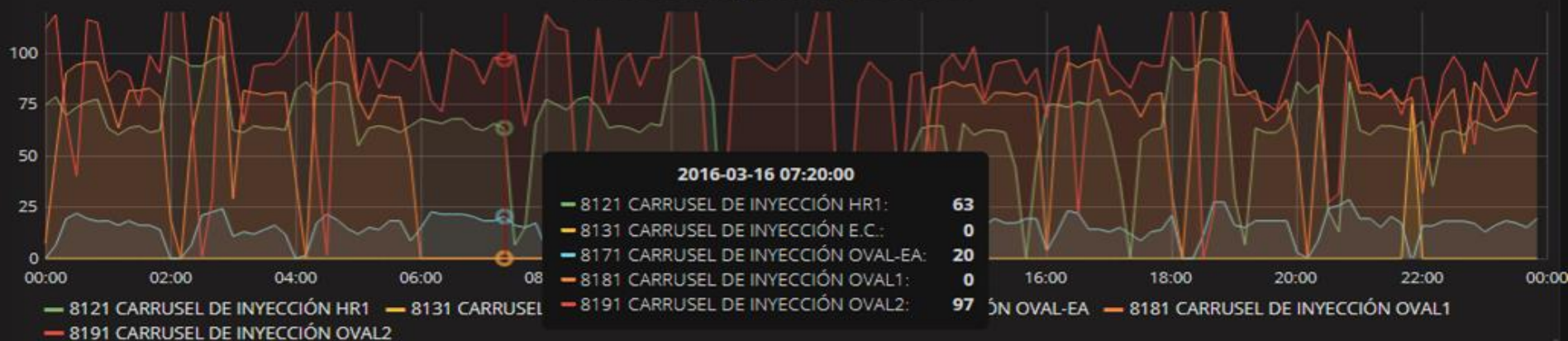
% Eficiencia Agrupada Hora

Time ▴

% Eficiencia

2016-03-16 00:00:00	51.47
2016-03-16 01:00:00	49.09
2016-03-16 02:00:00	51.92
2016-03-16 03:00:00	47.73
2016-03-16 04:00:00	52.32
2016-03-16 05:00:00	47.69
2016-03-16 06:00:00	35.57
2016-03-16 07:00:00	30.74
2016-03-16 08:00:00	36.12

% Eficiencia desglosada por centro: All



IoT is the operator
fifth-play

Telco services + Smart Home = Quintuple Play



Connected TV Services - Orange - @mobydub01

It's not technology,
it's **ecosystem**

We should **be ready**
to play in the new
battle field







Euskaltel **Group**

Thanks