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Internet of Things

Internet of Things will be the next revolution of the Internet. It will gather, analyze, and distribute data turning it into information and knowledge, creating a 7 trillion dollar business.

500M devices

12.5 Bn Smartphones & tablet PCs

25 Bn Smart objects

2003

2010

2015

6.3 Bn people

6.8 Bn people

7.3 Bn people

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From traditional M2M to Low Power IoT

Traditional M2M (Sim-based)

Internet of Things

Issues:
- Higher priced module
- Limited battery life

Issues:
- Limited battery
- Insufficient cell coverage
- Unmanaged LANs

Pros:
- High range
- Hign indoor penetration
- Low module cost

Low Power IoT Market Projections

Utilities
553M

Smart Building
780M

Smart City
270M

Consumer market
390M

+ Agriculture, logistics, ...

Source: Analysys Mason 2014   Summary of forecast of consumer connections 2023

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Key Success Factors

Open specification for IoT networking

Large eco-system of device enablers

Online marketplace for applications and services

Standards-based application development APIs

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Low Power IoT Alliance

The ThingPark Wireless LoRaWAN Eco-system

The full ThingPark IoT Framework

ThingPark Wireless

Connectivity for the Internet of Things with LPWA Networks

LoRaWAN core network infrastructure including network controllers (LRC servers) and multiple hardware options for base stations

ThingPark Cloud

Accelerating IoT application development on open APIs

Open data cloud services with standard based REST API. LoRaWAN to ETSI M2M/OneM2M interworking
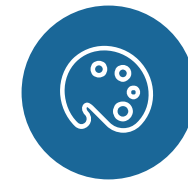
ThingPark Store

Online marketplace engine

Open data cloud services with standard based REST API. LoRaWAN to ETSI M2M/OneM2M interworking

Actility helps service providers all the way from connectivity to online distribution of their IoT offers

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Key vertical Markets – Smart City

ThingPark Wireless Network

Sensors for Oty Bus Serv

Smart Home Sensors

Street Lighting Sensors

One single standards-based network for all smart city apps

Longer sensor battery life and range

Unified city management apps

City councils require one single standards based network to support Smart parking, Street lighting, traffic and waste management
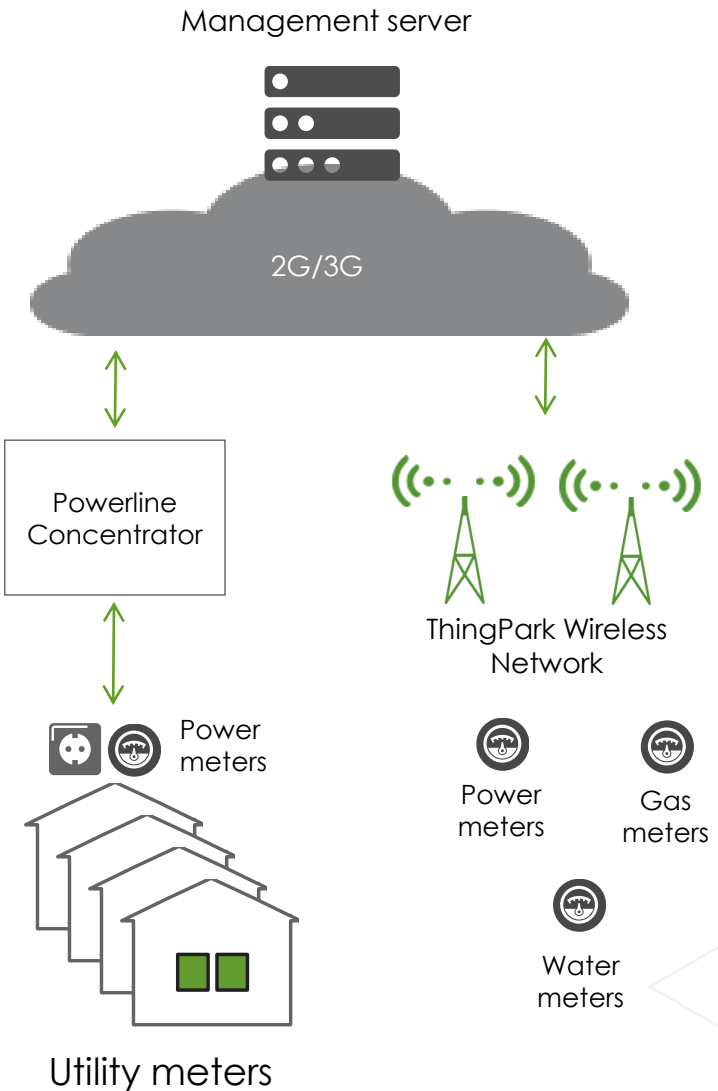
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Smart Metering

Supporting multiple utility metering with one network

Low latency network for bidirectional communications

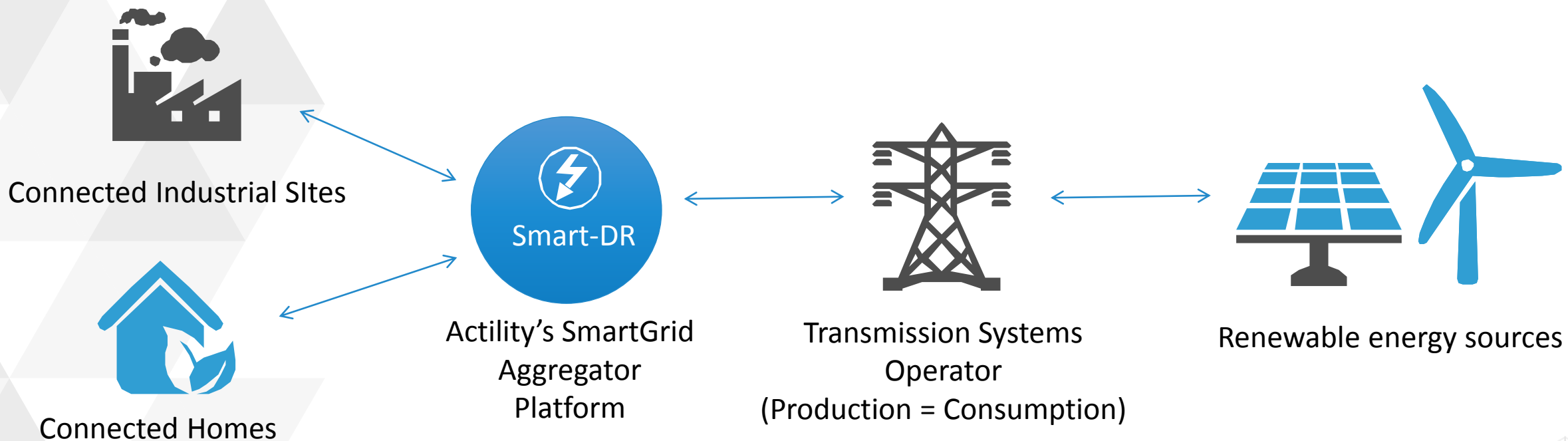Supporting new innovative pricing models

Management server

2G/3G

Powerline Concentrator

ThingPark Wireless Network

Power meters

Power meters

Gas meters

Water meters

Utility meters

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Energy Market will benefit from IoT

Actility's SmartGrid Platforms

TSO

ThingPark Wireless

SmartGrid Platform

Actility's SmartGrid platforms receive large scale demand response requests from TSOs and energy management requests from end-user apps to control household appliances

Smart Thermostat

Connected thermostat helps regulate household power consumption by providing user behavior patterns to Actility Platform

Connected Smart Meters

Connected Smart Meters provide real-time consumption data and allow Utilities to provide innovative pricing

EV Charging

EV Connects to local smart charging station connected to the Grid and to remote charging platform via LPWA netwprk

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Actility is a Pioneer in SmartGrid

Connected Industrial SItes

Connected Homes

Smart-DR

Actility's SmartGrid Aggregator Platform

Transmission Systems Operator (Production = Consumption)

Renewable energy sources

Actility is an Automated Demand Response operator in France and Belgium

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Today Actility is a key automated Demand Response player

Helping large industrial clients leverage their flexibility in France, Belgium and UK

What is Demand Response?

Demand Response(DR) involves a business voluntarily curtailing or reducing electrical consumption in response to a grid emergency, environmental need, price signal, or a financial incentive paid by the business electricity provider.

When an event occurs, customers are notified by the utility and typically respond by shedding or shifting load.

Early adopter IoT Actility roll-outs
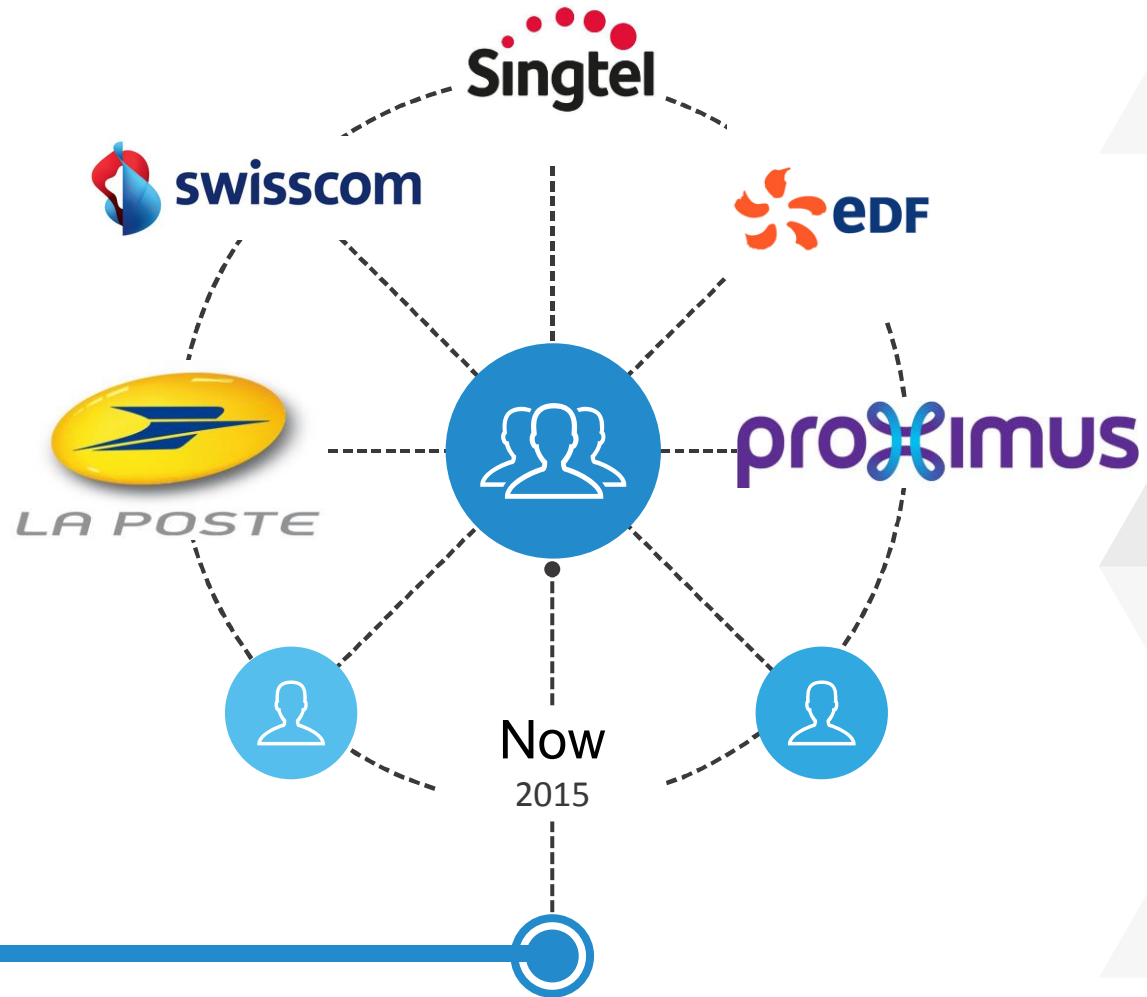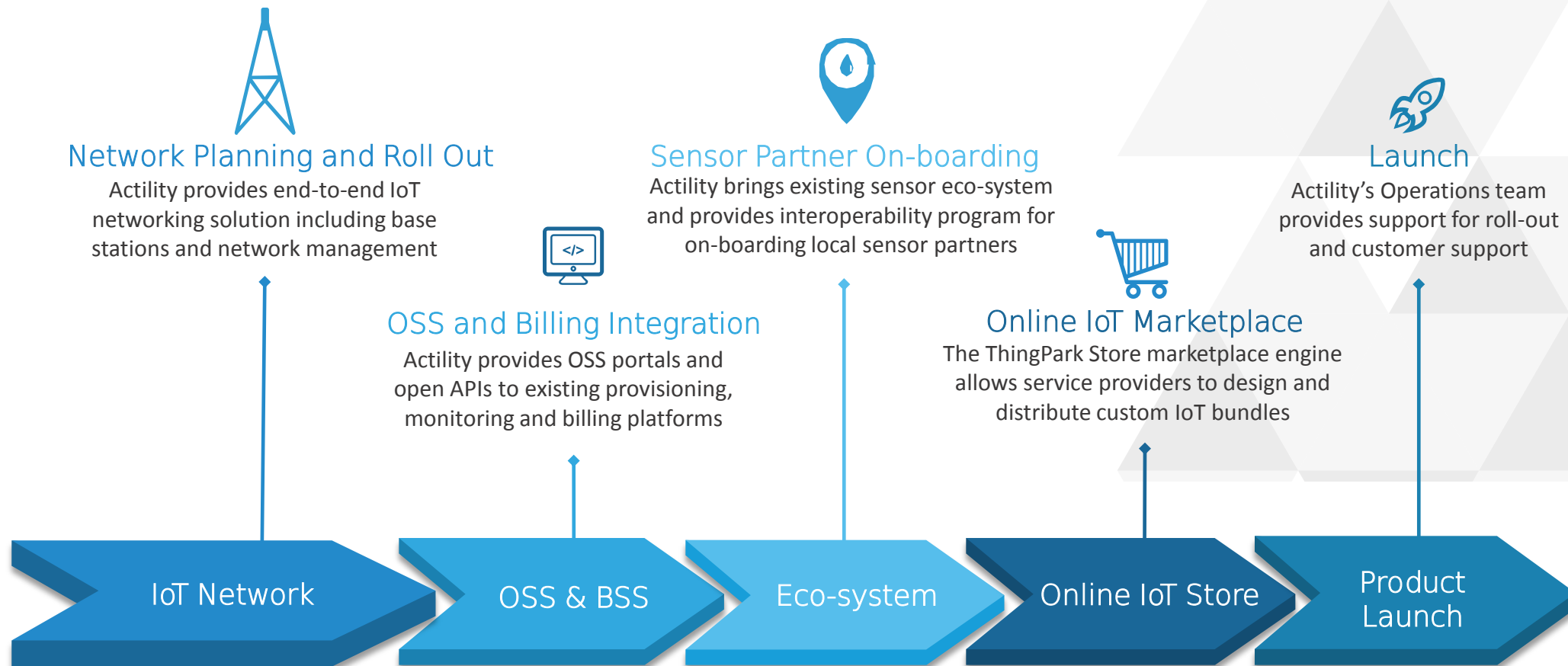
« We foresee a significant increase in demand for Low Power Wide Area Network based solutions in the market. We feel that Actility serves as an important ecosystem and technology partner as we explore new opportunities to meet the diverse and emerging needs of our customers ».

Gerhard Schedler, Head of M2M

Jumpstart your IoT roll-out

Network Planning and Roll Out
Actility provides end-to-end IoT networking solution including base stations and network management

OSS and Billing Integration
Actility provides OSS portals and open APIs to existing provisioning, monitoring and billing platforms

Sensor Partner On-boarding
Actility brings existing sensor eco-system and provides interoperability program for on-boarding local sensor partners

Online IoT Marketplace
The ThingPark Store marketplace engine allows service providers to design and distribute custom IoT bundles

Launch
Actility's Operations team provides support for roll-out and customer support

| IoT Network | OSS & BSS | Eco-system | Online IoT Store | Product Launch |

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Thank you