

# Nexign IoT Platform

**Nexign IoT Platform** (Internet of Things Platform) is a standardised collection of technologies and capabilities that enables and accelerates business creation and live improvements, allowing customers to enhance and manage their business requirements. Fundamentally, Nexign IoT Platform is about business transformation, leading customers to a hyper- connected, insight-driven, agile world and helping them to create new value.

Nexign IoT Platform includes two products: Connectivity Management Platform (CMP) and Application Enablement Platform (AEP).

**Connectivity Management Platform** is an end-to-end platform that provides customers with a complete set of tools to efficiently control and manage their connected IoT devices. In-built analytics reduce maintenance costs and offer new ways of monetising low-margin IoT subscribers. Customers can monitor distributed devices in real time, manage devices at both the BSS and infrastructure levels and diagnose any problems that may occur when IoT devices are connected to the network.

**Application Enablement Platform** is designed to interconnect applications distributed on physical devices and in the cloud to enable efficient implementation of various industrial and consumer scenarios. AEP helps business players to build ecosystems that encompass the wide range of applications embedded in smart devices in conjunction with cloud-based applications for monitoring, analysis or automation. AEP offers maximum flexibility in connecting different types of devices, as well as in the implementation of domain-specific data models and analytical services.

### IoT data model integration

Nexign IoT provides a dynamic software model of a physical thing that relies on device data to manage processes that correspond to devices, respond to changes, and improve operations.

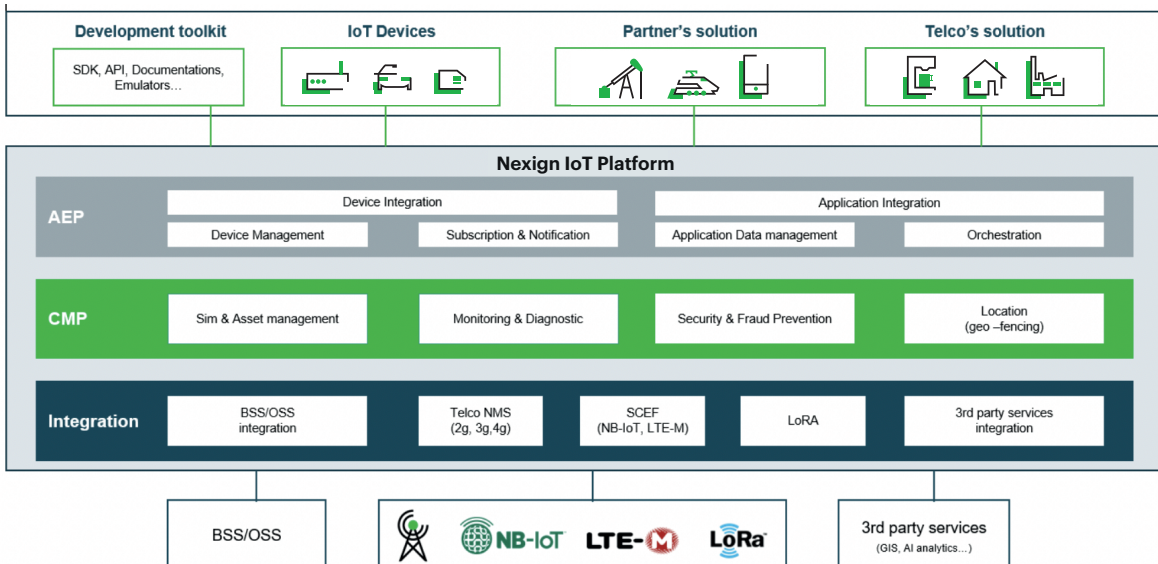
Nexign IoT Platform can be used to optimise business processes in the following ways:

- Predict equipment failure
- Plan service processes

These virtual models primarily aim to support day-to-day decisions about the physical world, facilitating digital transformation with additional enabling of:

- Digital twins
- Predictive analytics, artificial intelligence
- Cloud technologies, security, high availability

### Nexign IoT Platform architecture



## Features

- Handles the main data transmission protocols to support off-the-shelf integration of most IoT devices that connect to the internet and can transmit data via HTTP, MQTT, LWM2M, AMQP, XMPP, DDS, or WebSocket
- Application integration on the IoT Platform is aimed at enabling data exchange between IoT applications regardless of the equipment on which the applications are executed
- Ability to load, install, remove and upgrade the system and application software and features on devices, change device settings, measure device performance and detect faults
- Response for data collection, conversion and aggregation; application data integration in accordance with customer-defined data models; big data preparation and analytics
- Effective SIM and asset management; suitable graphical interface for working with thousands of devices and convenient group operations
- Ability to provide multi-aspect connection status diagnostics or check activity in real time
- Enables security and fraud prevention: preventing unauthorised access to connected devices and data is a critical issue for every IoT business
- Enables asset location tracking: viewing current and predefined device locations on the map in real time allows IoT device capabilities to be expanded without GPS

## Key benefits

### Capture a share of the rapidly growing IoT market:

- Growing number of new IoT customers due to suitable band in-demand services
- Revenue growth per customer

### Take advantage of the opportunity to build IoT partner ecosystems with a range of vertical solutions:

- Reduce operating costs of different vertical solutions
- Accelerate the launch of new vertical solutions
- Create conditions for IoT data monetisation

### Smart city ecosystem

A city that monitors and integrates the status of all of its critical infrastructure, including roads, bridges, tunnels, subways, airports, communications, water and power, can better optimise its resources, plan preventive maintenance, and monitor security. Emergency response management can be focused and managed.

There are hundreds of different services, companies and processes involved in city management.

**Nexign IoT Platform** provides the ability to create an ecosystem and a single universal data model allowing the inclusion of data and events from sensors in city business processes.

There is a specific set of issues that Nexign IoT Platform can effectively solve with its ontology model:

- Different applications, services with a single target
- Single interpretation of data by different applications
- Formation of a common set of big data; creation of a single environment for decision-making process automation
- Digital transformation; automated decision-making based on real-time data
- Effective use of enablers, capabilities of IoT Platform

### Why Nexign IoT?

- Partnership model to enable operators to expand their business opportunities
- Implementation of the product for one Tier 1 mobile operator resulted in the operator's IoT market share increasing from 19% to 37%
- According to IKS-Consulting's Rating of M2M Platforms, conducted in the country of one of Nexign's clients, the product demonstrated maximum results in comparison with competitors