



暨联牧科

1iot  
物联服务框架

专注于物联网百米落地技术

垂直领域

- 生活物联
- 新零售
- 智慧交通

MovTek IoT World view



嵌入式与物联网联合实验室  
Embedded and IoT Technology Joint Lab



移动物联网（华南）联合实验室  
JINAN UNIVERSITY MOVTEK  
Mobile IOT (Southern China) Joint Lab



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垂直领域

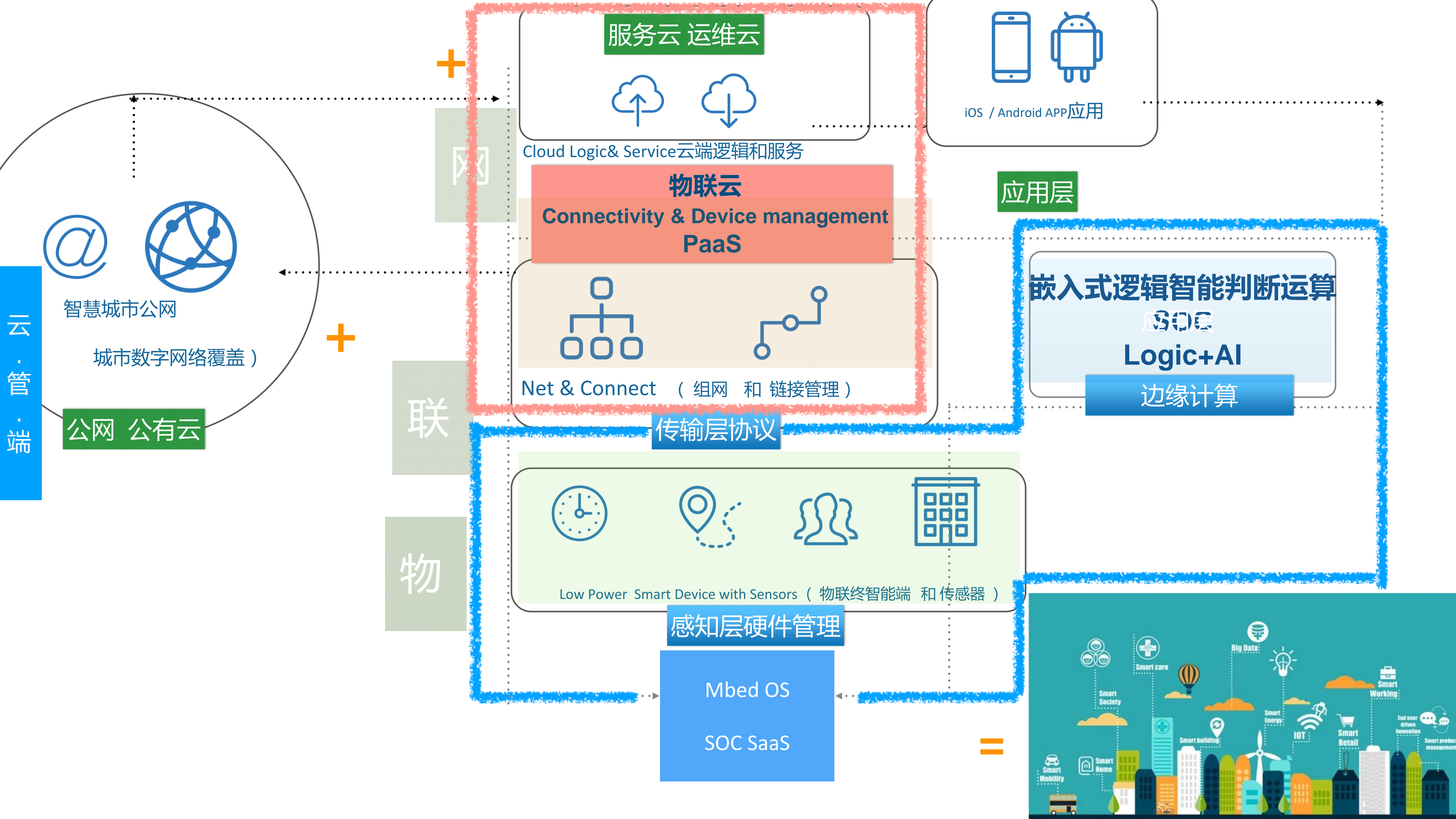
- 生活物联
- 新零售
- 智慧交通

• 选择基于 Mbed OS 做物联网硬件生态基础？

• 实例中使用到的LoRa , NB-IoT 等不同连接的  
低功耗，经济性，可持续性实现

• 基于Mbed OS + Pelion 设备管理平台的端到云的  
连接云、安全云、服务云

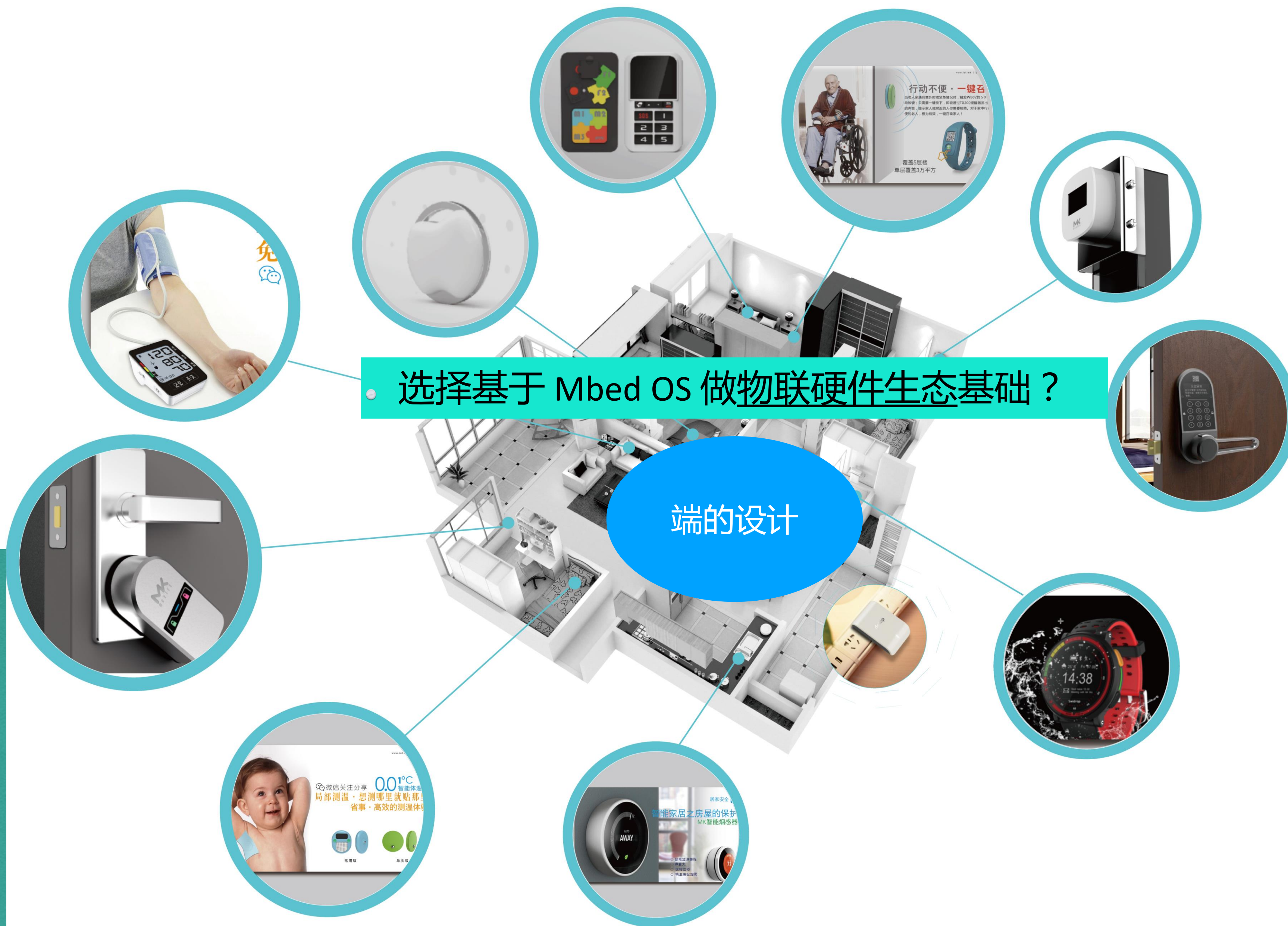
• 已投放市场实例：新家居 中一锁当关的生态



Movtek

Mbed  
2  
Pelion

Smart  
Living



实现的考量

1. SOC的工作量

2. 系统可延展性

3. 可运营性

4. 安全性

可持续性发展的考量

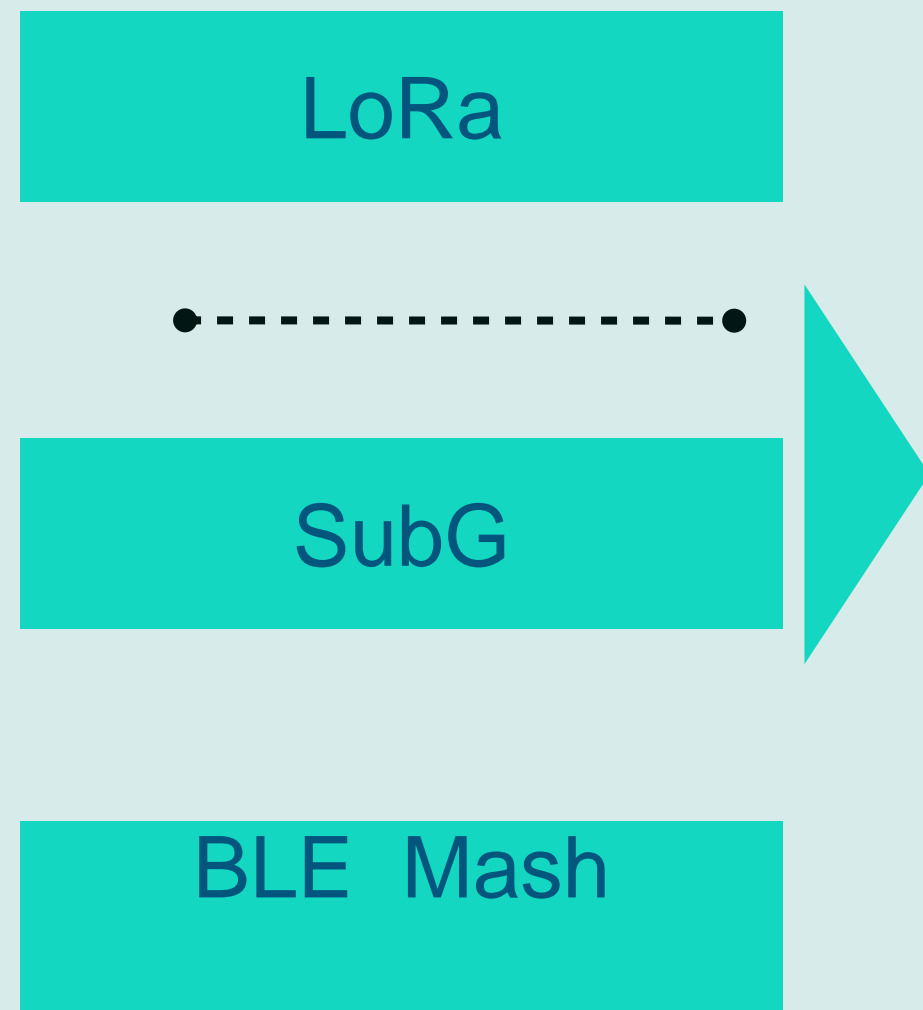
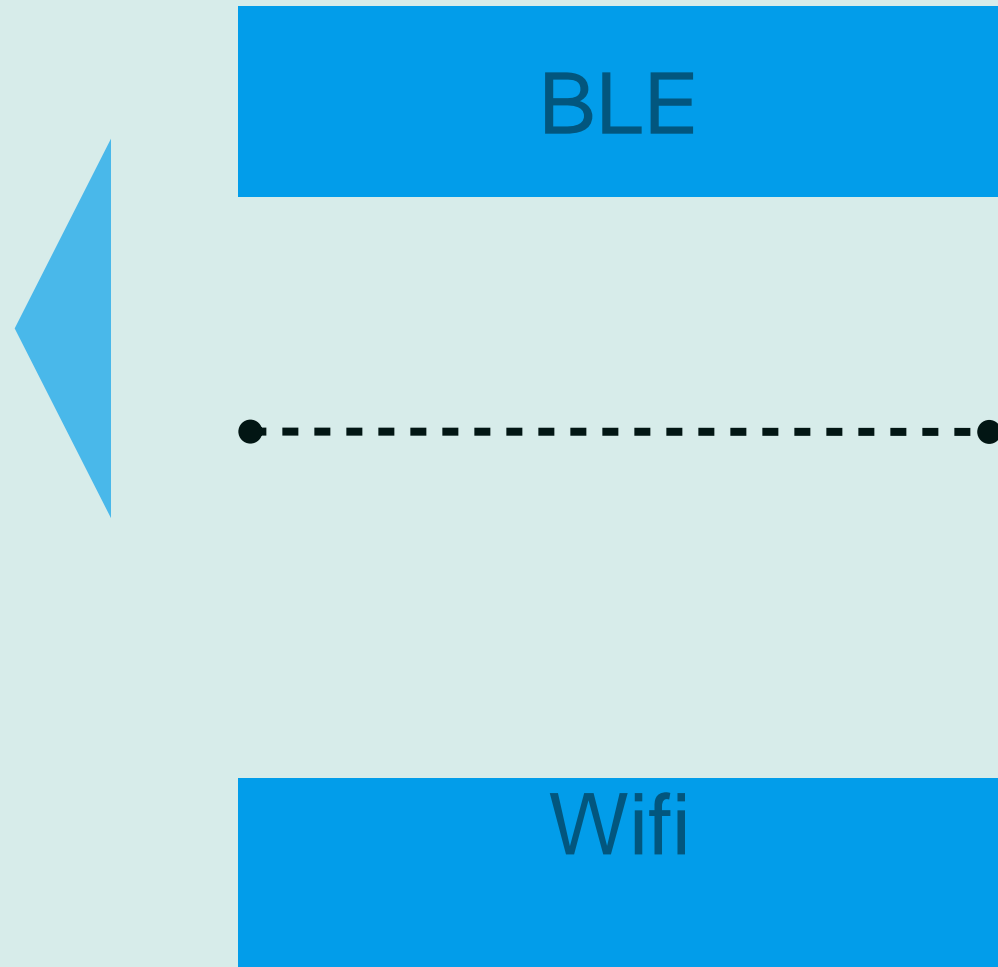
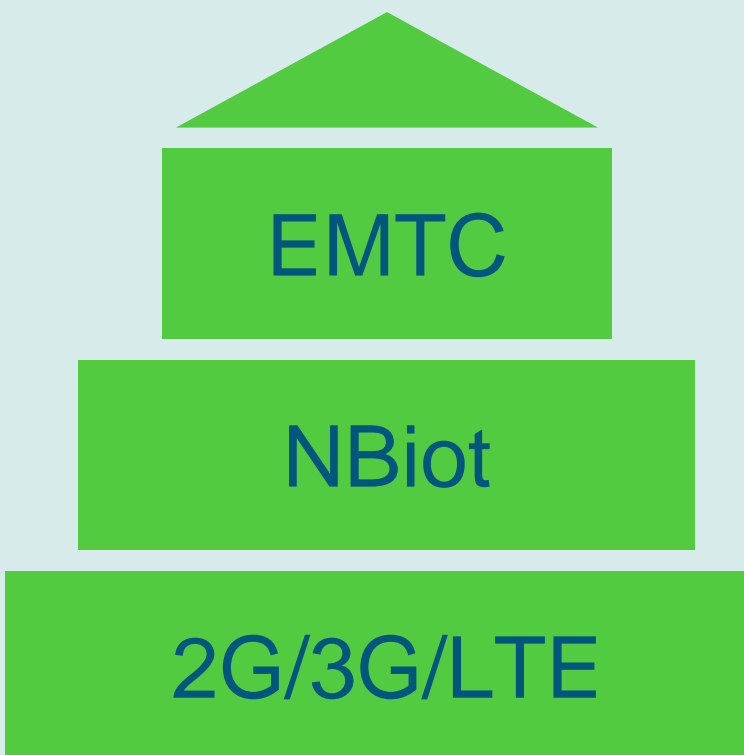
SaaS归一

PaaS规范

用户平台

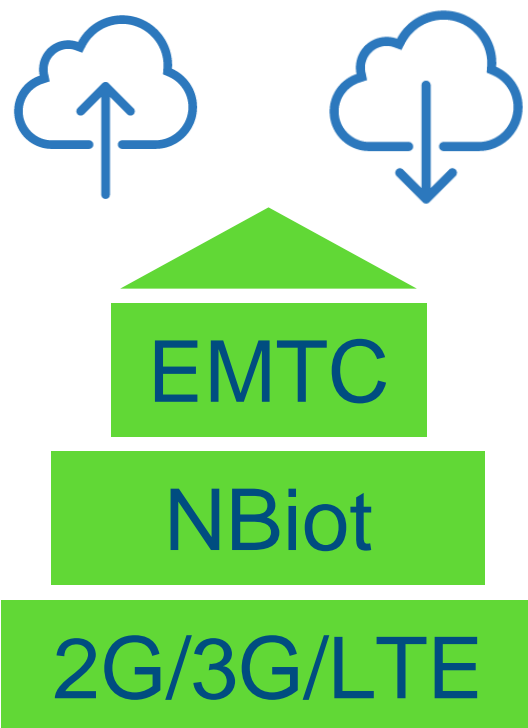
OTA 收费

运营商 API 对接

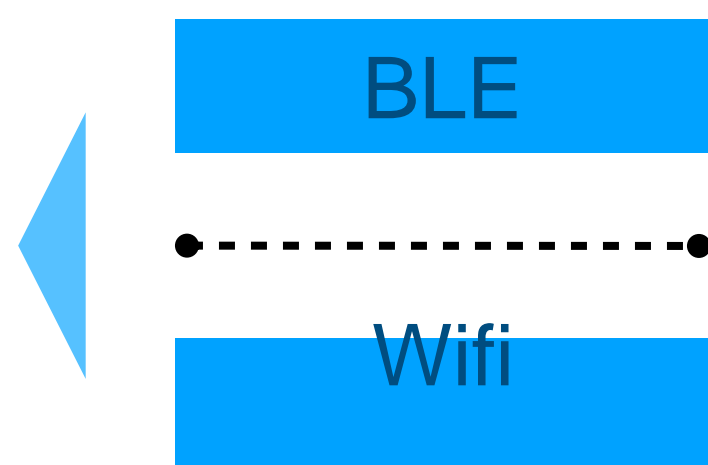




加装L系列



简装M系列



Wifi/BLE on Board

220v to DC 2A

MIG651

10cm x 5.5cm x 2.8cm

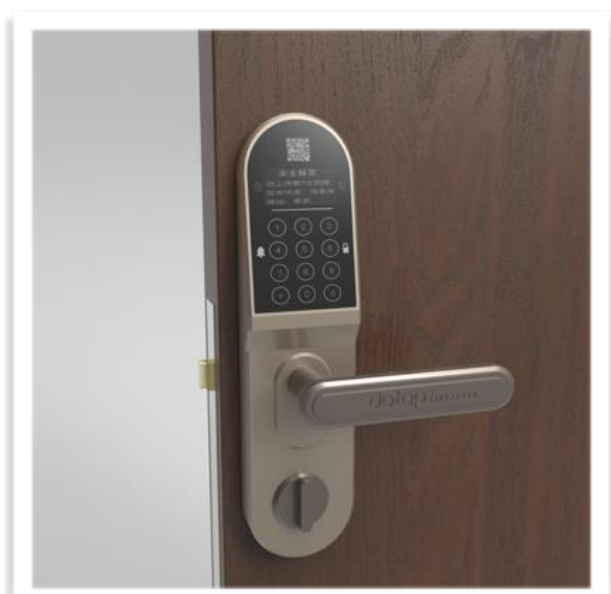


智慧生活套件

管的设计



家装H系列



- 实例中使用到的LoRa , NB-IoT 等不同连接的  
低功耗, 经济性, 可持续性实现

连接

- 选择1：低能耗 M4 BLE SOC  
主机功耗100微安以下  
可植入独立终端
- 选择2：wifi M4 SOC  
家庭gateway

低能耗

- 连接和入云
- 模组化 选配 插拔式
- NBiot , 2G—— LTE模组  
Lora/Sub G/..模组
- 设计BOM cost在  
20USD以内
- 各种终端成：。。。

经济性

- 可持续性
- OTA + 平台拓展
- SoC SaaS 设计可独立部署  
设备指令管理PaaS  
设计可独立部署 连接云  
与 Pelion联接
- 与第三方开发 服务云  
互联网流量 公司  
72小时联调

持续性

- 已投放市场实例：新家居 中一锁当关的生态



— 居家公寓 —

物联网云 锁 当 关 智慧生活网

= 智慧生活入口

一把锁就是一个物联网关  
一把锁就能构建居家公寓、行政办公的物联网平台

dotop物联网云锁等于智慧生活入口



◆家居救助

配合T-200提醒器  
无惧墙壁楼层，一键召唤家人

当您在家中，行动不便时，只需按一下手肘上的求助按钮，所关联的T-200提醒器，则会发出强大的声音通知家人，您需要帮助！30000平方，三层楼，无惧墙壁楼层，一键召唤家人。

T-200提醒器  
可贴墙上，也可手持。

一键上传当前位置

当您遇到紧急情况求助时，一键触发，即可上传当前位置至手机APP上，方便家人快速求助。

生活安全入口

居家安全 3

智能家居之厨房的保护  
智能煤气阀

智能家居之厨房的保护  
智能煤气阀

- 智能监测报警
- 远程控制，一键开关
- 远程监控
- 安装简单，一键启动

智慧水表

智慧电表

居家安全入口

行动不便·一键召唤

当老人家遇到意外或紧急情况时，触发WB02的SOS求助按钮；只需一键按下，即能通过TX200提醒器发出强大的声音，提示家人或附近的人需要帮助。对于家中行动不便的老人，极为有效，一键召唤家人！

覆盖5层楼  
单层覆盖3万平方

卫星卡片电话

平安手环

无需充电  
家居一键SOS

智能家居之厨房的保护  
智能煤气阀

居家安全 3

智能家居之房屋的保护  
智能烟感器

- 智能监测报警
- 声音大
- 远程监控
- 精准捕捉烟雾

dotop  
智慧生活入口

微信关注分享 0.01°C 智能体温计

局部测温·想测哪里就贴那里  
省事·高效的测温体验

常用版

单次版

心率、血氧

30天生活防水

一个APP可添加  
63种智慧生活硬件

扫码下载  
多普生活APP

出行必备·一档随身带  
随时更新，随身携带  
扫一扫，状况了如指掌

- 微软牧科物联合作 2亿用户，600万同时在线
- 首创全民健康档案病历急救资料与手机号，脸部识别，邮箱同步，全民无需app一键提供位置信息和救助。

MK智能血压仪  
免配对·数据直上云端  
微信关注分享

健康体征入口

心电图

平安健康档

终身免费的健康档案  
扫一扫，一键协助  
个人信息/体征数据记录  
病历/过敏药物记录  
紧急联系人及求助地址  
安全求助全系列配备  
数据直上云端，永久存储

健康档案 一键协助 云端同步

健康档案入口

平安健康档

云端永久保存健康档案信息  
求助更方便

OL系列

# Design for Smart Office 专为智慧办公设计



简易安装便捷管理各种应用锁



支持覆盖5层楼20000平方



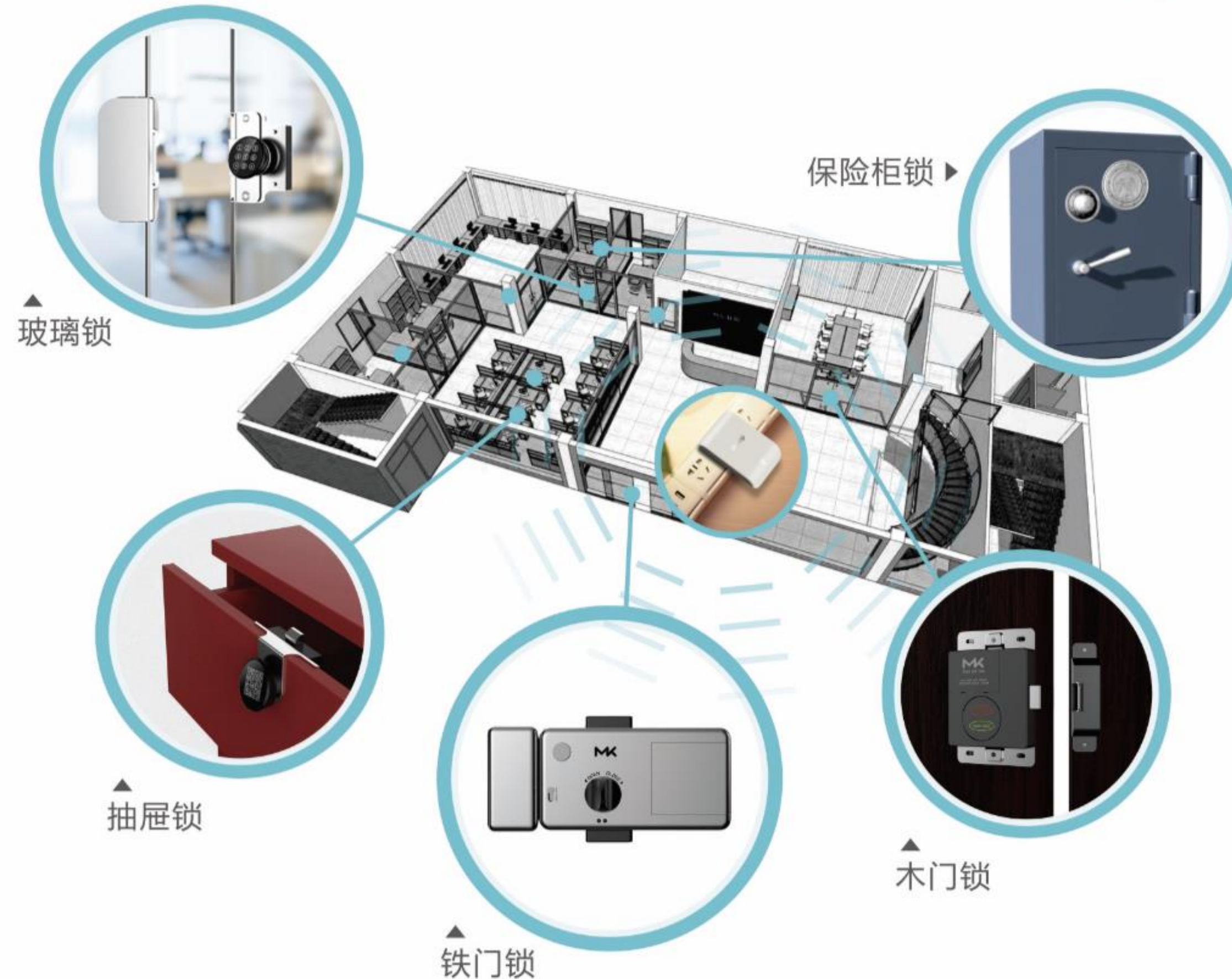
行政集中管理



超过管理1000个锁



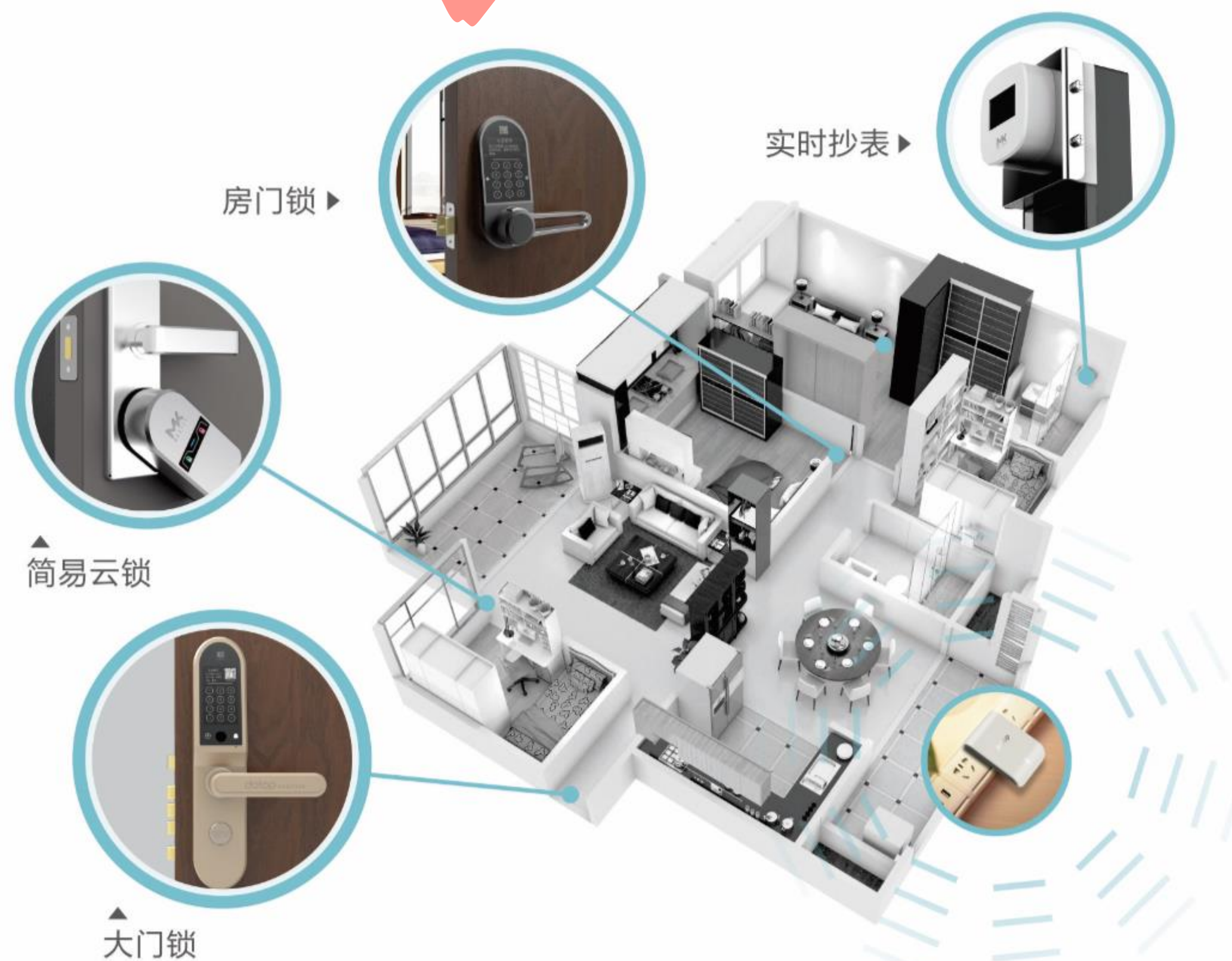
支持人脸识别





# Design for Smart Apartment 专为智慧公寓设计

- 免拆卸，简易安装、保留原有机械锁
- 公寓门禁一人一密钥，出入记录管理
- 远程开锁
- 一次性密码，用后即“焚”
- 屋主/访客留言
- 支持智能抄表
- 支持无人看房



- 延伸领域

智慧办公

房地产开发 智慧楼宇

居家养老

智慧家庭

智慧短租公寓

传统锁业 赋能

运营商 增值业务

- 电子墨水 留言功能
- 全航空铝材 终身不掉漆 老化
- 全功能实时云锁



**全功能 实时云锁**

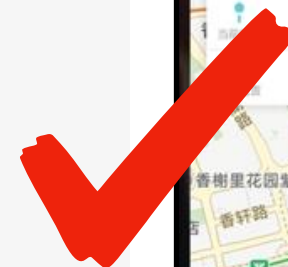
**① 多普生活系列**

Smart parking



USAGE

- Pay-down-Pay Parking
- Sharing Parking
- Unmanned Parking Management
- park booking & Navigation







- 专为 预付式 时租 短租 公寓 设计
- 简易改造 无人值守式 自助 度假村 酒店
- 物联 经济 普及

多通道 内容通信网关 MIG 751

直流电源供电  
多路分组交换：  
1路指令信道+3路通信信道  
覆盖范围：  
1000平方米  
覆盖ID 3000  
(每秒刷新 4个 id 单价  
或每秒刷新1个id全内容)  
工作电流 功耗：12db (wifi 18db)

A small, rectangular, silver-colored device mounted on a wall, connected to a black cable.

**MIG751**

**楼层 及 区域覆盖 GW**

- 电信全网通4G LTE 实时云锁
- 来访安全控制录像[图片]
- 实时入云
- 门内广角观察



**全功能 安全健康 实时云锁**

**GL X**

Back



## Movtek is investing in a digital future: Low-power narrowband IoT solutions to power smart cities

Founded in 2016 and headquartered in Hong Kong, Movtek is a technology company that is building its future on the Internet of Things (IoT). The company has three primary product lines: smart life (or consumer-facing IoT solutions), industry IoT solutions, and an IoT platform. Movtek has significant experience in creating low-power microcontroller (MCU) – based solutions that use the NB-IoT protocol, which will soon become the global standard protocol for powering low-power devices. An R&D powerhouse, Movtek holds eight global invention patents and 12 software copyright patents, which include location awareness, energy saving, and IoT algorithm innovations.

Movtek’s solutions solve the last 100-meter IoT issue with easy management, always-on connectivity, reliable performance, and long-lasting battery life. OEM and public service provider partners can use Movtek’s NB-IoT solution to build solutions for the fast-growing smart city and smart life markets, saving considerable time and cost and delivering an exceptional user experience. Examples include wearable devices for healthcare, always-on connected devices for emergency use, and location trackers for pets.

Currently, many market solutions are still 2G/3G/4G-based, which isn’t secure, power-efficient, or reliable. By solving these issues, Movtek has become the leading solution provider for low-power IoT solutions and the pioneer of NB-IoT/LoRa low-power solutions. The company’s solutions are used by most of the Chinese carriers, including China Unicom and China Telecom.



### A smart business move—banking on the smart city market

Movtek, an expert on low-power narrowband IoT solutions (NB-IoT), is moving swiftly to capture the market opportunity created by smart cities and smart life.

Movtek knows that up to 70 percent of the world’s population will live in urban areas by 2050, and that building the smart cities and consumer solutions to serve them will take billions and ultimately trillions of sensors and M2M connections, all communicating over low-power, low-throughput networks.

Microsoft helps its partners place the right strategic bets, create digital ecosystems, and build a platform business on a solid, yet flexible IoT foundation with Microsoft Cloud and Microsoft Azure IoT Suite.

Partners drive to insight using Power BI, Cortana Analytics, and Machine Learning, while knowing that every endpoint, from the smallest sensor to devices and the cloud, is secure with Azure.

### Microsoft Azure—accelerating innovation with the cloud

Today’s cloud technology is enabling digital transformation on a global scale and Microsoft Azure is the cloud platform of choice for ODMs and their partners. From endpoint to insight to action, across the enterprise and around the world, Azure provides a platform of technologies that can:

- Accelerate app innovation through rapid app development and agility in the cloud with preconfigured solutions for the most common IoT scenarios.
- Deliver integrated data and intelligence—capture and analyze data in real time for rich insights to intelligence embedded within apps.
- Remain open and flexible, so partners can use the tools and technologies they already have and want to use to connect any device, OS, data source, software, or service.
- Protect customers’ business assets. As more customers seek digital experiences, they expect the data they share with an organization to be protected. Azure provides end-to-end security: from the endpoint, through the connection, to data, applications, and the cloud.
- Enable effortless growth with room to scale—Azure lets you connect millions of devices, terabytes of data, on-premises, in the cloud, and in more than 36 regions worldwide.

Capture your share of the \$1.7 trillion market opportunity: Build connected devices and apps with Microsoft Azure IoT Suite. Contact Microsoft today for help envisioning and creating a strategy and roadmap.

### Products and Services

Movtek uses the following Microsoft products and services:

- Azure Virtual Machines
- Azure IoT Hub
- My SQL PaaS
- Azure Web and Mobile Services

Microsoft partnered with Movtek to create a smart city and smart life strategy. Movtek’s current cloud solution didn’t provide the company with the robust IoT PaaS (platform-as-a-service) capabilities it needed to achieve its vision for digital transformation. Almost all of Movtek’s customers are global, so it was essential that the company rapidly evolve its PaaS capabilities with Azure to serve this customer base, future-proof its business, and empower partners with an integrated hardware-PaaS solution they could use to develop their own smart city and smart life offerings.

### Movtek’s innovative partnership opportunities

Movtek has moved rapidly to secure key partnerships to take its products to market and scale its business. The company collaborates with leading LoRa, NB-IoT, and IoT organizations and technology companies; carriers; device manufacturers (OEMs); ISVs; and distributors.

- **Carriers:** Movtek serves as the low-power IoT solution provider for leading Asian carriers, providing them with significant business and technical advantages over providers offering 2G, 3G, or 4G solutions.
- **OEMs:** Movtek plans to license its technology and hardware designs to OEM partners.
- **ISVs:** Movtek seeks to partner with ISVs to build smart city and other related community projects.
- **Distributors:** Movtek is seeking distributors to take its Movtek 2C product portfolio to market.

### Azure—helping partners capitalize on business opportunity

Movtek selected Microsoft Azure for its business transformation because:

- **Globalization:** Movtek’s IT team realized the company needed a cloud solution partner who could deliver unified service globally to serve Movtek’s worldwide customers. Movtek’s IT team adopted Azure and integrated the company’s technology into the cloud, enabling Movtek to help partners build solutions faster and more cost-effectively.
- **Scaling:** Azure enables partners to scale device solutions easily. Movtek is working on multiple projects with government agency clients to deliver public healthcare for senior citizens. Azure will support rapid user growth, such as scaling from 50,000 to 5 million end users within one year.
- **Data PaaS:** Azure provides a data PaaS environment for development and deployment, enabling Movtek to deliver new value-added services and adjust them to various user scenarios, which is key to Movtek’s business model.
- **Security:** The Microsoft Azure IoT platform is built on the Trusted Cloud. Microsoft was the first cloud supplier to be certified by EU data protection laws and complies to ISO/IEC 27018, the only international set of privacy controls. As a consequence, Azure-certified devices are trusted by partners and enterprises alike.

Build a creative, profitable future with smart city and smart life solutions and services. Contact Movtek today about partnership opportunities.

#### Microsoft contact

Name, Role  
email

#### ODM contact

Name, Role  
email



CTE 生态系统合作伙伴 2017

Microsoft Partner Of Ecosystem 2017

技术和储备

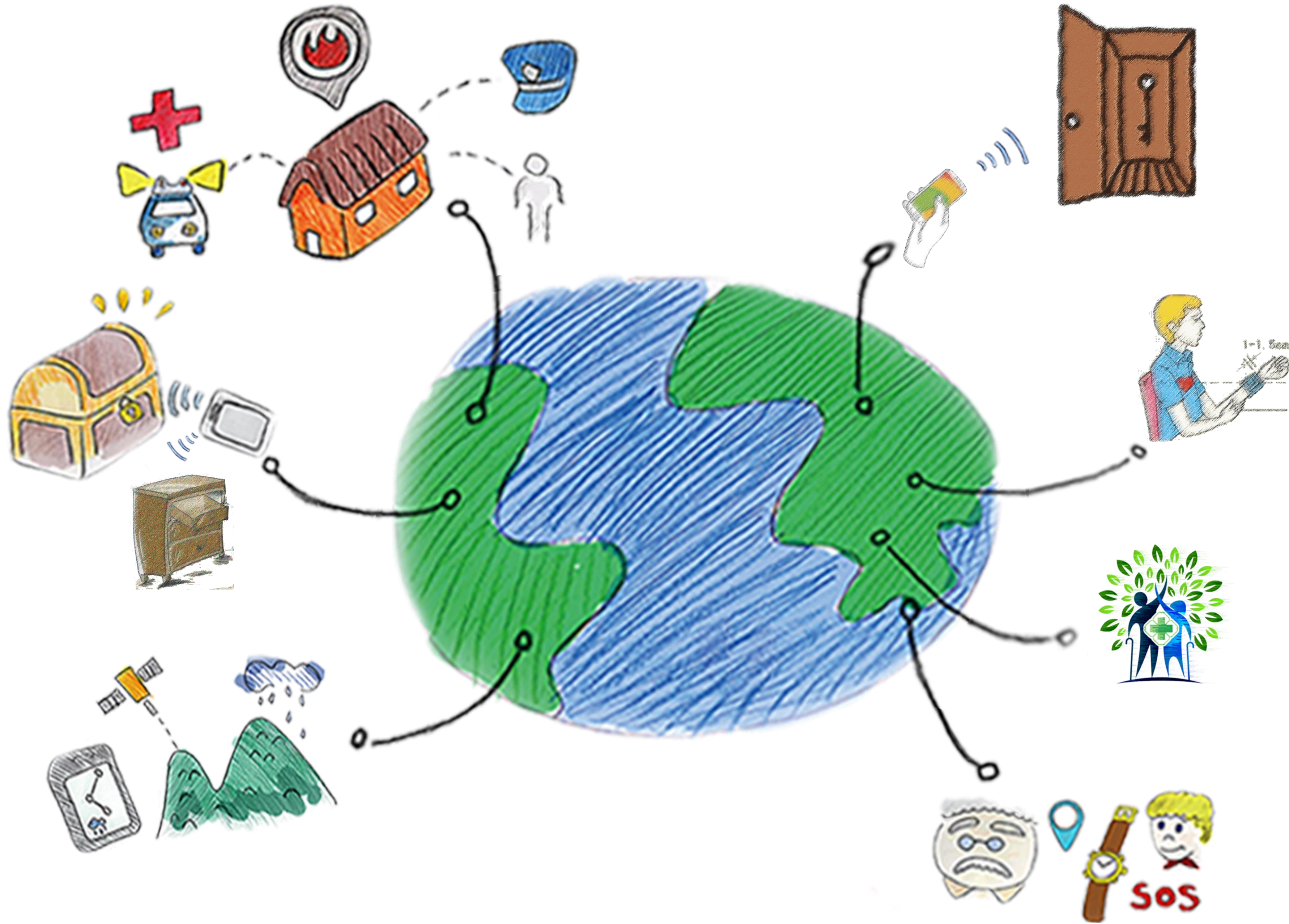


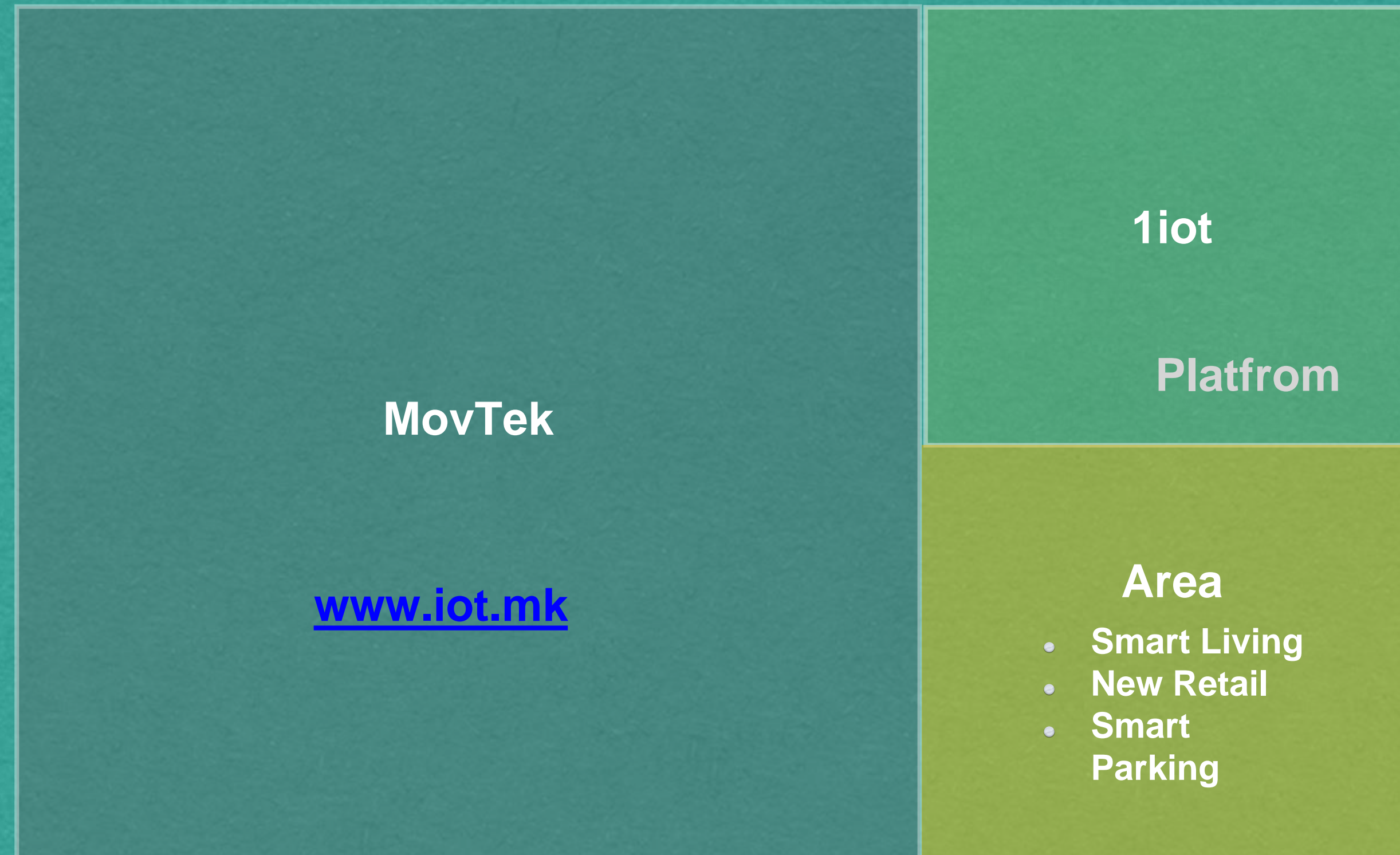
暨大牧科 华南（移动）物联网实验室 成立于2016年



中国国家教育部 科教结合协同育人行动计划 项目成员

暨大牧科 arm 联合实验室 2017年11月揭牌





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