

Inkwell Data Ltd

# Executive Summary

- The real estate sector is increasingly looking at ways to digitalise their infrastructure as a value differentiator, both for owners and tenants.
- We believe that end-users will demand for Internet of Things (IoT) functionality to address their evolving needs:

Manage rising utilities bills

Detailed ESG reporting to address new regulatory demands

Active monitoring of space utilisation / air quality / inefficiencies

Evolving security requirements (cybersecurity as well as physical access)

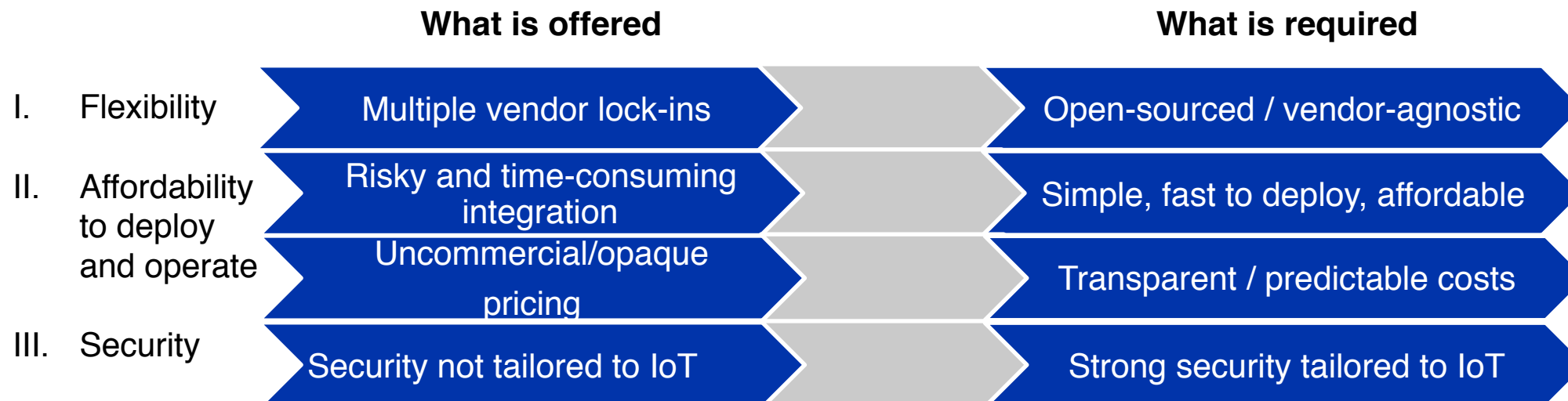
Integrated management of the building (trending towards self-service)

- Inkwell Data has designed and deployed a suite of solutions that enables successful IoT outcomes, minimises vendor lock-ins, drastically reduces data transfer and cloud costs, and is easy-to-use (no code-environment).
- We offer a disruptive commercial proposition with affordable and transparent pricing to help reduce installation and operational costs significantly, with payback within months (depending on existing energy efficiency of buildings).

# Inkwell Data

## INTRODUCTION

- IoT market has been stuck in Proof of Concepts (PoC) demonstrations for years, with a remaining gap between what potential end-users are offered and what is required:



- Inkwell Data's digital twins middleware platform, Altior™, enables to fully bridge this gap.



# The IoT-enabling platform

HOW ALTIOR CAN ENABLE REAL ESTATE IoT STRATEGIES

## I. Flexibility

### Without Altior

Devices	Multi – vendor Proprietary Communication Limited / no interoperability
Networks	Single transmission protocol for all devices No upgrade path for future technologies
Software interface/ app	Multiple proprietary systems Limited / no interoperability Cost duplications
Public cloud infrastr.	Multi – cloud strategy to manage third – party dependencies Cost duplications Increasing evidence of cloud security frailties

### With Altior

Devices	Over-the-air upgrade path to software layers All devices become interoperable
Networks	Existing and future technologies can be used without affecting apps / cloud infrastructure
Software interface/ app	All data is aggregated under one software platform Existing and future apps can be used without disrupting services
Public cloud infrastr.	Tailored, secure, VPS-based cloud infrastructure Fixed, highly cost competitive pricing

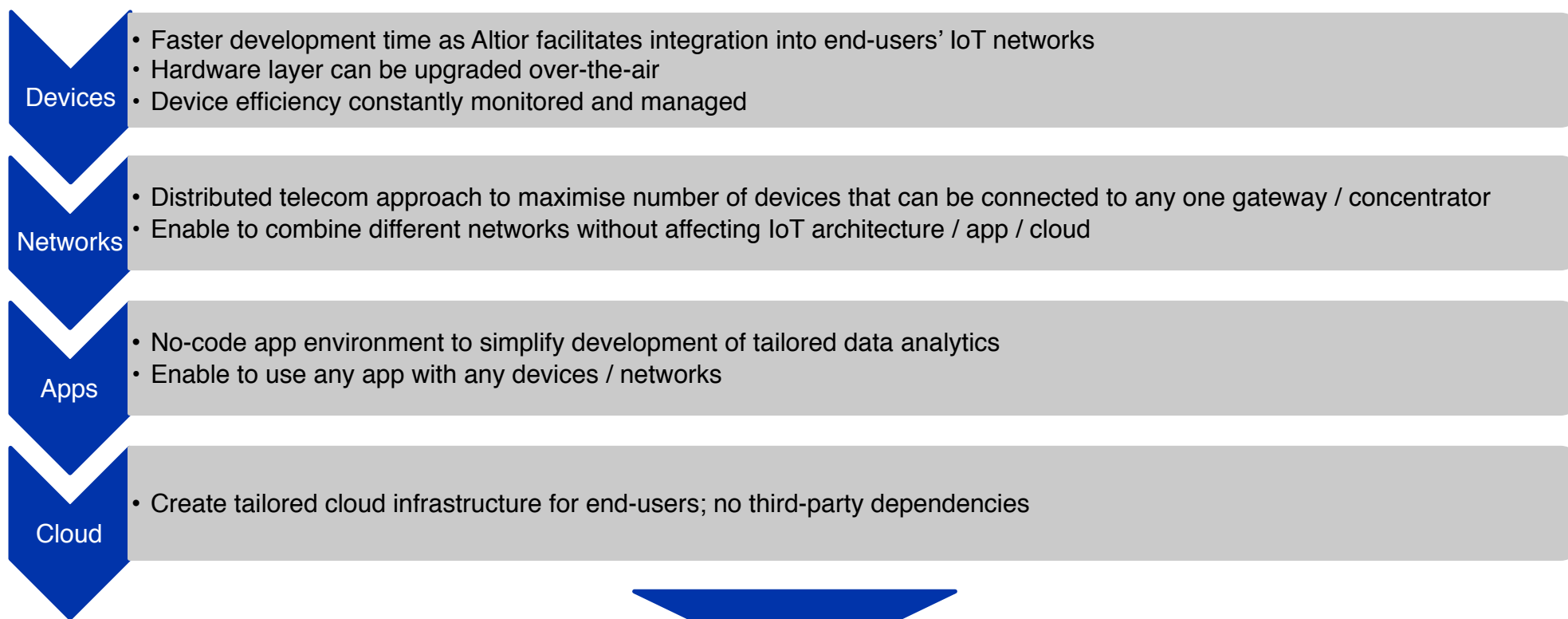
- Locked-into vendor solutions
- Locked-into transmission technology
- Data silos requiring expensive integration costs
- Cloud infrastructure – third-party dependencies
- Dependant on facilities managers

- Remove vendor lock-ins
- Data managed under one platform, even when originating from multi-vendor devices
- Tailored cloud infrastructure, significantly cheaper
- Self-service approach to facility management

# The IoT-enabling platform

## HOW ALTIOR CAN ENABLE REAL ESTATE IoT STRATEGIES

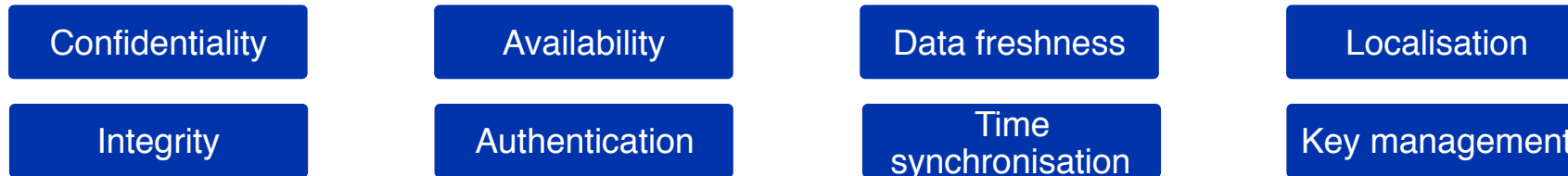
### II. Affordability to deploy and operate



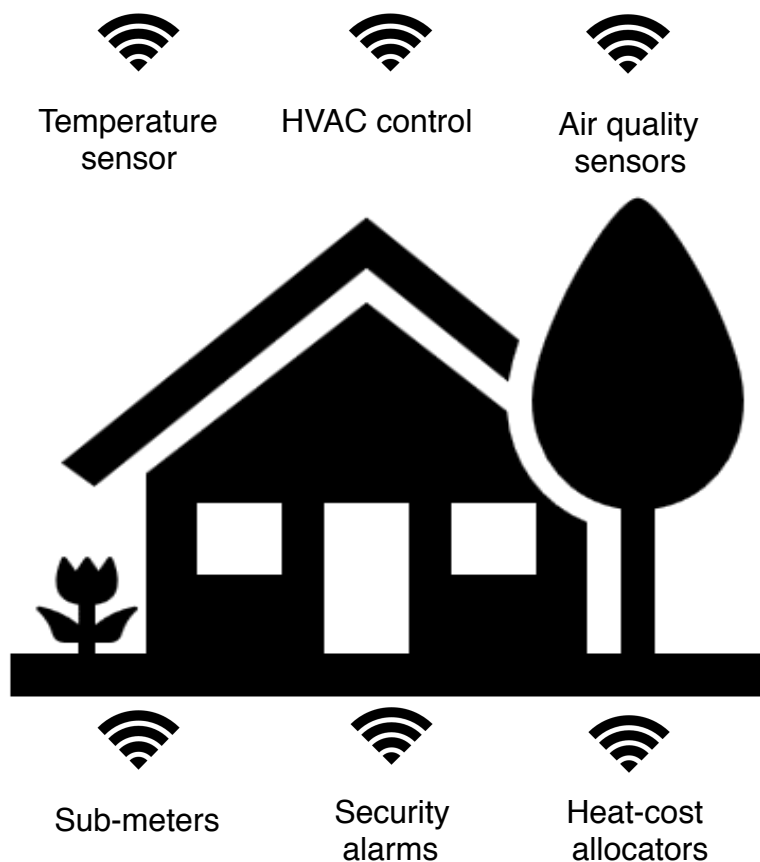
IoT costs (deployment and operations) significantly reduced across the value chain – transparent costs across project life.

### III. Security

- Aegis, Altior’s security framework, combines the security objectives and requirements of any computer system with those peculiar to field devices and sensors. These include:



- Aegis implements a layered end-to-end security model, where all the data traffic is secured by a common encryption system that covers the physical and data transport layers as well as the application layer.
- Aegis provides a zero-trust security model, which ensures that no user, whether internal or external, is trusted.
- Aegis treats security as a process, not a product: continuous audit and improvement.
  - Operates on the concept of “least privileged access” for human users.
  - For every device twin, Aegis awards a “risk adaptive access control” profile, checking not only for legitimate access to the data infrastructure but also every single operation performed by the device twins.
  - Checks are computationally inexpensive and barely noticeable, even under heavy traffic loads.



Create a digital layer “above” any infrastructure, fast and affordably

### Digital layer

Removes vendor lock-ins

Enables upgrades

Introduces zero-trust security

Future owners can introduce new solutions without cost overlaps

Reduce IoT costs dramatically across the IoT value chain

Enable a “self-service” culture for IoT strategies to better control data sovereignty and costs

# Contact Us

Inkwell Data Ltd

 Iveagh Court, Harcourt Road  
Dublin, Ireland

 184, Shepherds Bush Road, W6  
7NL London – UK

+44 (0) 203 9510 831



[info@inkwelldata.com](mailto:info@inkwelldata.com)



[inkwelldata.com](http://inkwelldata.com)

Inkwell Data Italia s.r.l.

 Via degli Zabarella, 24  
35121 Padova, Italy

 +39 049 6898 423