Internet of Things for Housing

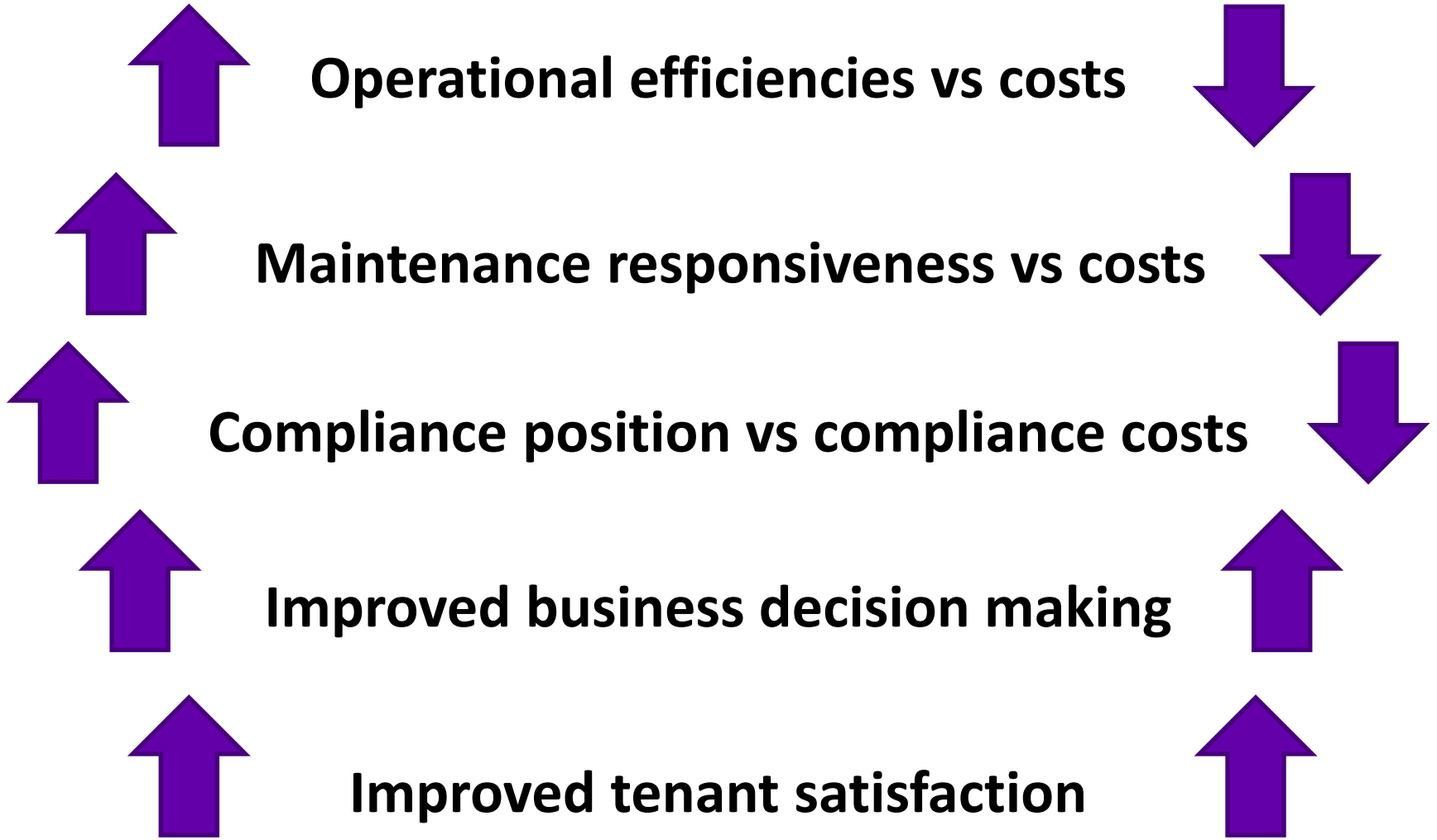
Housing Technology

Mark Frost – BT IoT
10th September 2019

Email: mark.2.frost@bt.com

British Telecommunications plc 2017

Why Internet of Things (IoT) for Housing Operations



British Telecommunications plc 2017

How IoT helps achieve this…

Real time visibility of housing assets

Identify and respond to issues early

Move to proactive/predictive maintenance

Reduced compliance site visits

Greater/more granular operational data

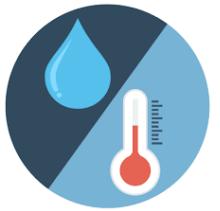
Improved Business Intelligence

Potential for automation

British Telecommunications plc 2017

Potential use cases (not exhaustive)

Legionella compliance



Temperature & Humidity

Carbon dioxide/monoxide

Air quality

Damp

Utility metering (Landlord's)

Fire alarm status

Leaks

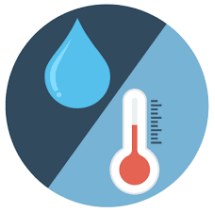
Lift control systems

Emergency Light testing

British Telecommunications plc 2017

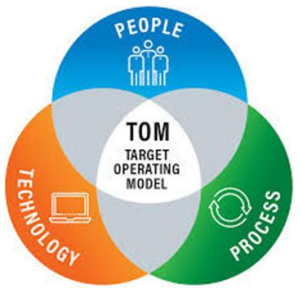
Where are we now…

Proof of Value trials



Testing use cases

Meaningful data & presentation



Target operating model

British Telecommunications plc 2017

BT Managed IoT Service

Sensors

Network

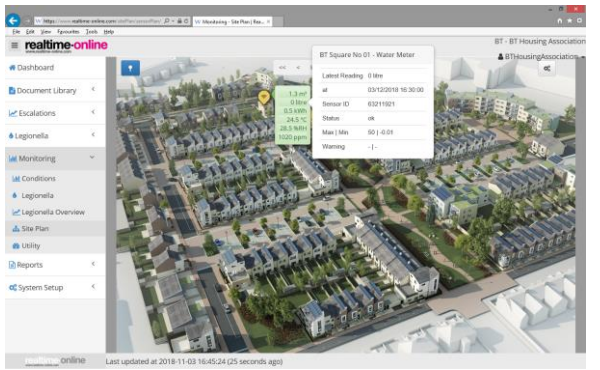
Data Hub

Platform / ERP / CRM / WFM

2G 3G 4G Lte 5G

LoRaWAN™

Wi Fi



CRM ERP

Workforce Management

aws Azure Google Cloud

End-to-end security

British Telecommunications plc 2017

Anecdotal statements from current pilot

Keeping An Eye On Our Contractors – Lift Maintenance

Issue - I know when our contractors are supposed to carry out their monthly lift maintenance but I have no way of checking if it's been done

Insight - I'll check the dashboard for the relevant date to find out if the lift was serviced when the invoice says It was

Reduce my water hygiene workload

Issue - I want to know which outlets have been compliant in the last week so I don't have to flush them

Insight - I'll look up the legionella dashboard on the day I do my flushing to check which ones I need to check

I know when a fire alarm has gone off, wherever it is

Issue - The fire brigade get called to our properties when an alarm goes off. If it's a false alarm they contact me but most of the time it's the first I've heard of it. That's embarrassing and we can be charged for the callout

Insight - I'll check my alerts and proactively investigate fire alarms that are going off when they're not supposed to

British Telecommunications plc 2017

Anecdotal statements from current pilot

When a block is too hot I can turn the heating down

Issue - Some communal areas in our buildings are heated according to a timer and don't respond to changes in ambient temperature. This wastes energy and costs us money

Insight - I'll use the information from the platform to check our heating systems are not overheating our properties to save energy and money

Combining connected systems

Issue - I got a lift out of order notification but I don't know what happened

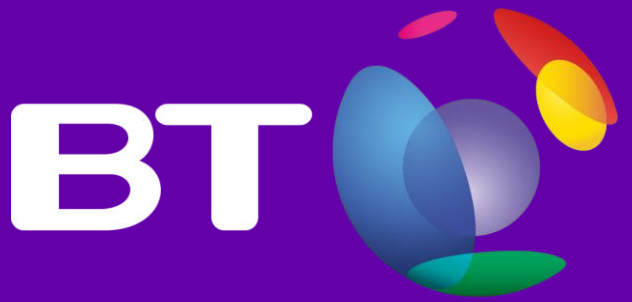
Insight - I'll note the time of the alert and check the CCTV footage

Looking at data trends – Lift Maintenance

Issue - I want to give our development team advice on the type of lift we prefer to maintain

Insight - I'll pull off a report from a lift to see how many times it went out of service in a given period and use this to compare lift types

British Telecommunications plc 2017


BT