

This presentation was live at:



# Smart Buildings

**SHOW**

18-19 October 2023 • ExCel London



# Automated shading for multi-dwelling developments

Smart Building Show 2023

Chris Janes



# Automated shading for multi-dwelling developments

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## Agenda of today's presentation

1. Introduction to Qmotion
2. Window treatment – typical Options
3. Applications (buildings)
4. Why use window treatments?
5. Motorised Blinds and Curtains
6. Automation
  - types of automation
  - benefits of automation
7. Options for developers
8. Case study – South Quay Plaza
8. Further learning
9. Q & A

## Who is QMotion

**QMotion Advanced Shading Solutions** is headquartered in Pensacola Florida

QMotion is proud to have become part of **legrand**<sup>®</sup> in December 2015.

QMotion EMEA manufactures finished product and is located in Milton Keynes UK.





## Window treatment options

Blinds

Roller Blinds

Roman Blinds

Pleated Blinds

Honeycombe Blinds

Exterior blinds



# Why use window treatments?

## Functional and Practical benefits

### Functional

Reduce solar gain

Reduce heat loss

Minimise glare

Block unwanted light

UV protection

Improve acoustics

Security & privacy

### Practical

Interior design & Style

Easy to use

External aesthetics

Adaptable

Easy to maintain

Motorised

## Why use window treatments?

### Solar Gain & winter heat loss

**Research in Spain** : External window shutters : 14% less energy required for cooling systems <sup>1</sup>



Internal blinds and shutters can reduce heat loss through windows by between 13% to 33%. <sup>2</sup>

Source :

1. Guardian report 27/08/2023 'How to stay cool without aircon'
2. BBSA commissioned study with University of Salford dated March 23

# Why use window treatments?

## Solar Gain

Part O of the building regulations – June 2022

New buildings must be designed and constructed to:

- Limit unwanted solar gains in summer.
- Provide an adequate means of removing excess heat from the indoor environment.





# Why use window treatments?

## Fabric Types

### Black out

100 % UV protection

Ideal for bedrooms ,  
cinema rooms



### Translucent

V High UV protection

Some light in but  
cannot see through



### Sheer

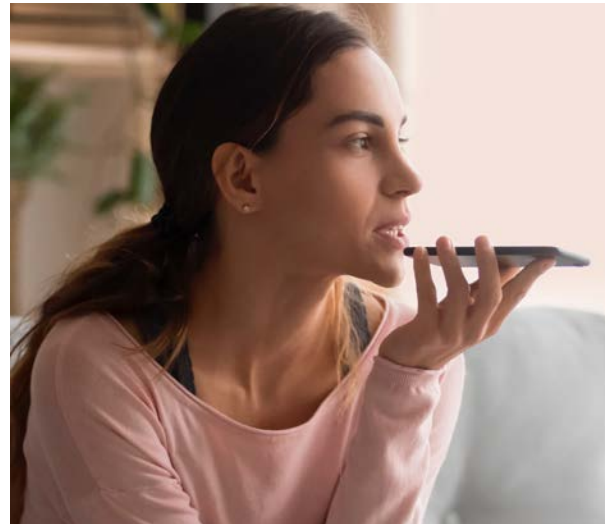
Low to high UV  
protection

Solar screen but light to  
room and see through



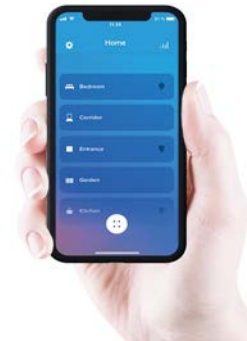
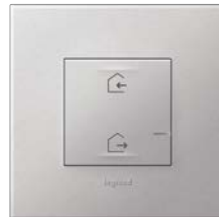
## Why use motorized blinds?

Convenience



Blinds  
up!

Vs



# Why use motorized blinds?

## Practicality

### Dual Blinds



### Multiple blinds



# Why use motorized blinds?

## Accessibility

- Disability or physical impairment
- Difficult to reach locations



## Why use motorized blinds?

### Safety

No cords!

-eliminate the hazard for children & pets.

Blinds installed (from 2014) with looped cords must have child safety devices installed at the point of manufacture or sold with the blind.





## Why use motorized blinds?

### Automation

Part of a 'smart home' solution:

- Control all your devices from a single app or smart home hub.

Activate with scenes , timers , sensors , weather conditions

Improved Energy efficiency

Integrate with BMS



## Benefits of Automation

### Heat Regulation

Sensors & timers

Preemptive control

### Convenience

Scenes and events

Whole home control

### Control options

Apps/ voice/ keypad

External control

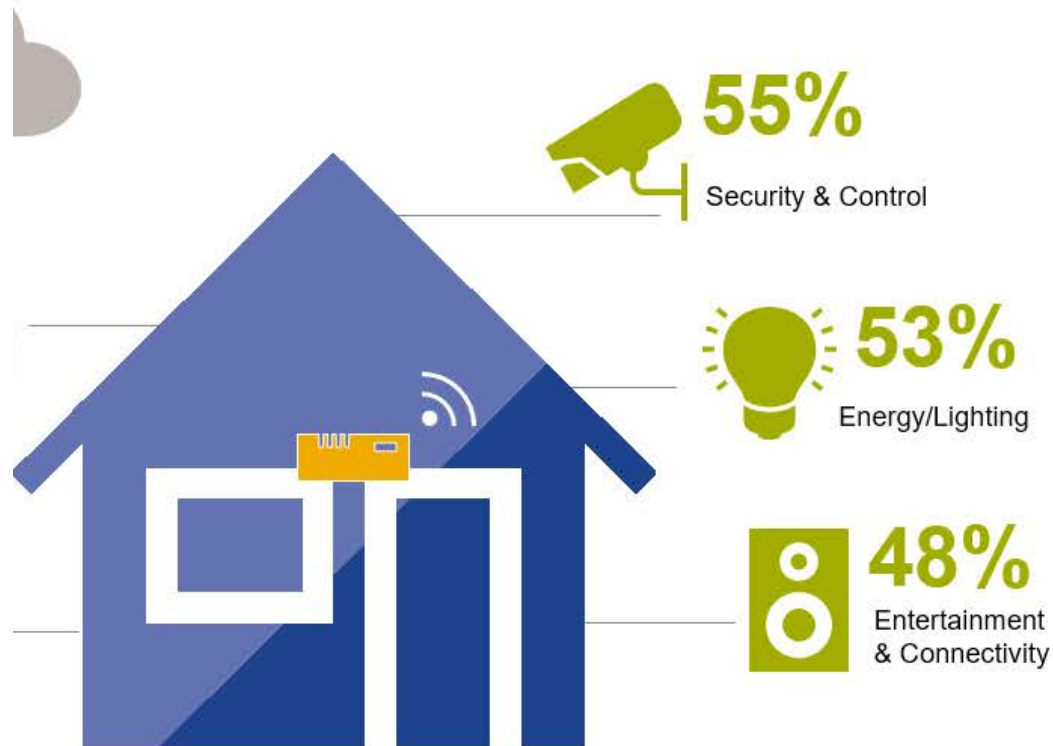
### Security

Virtual occupancy

Visual screening

## Benefits of Automation

### End-user expectations

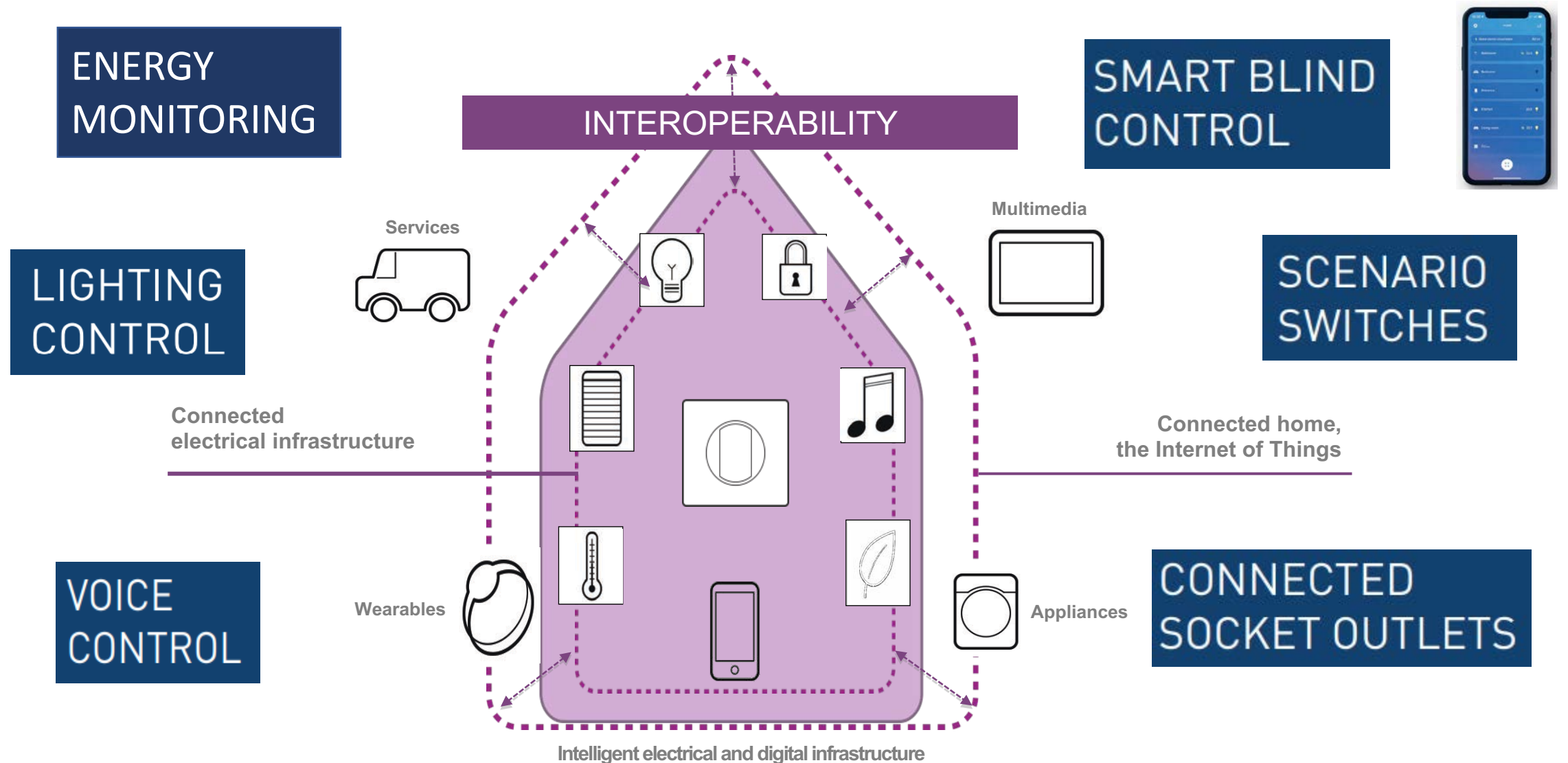


1.  
Security & Control

2.  
Energy & Lighting

3.  
Entertainment

# Connected buildings



## Options for developers



Option	Benefit
Standard Fit motorised	Added value and consistent look and feel (outside aesthetics)
Standard fit manual (upgradable)	add battery motorisation and wireless automation day 2
Low-cost wire only (Cat6)	Sell shading packages to homeowners



## Options for developers



Option	Benefit
Offer battery powered wireless blinds	Added value and consistent look and feel (outside aesthetics)
Offer pre-defined packages for pre-wired installations	Add battery motorized blinds and wireless automation day 2
Low-cost wire only	Sell shading packages to homeowners

## Case studies



Qmotion<sup>®</sup>uk  
advanced shading systems

**Do you have  
any questions?**





**THANK YOU**  
FOR YOUR TIME





# Smart Buildings

## SHOW

9-10 October 2024 • ExCeL London

We look forward to seeing you in 2024