



CTBUH 2017
International Conference

Connecting
the City People, Density &
Infrastructure

Maintaining the Lifecycle and Increasing the Value of High- Rise Buildings

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Is your building still competitive?

RIDE COMFORT

PERFORMANCE

RELIABILITY

USER EXPERIENCE

SAFETY

ATTRACTIVENESS

PEOPLE FLOW

ENVIRONMENT

COST REDUCTION

SECURITY

KONE

Traditional and New Technologies

THAT RESHAPE TALL BUILDINGS



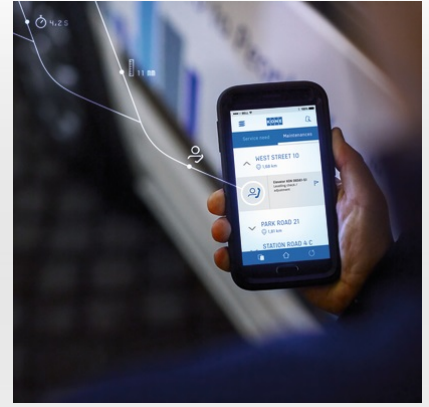
ASSESS CURRENT
EQUIPMENT



PLAN FOR OPTIMAL
PEOPLE FLOW



ELEVATE USER
EXPERIENCE



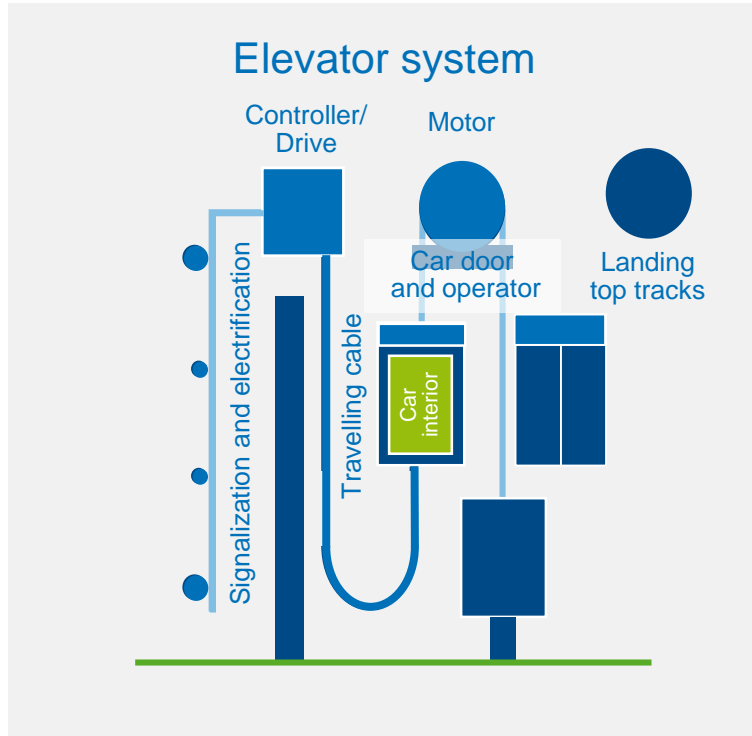
MAXIMIZE LIFETIME
RELIABILITY

The background of the image shows an elevator shaft under construction or maintenance. A worker wearing a white hard hat and a dark blue jacket is visible in the center, working on a green component of the machinery. The shaft is lined with dark grey metal panels. In the foreground, a modern elevator control panel is mounted on a wall, featuring a digital display and a large, stylized button with a house icon. The overall scene is brightly lit, highlighting the industrial environment.

Traditional Elevator System Upgrade

Traditional Elevator System

AS A STARTING POINT



- ➔ Motor
- ➔ Electrification
- ➔ Drive
- ➔ Signalization
- ➔ Control system
- ➔ Mechanics
- ➔ Doors and Door operator
- ➔ Ride comfort
- ➔ Door tracks
- ➔ Noise

How we understand

COMPREHENSIVE METHOD TO MEASURE, ANALYZE AND PLAN THE WORK



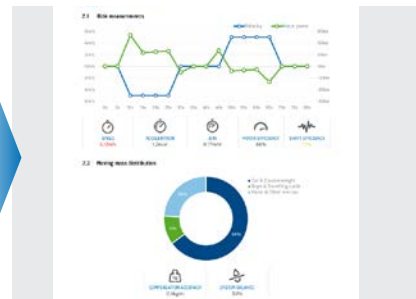
Measurements
and dimensions



Shaft inspection, car
top and pit



Analysis



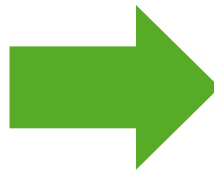
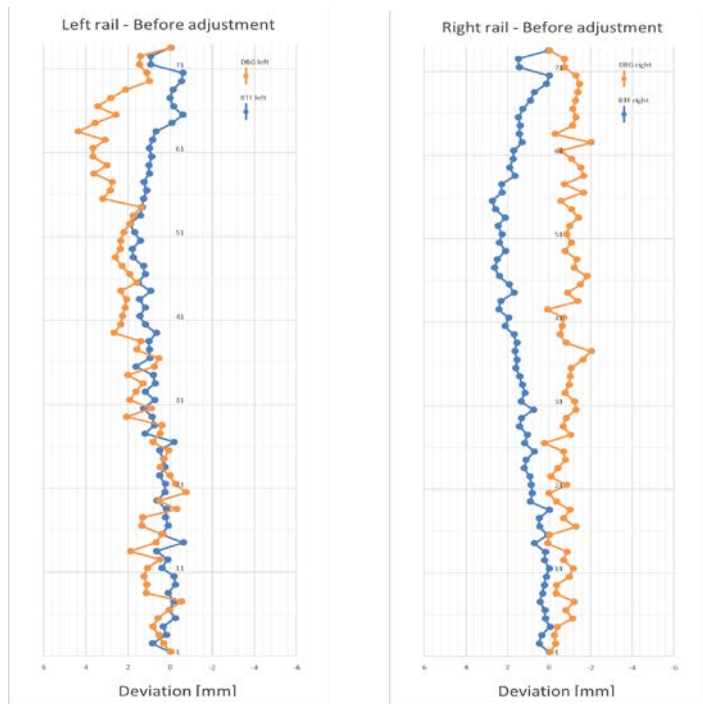
Report

How we improve

ADJUSTMENT WITH SMART TOOL ON ELEVATOR OF 175M TRAVEL, 3.0 M/S SPEED

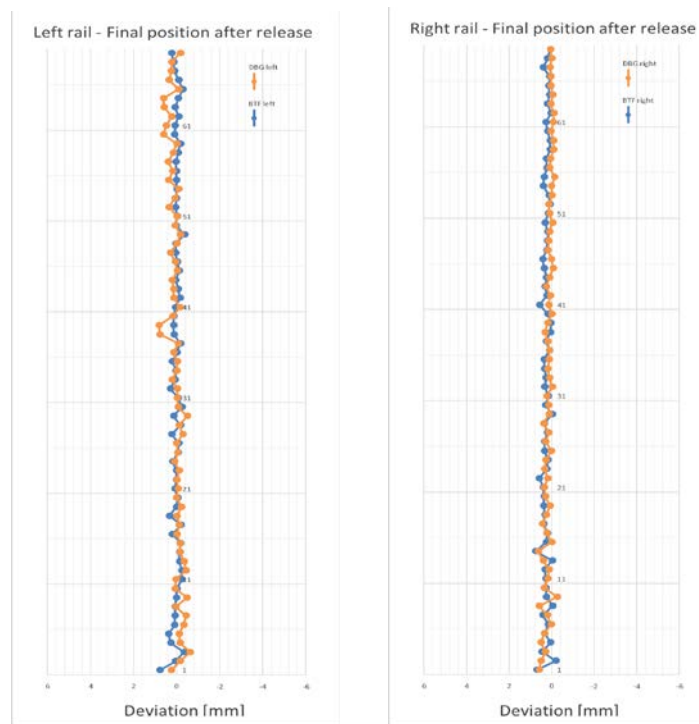


Before adjustments



Deviation
reduced by
70%

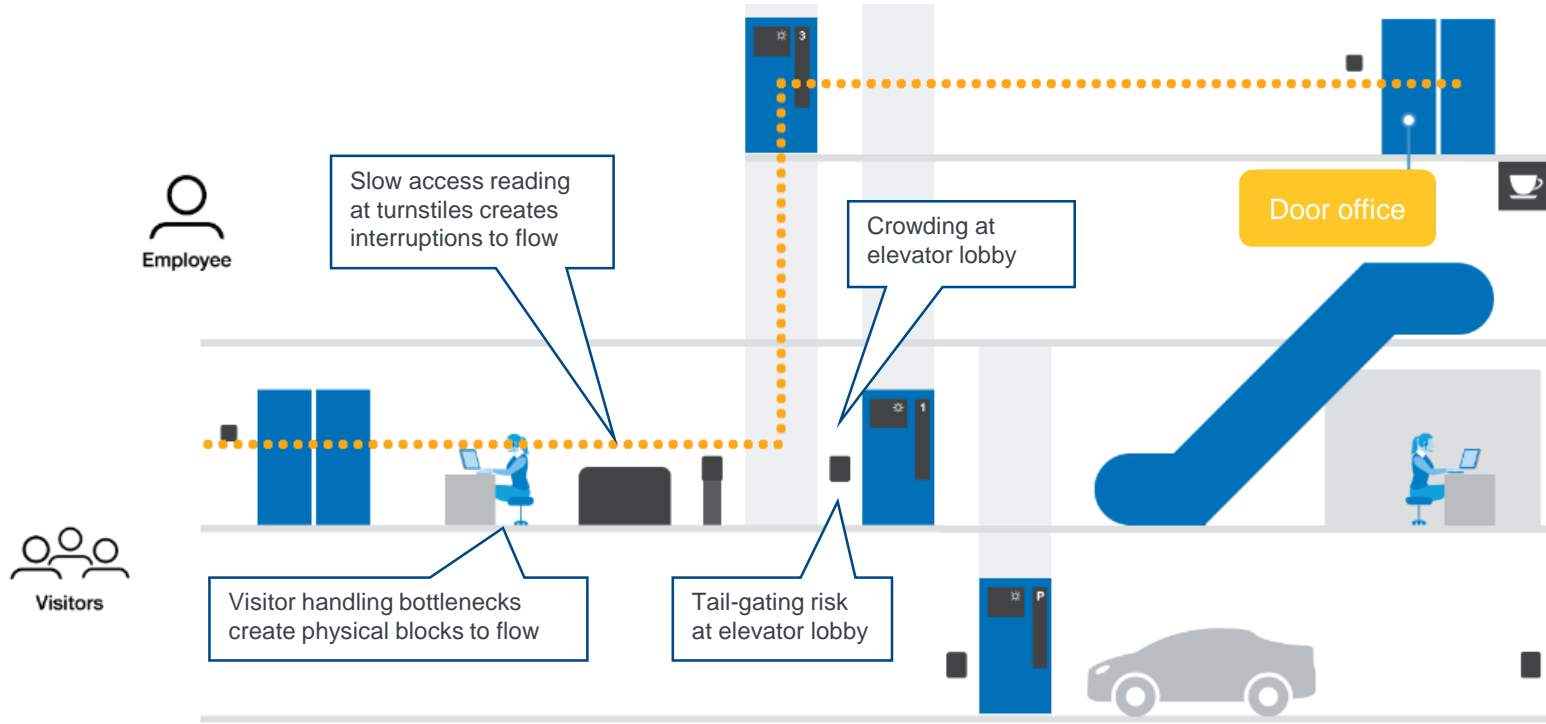
After adjustments



The text "People Flow Planning" is centered in the middle of the image. It is written in a large, white, sans-serif font. The background of the text is a blurred photograph of a modern office building's entrance with a glass revolving door and people walking on a paved plaza.

People Flow Planning

Touchpoints in end-user journeys



Studying people flow

Elevator performance analyzer (EPA)

- Detects floors served and distances travelled
- Detects passengers entering / leaving the car
- Detects door operations



Smart Lobby System

- Detects people flow at each lobby entrance
- Heat map views of people in lobby
- Dwell time of people at various spots in lobby
- Usage of space in the lobby

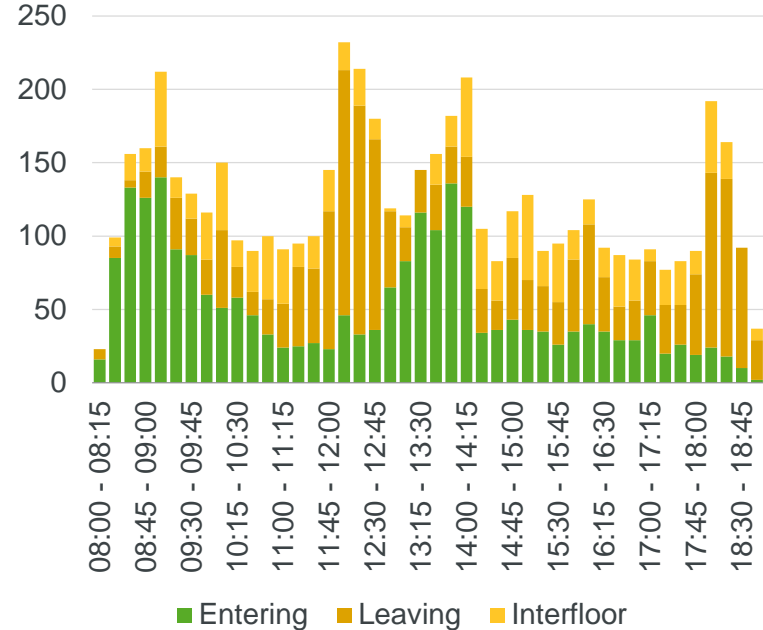


Singapore Office Tower

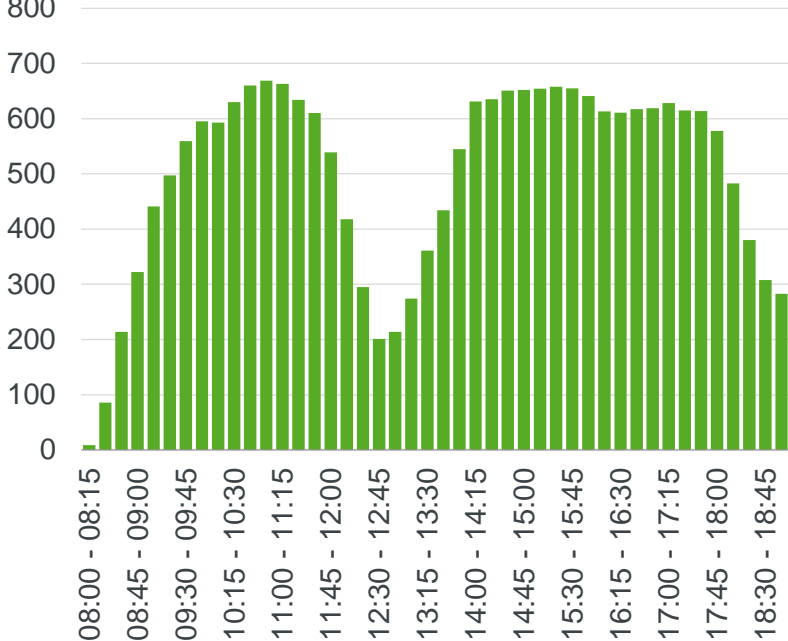
KONE ELEVATOR PERFORMANCE ANALYZER HELPS TO UNDERSTAND THE ACTUAL DAILY PEOPLE FLOW IN THE BUILDING

CASE

People Flow Profile



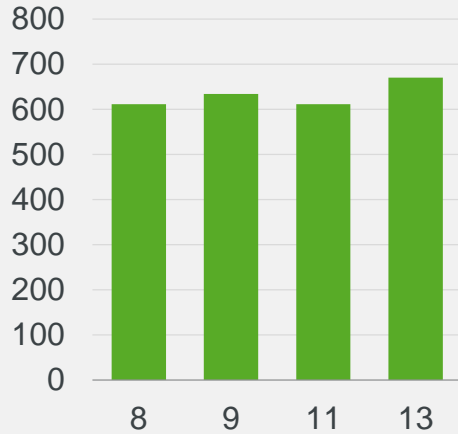
People Inside the Building



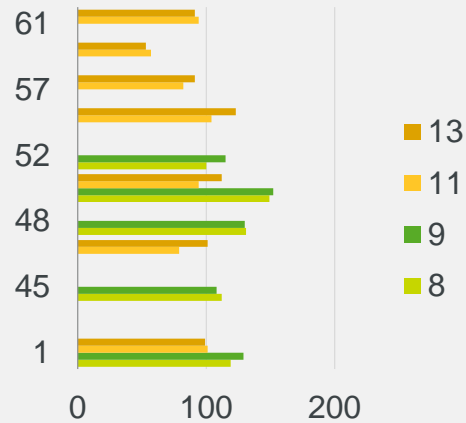
Shanghai Office Tower

➔ Non equal serving of floors by elevators in a group.

Number of Starts in the High Rise Group

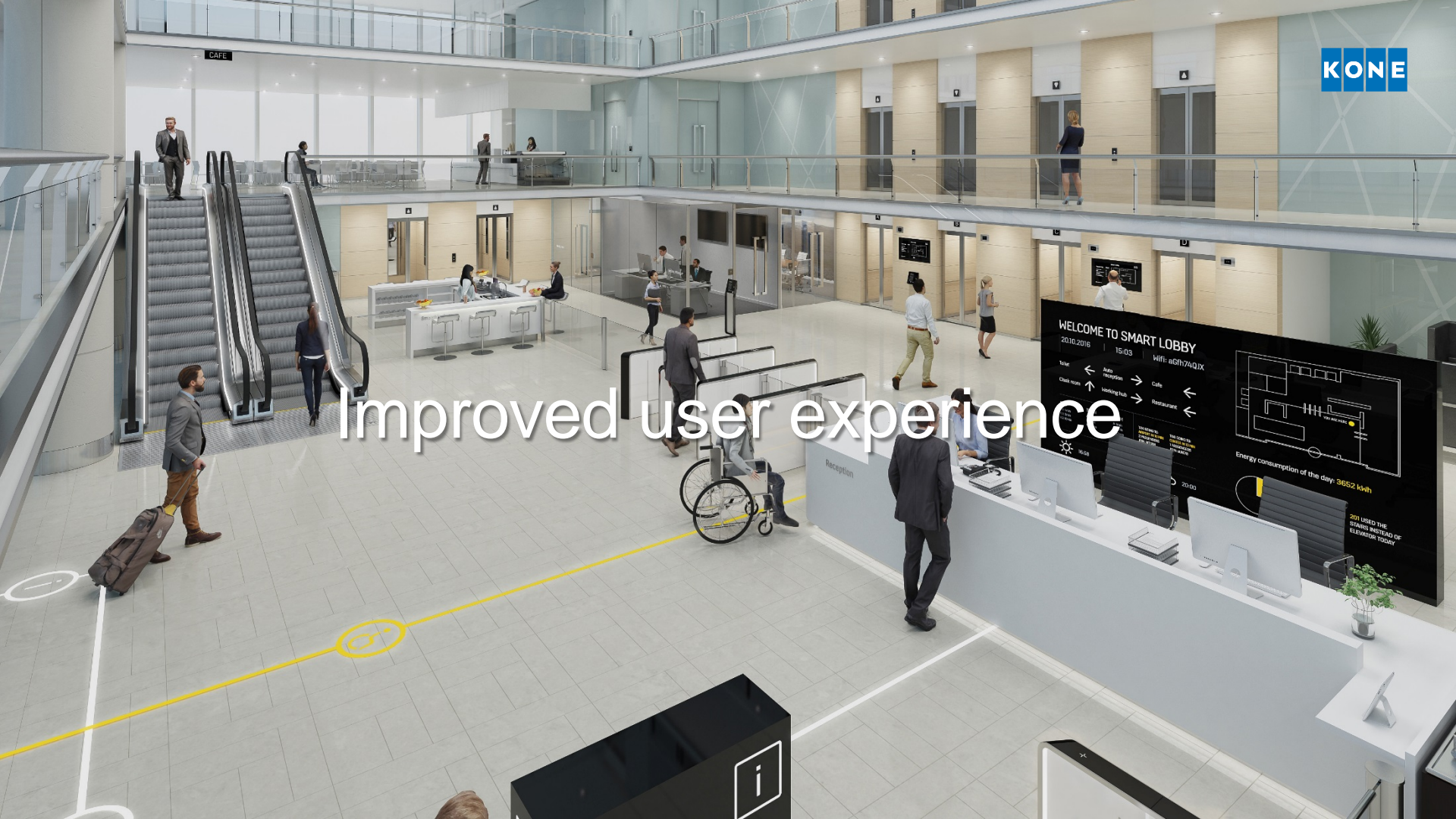


Number of Starts by Floor



Floor	Starts			
	8	9	11	13
1	119	129	101	99
4	-	-	-	-
45	112	108	-	-
46	-	-	79	101
48	131	130	-	-
50	149	152	94	112
52	100	115	-	-
56	-	-	104	123
57	-	-	82	91
58	-	-	57	53
61	-	-	94	91
Sum:	611	634	611	670

Improved user experience



World-class design and usability

FOR SMOOTH AND PERSONALIZED JOURNEY



Convenient tablet application for receptionists



A new way for calling elevator from mobile phone



A new way for calling elevator for VIP users from Apple Watch

C

2 3 7
8 9

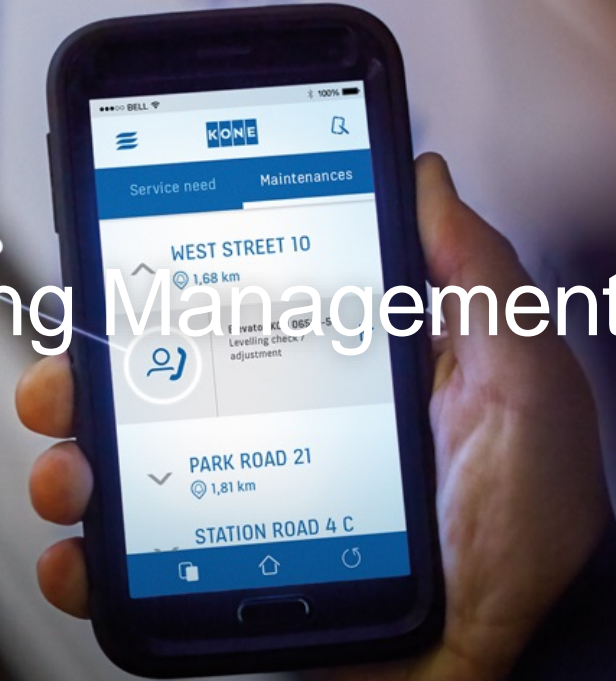


Information in lobby
and elevator car



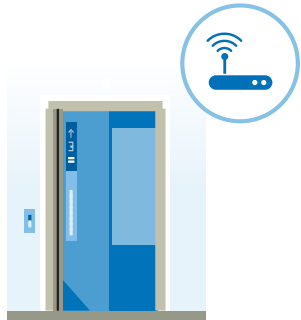
CETTE ELEVATEUR 2000
8 PERSONS
950kg

Improved Building Management



Intelligent services ensure better visibility and management

The system keeps a constant eye on critical parameters



Intelligent technology analyzes maintenance needs and predicts faults



You get trustworthy insights into the health of your assets and proposals for the future



Technicians get the right information at the right time



Is Your Building Still Competitive?



Safety and Reliability
Upgrades



Updated and Improved
People Flow in the Building



Increased Building Value
and Long Term
Sustainability



Improved user
experience



Improved
building management