

KONE Health and Well-being Solutions

HEALTH AND WELL-BEING

Introduction



- ① Introduction
- ② Health and well-being offering
- ③ Opportunities for discussion





As the world enters the new normal, safe and clean environments will be a priority. KONE's health and well-being solutions will help ensure a smooth transition to this changing reality.

Health and well-being solutions

CURRENT OFFERING



Within each of these larger categories, we have a set of solutions that will develop over time and as capabilities progress to commercialization

Maintaining

Keep your equipment smoothly running

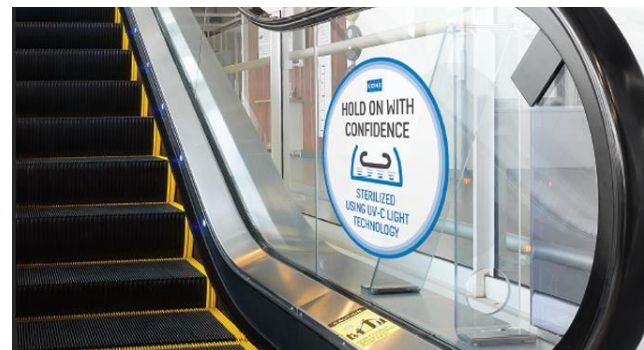
- KONE Care
- KONE Online and KONE Mobile
- KONE 24/7 Connected Services



Cleaning

Help promote the health and safety of your customers

- KONE Handrail Sanitizer **NEW**
- NanoSeptic - Self-cleaning surface products **NEW**
- KONE Air Sanitizing System **NEW**
- Cleaning Equipment – best practices



Moving

Optimize your customer experience

- KONE PeopleFlow Planning (incl. Traffic Analysis)
- KONE RemoteCall
- KONE Elevator Call **NEW**
- KONE Integrated Solutions
- MAD:Germ-Free Elevator Solutions (Toe-To-Go, Touch-To-Go)
- Facility Customer Stickers



MAINTAINING

*Keep your equipment
smoothly running*

KONE



KONE Care

FLEXIBLE SERVICE TAILORED TO YOUR NEEDS



KONE Care is a customizable maintenance program designed to keep you operating at peak performance. No matter where you purchased your elevators and escalators, we've got a plan to fit your building's needs.

KONE offers quick access to authentic OEM spare parts, as well as quick access to KONE software updates.

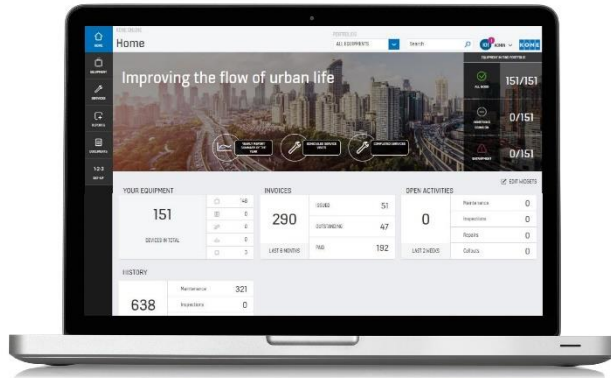


- Tailored service means you choose only the maintenance you want
- KONE 24/7 Connected Services provides usage info in real time for predictive maintenance
- KONE Online and KONE Mobile keep you up to date at all times



KONE Online and KONE Mobile –

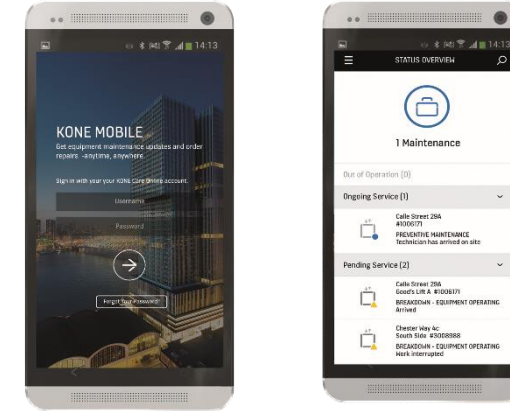
Stay up to date anywhere, anytime



KONE Online – INFORMATION WHEN YOU NEED IT

Through our digital channels, you and your team can stay up to date around the clock

- Remote real-time visibility on equipment status and maintenance work
- Condition of your equipment
- Review past, current, and future maintenance work

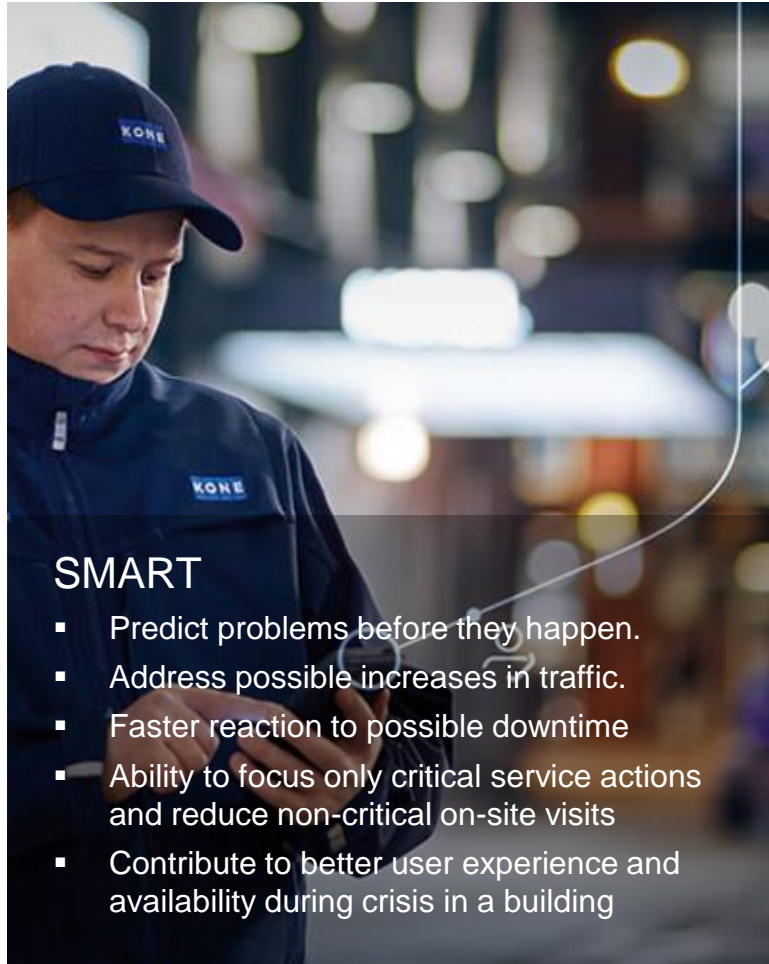


KONE Mobile – REAL-TIME UPDATE ON THE GO

This is especially important if:

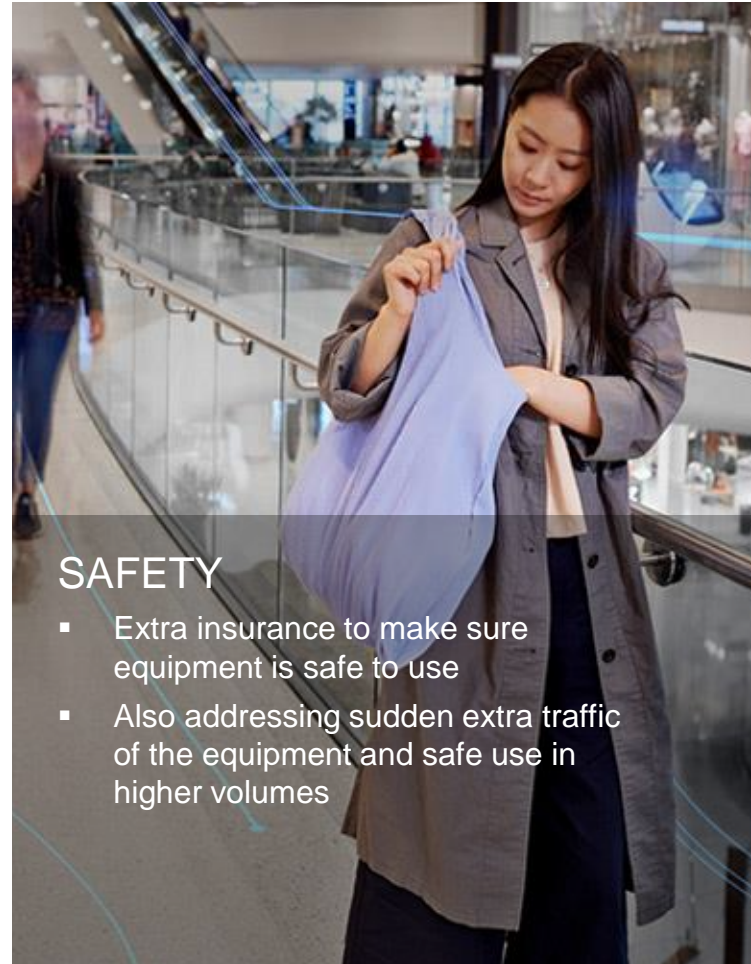
- You are managing multiple sites
- You are not able to be onsite all the time and need to work remotely
- You need to report the status of your equipment to others
- You need to get-in-touch with your KONE contacts with a single tap.

KONE 24/7 Connected Services

A KONE technician wearing a dark blue uniform and cap with the KONE logo, looking down at a device in his hands at night. The background is blurred with city lights.

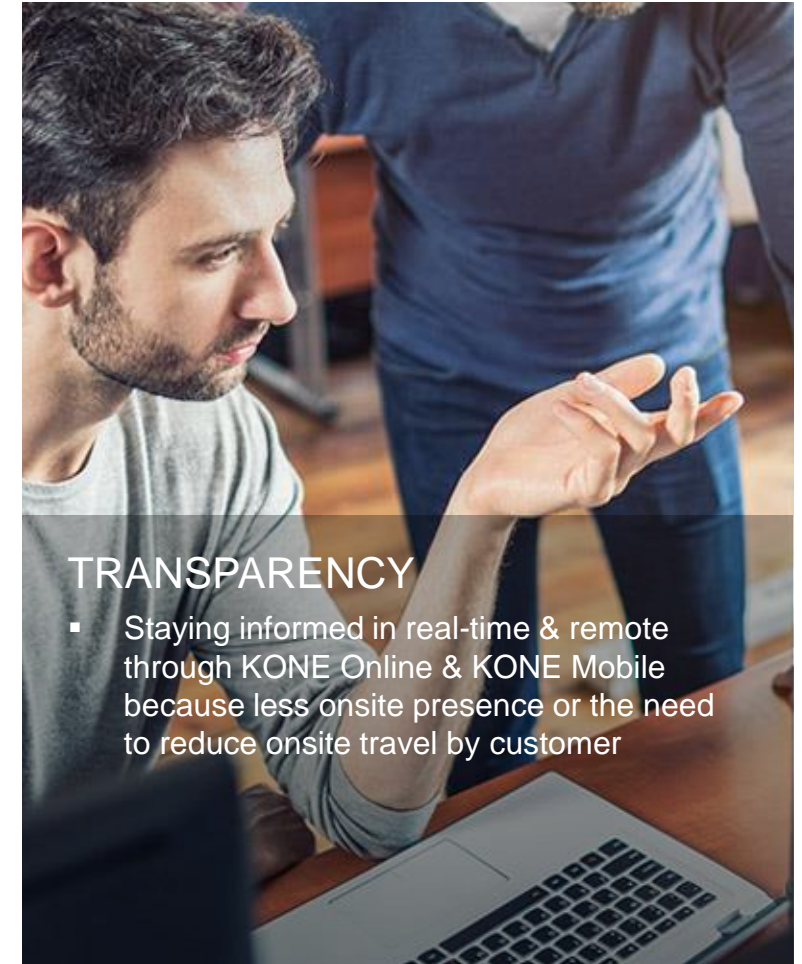
SMART

- Predict problems before they happen.
- Address possible increases in traffic.
- Faster reaction to possible downtime
- Ability to focus only critical service actions and reduce non-critical on-site visits
- Contribute to better user experience and availability during crisis in a building

A woman in a grey coat stands on a modern staircase with glass railings, holding a light blue garment. The background shows a multi-level building interior.

SAFETY

- Extra insurance to make sure equipment is safe to use
- Also addressing sudden extra traffic of the equipment and safe use in higher volumes

A man with a beard, wearing a grey t-shirt, sits at a desk with a laptop, gesturing with his hand while looking at the screen. Another person in a blue shirt is partially visible in the background.

TRANSPARENCY

- Staying informed in real-time & remote through KONE Online & KONE Mobile because less onsite presence or the need to reduce onsite travel by customer

KONE 24/7 Connected Services



A round-the-clock diagnostics service that gathers data on your equipment's condition.

Ensure equipment reliability while catering maintenance services to your specific needs that current situation requires

- Minimize disruptions and maximize availability of critical elevators to guarantee optimal people flow
- Optimize on-site maintenance work required by spotting critical service needs and planning accordingly (to secure social distancing)
- Keep staff up to date on equipment status

1 ROUND-THE-CLOCK MONITORING

We keep a constant eye on how your equipment is performing.



2 INTELLIGENT ANALYSIS

Intelligent technology analyzes maintenance needs and detects potential problems before they cause disruption.



3 TIMELY ALERTS

Our technicians get the right information at the right time to help them fix problems.



4 CLEAR REPORTING

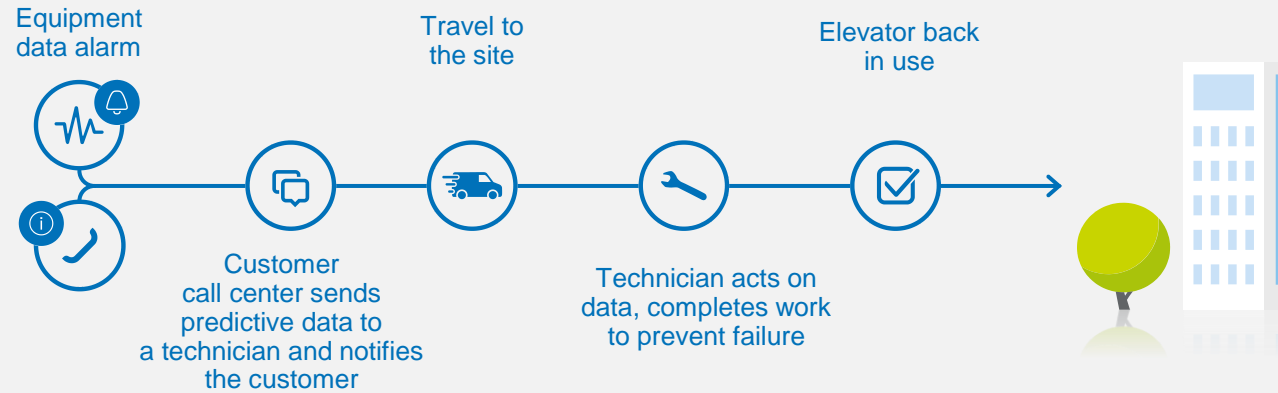
We'll keep you fully informed about all the work we do and what the outcome was.



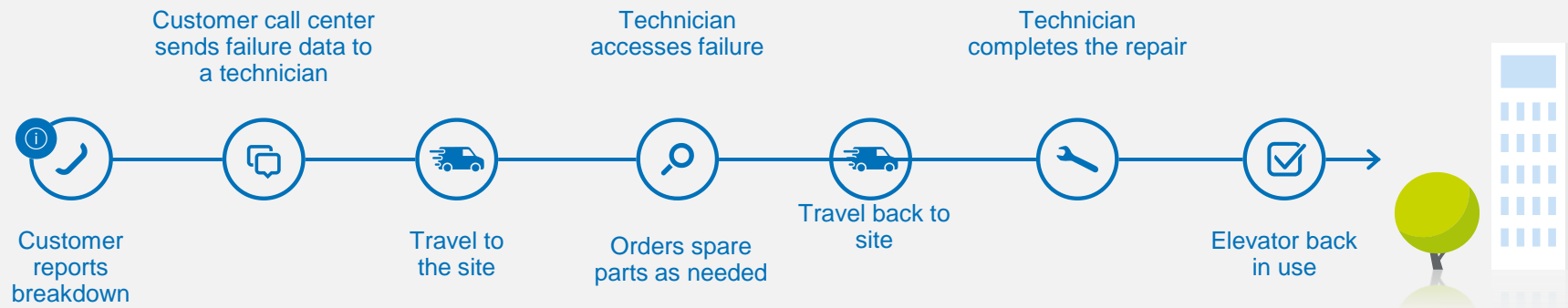
What makes intelligent services different



New revolutionary process with KONE 24/7 Connected Services



Traditional process



- 24/7 watch so you don't have to
- Data-based diagnosis
- More effective service procedure
- Taking action before a shutdown occurs

CLEANING

*Help promote the
health and safety
of your customers*



KONE Handrail Sanitizer

For escalator and autowalk



Encourage passengers to “hold-on” to handrails

- **Effective At Killing Bacteria And Viruses**
 - KONE Handrail Sanitizer* utilizes UV-C LED light technology which is known to kill up to 99.9% of E.coli bacteria.
- **How it works?**
 - KONE Handrail Sanitizer* installs inside the handrail balustrade enclosure – safely out of sight and out of reach of passengers. The durable LED bulb, rated for up to 20,000 hours, focuses its germ-destroying light on the full width and sides of the handrail as it passes through.
- **A Universal Solution**
 - KONE Handrail Sanitizer is an easy upgrade for new installations and for retrofitting existing escalator and autowalk, regardless of equipment manufacturer.



Demonstrate your commitment to passenger safety with sanitized handrails that encourage “hands-on” ridership.

KONE Air Sanitizing System

For elevators

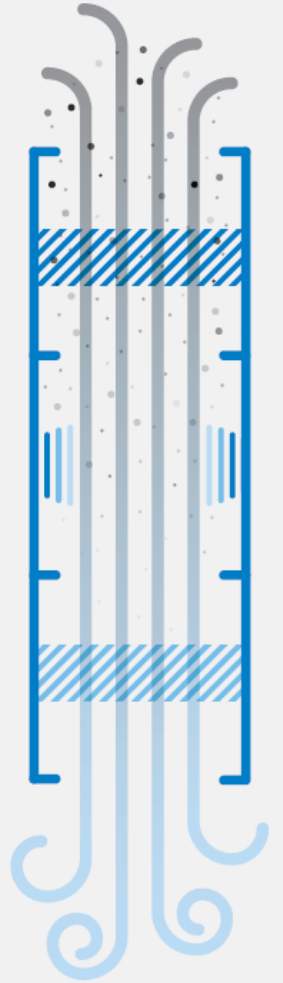


A system based on the same principles as hospital sterile room technology, offers an effective antidote to dirty elevator air.

- **The Power of 2-step Filtration (MERV 13)**
 - KONE Air Sanitizing System employs a double dose of MERV 13 Filters (Minimum Efficiency Reporting Value) filtration technology to help remove these particles for a cleaner, safer elevator environment.
- **An Extra Shot of Germicidal Light**
 - KONE Air Sanitizing System employs this germicidal light frequency as an additional line of defense between the two pleated MERV 13 filters, effectively sanitizing elevator air.
- **A Safe, Quiet Workhorse**
 - an ultra-quiet (38 dBA to 62 dBA) fan, mounts above the cab, with rubber dampeners to further isolate any noise.
 - Variable speed (15-100%) 710 CFM fan can be controlled with supplied wireless remote.
 - Built-in triple safety features protect workers during equipment servicing.

3-STAGE CLEANING PROCESS

- ➔ Negative pressure continually sucks air into sanitization chamber.
- ➔ Dirty air is forced through multi-layered MERV 13 filters.
Removes cough/sneeze particulates, smoke, smog, and many allergens.
- ➔ UV-C light inactivates bacteria and viruses.
- ➔ To ensure maximum filtration, air passes through a second filter rated MERV 13.
Equivalent to those used in hospitals' general surgery areas.
- ➔ Sanitized air flows into the elevator.



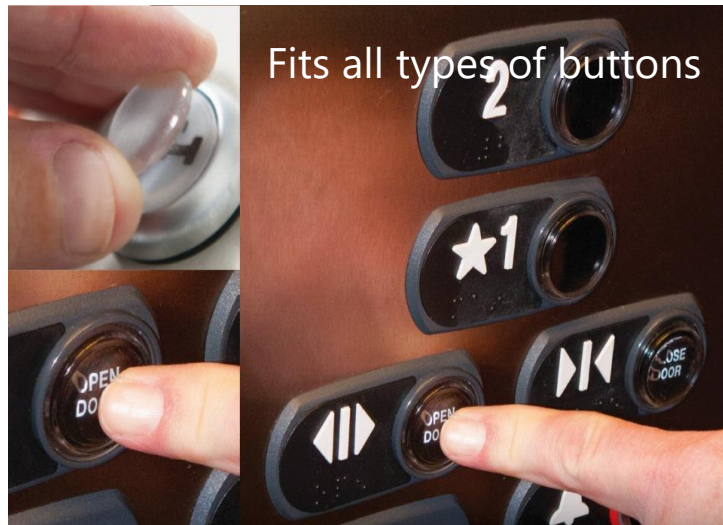
NanoSeptic®

Self-cleaning surface products



- Attach via removable adhesive (no residue left after removal) to high-touch areas such as elevator buttons, touchscreen surfaces and elevator cab handrails.
- Mineral nanocrystals harness the power of visible light to create a powerful self-cleaning oxidation reaction that continuously breaks down all organic contaminants.
- Created using technology rather than toxins, using no chemicals, heavy metals or diluted poisons - GREEN!
- Just peel and stick. Lasts three months (change once a quarter).

Elevator Buttons



Surface Wrap



Actual surface design is a faux brushed aluminum finish featuring self-cleaning messaging.



Optically Clear Screen Covers



Cleaning Equipment – best practices

Surfaces to disinfect:

Elevator buttons, elevator and escalator handrails, car walls, elevator doors, automatic building doors or other equipment surfaces to stop a virus or bacteria from spreading

Disinfectant selection, application and safety:

Follow recommendations from applicable public health authorities, e.g., CDC or WHO

Chemicals reactions are not immediate - damage may be delayed

- **To avoid damaging equipment surface, ensure that disinfectant type and amount are appropriate. For example, Ethanol up to 75% concentration can be used on stainless steel without damaging the surface.**

Test new cleaning agents on a small, nonvisible area

Most materials durability has been tested with standard cleaning solvents

UV light can be used to sterilize air and surfaces

- **Provided correct light frequency and end-user protections.**

Do NOT spray a cleaning solvent directly onto a surface

- **It may leave marks or get inside, damaging the electronics. Splashing can also spread microbes.**

Do NOT use acids or chloride-containing agents

- **They can permanently damage stainless steel surfaces.**

Never use mineral spirits, paint thinners, strippers or any petroleum-based products on plastic parts (e.g. elevator buttons or displays)



KONE

MOVING

*Optimize your customer
experience*

KONE People Flow Planning & Consulting



As environments are being reinvented in real-time, we need to think and act differently

Using KONE's expert knowledge, data, and simulation tools, we can provide an understanding of how physical distancing measures impact people flow in a specific building, and what measures could help reduce crowding and bottlenecks.

How many people can we let into an elevator at a time, given the physical distancing guidelines?

If we can only safely allow few persons in an elevator at a time, how may it affect waiting time?

What can we do to show to our tenants that we are taking actions to keep People Flow safe and efficient in the building?

KONE offers three tiers of customer deliverables to both deploy our existing People Flow capabilities, and to help our customers re-open their businesses.



BEST PRACTICES AND GUIDELINES

Segment specific people flow examples, KONE's health and safety guidelines and introduction to our health and safety solutions.



DATA INTO INSIGHTS

Customer specific elevator traffic analysis and safe lobby guidelines, supporting re-entry to workplaces in a controlled way.



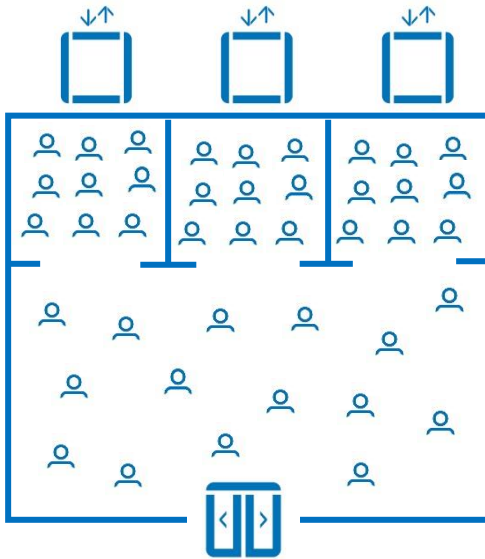
PEOPLE FLOW PLANNING

Holistic service delivered by a team of architects, elevator specialists and data scientists. End-result is bespoke recommendation for your needs.

Traffic Analysis

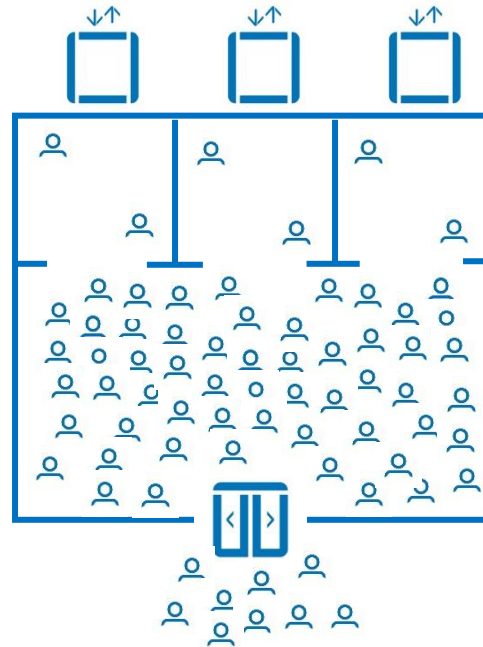
HELP EFFECTIVELY MANAGE TRAFFIC IN THE BUILDING

PRE PANDEMIC



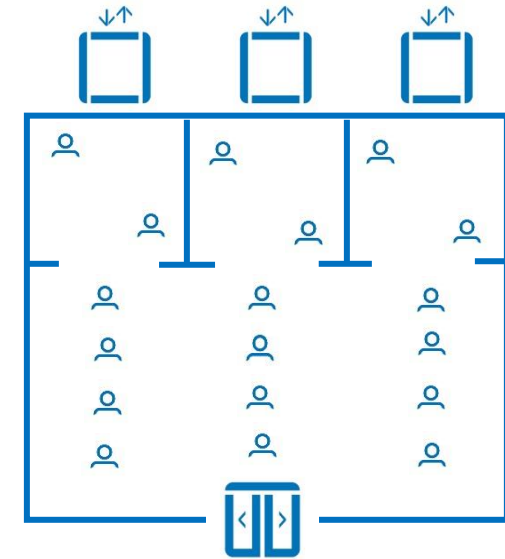
- No staggering time
- 12 people / elevator
- Handling capacity: 99 ppl / 5 min
- Arrival rate: 16.5 %
- Time to fill building: 30 min
- Average waiting time: 27 sec

POST PANDEMIC



- **No staggering time**
- 2 people / elevator
- Handling capacity: 36 ppl / 5 min
- Arrival rate: 16.5 %
- Time to fill building: 84 min
- Average waiting time: 28 min

POST PANDEMIC






- **Staggering time**
- 2 people / elevator
- Handling capacity: 36 ppl / 5 min
- Arrival rate: 6 %
- Time to fill building: 84 min
- Average waiting time: 56 sec

Traffic Analysis

HELP EFFECTIVELY MANAGE TRAFFIC IN THE BUILDING



		Elevator System Parameters (examples)				
Number of elevators in group		2	3	4	4	6
Number of floors served		4	7	10	15	15
Car speed (fpm)		200	350	350	350	500
100% total population for group		450	600	1000	700	1400
		Handling Capacity				
Number of people transported in 5 minutes		21	30	35	29	51
Number of people transported in 1 hour		252	360	420	348	612
		Minutes to fill the building (based on population %)				
100% population		113	100	143	117	140
50% population		56	50	71	58	70
25% population		28	25	36	29	35
10% population		11	10	14	12	14

Assumptions

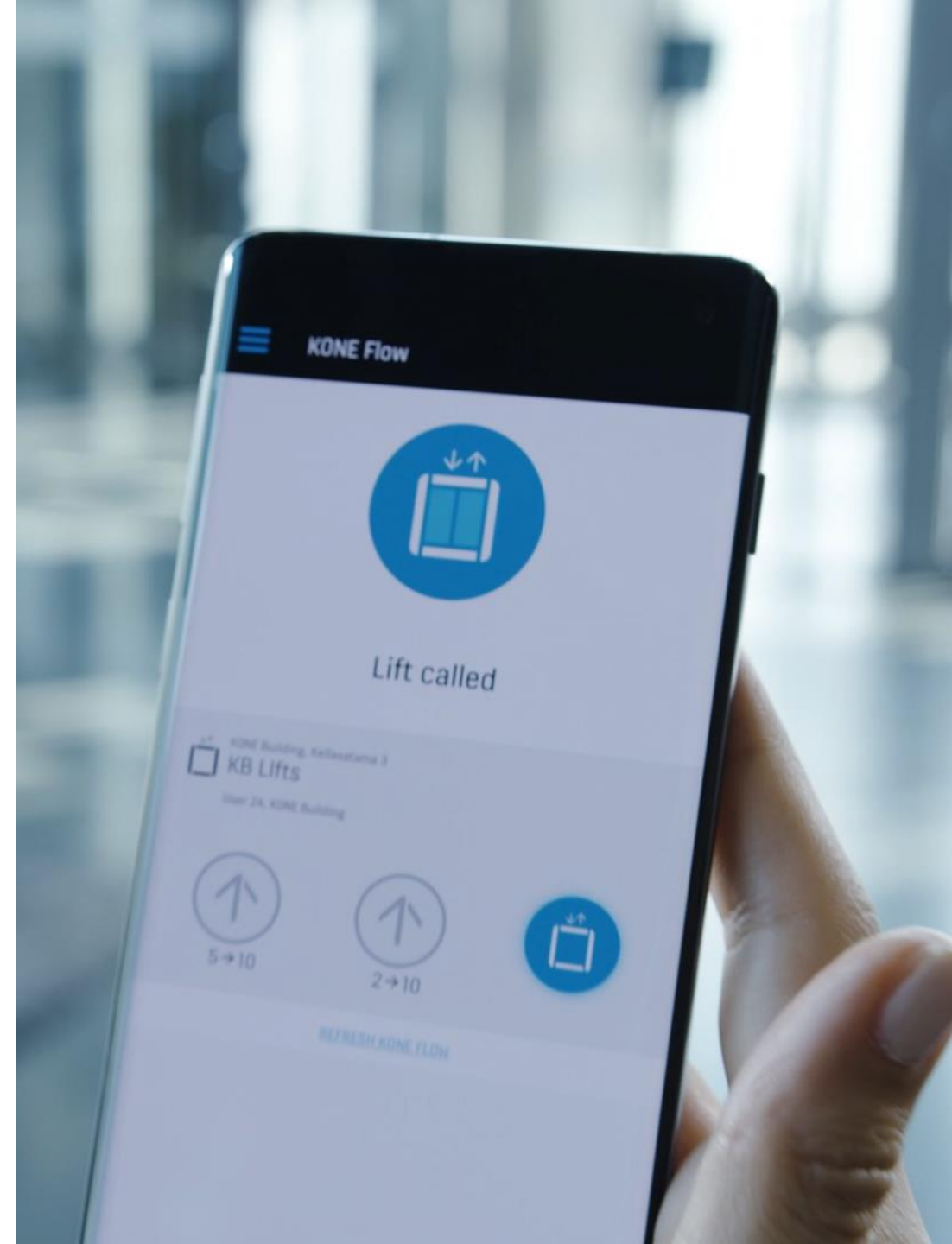
- Up-peak scenario only (100% incoming; 0% interfloor; 0% outgoing)
- Bottom landing is the only entry/exit floor
- Each floor above main landing has equal population
- Number of people limited boarding the elevator at the main landing
- Traction Elevator
- Controller Type: early vintage micro-processor
- Dispatching Type: conventional
- Door type / size = 42" wide / center-opening doors
- Standard acceleration rates
- 12ft floor heights

KONE Elevator Call

INTRODUCTION

- KONE Elevator Call is a cloud-based solution that allows a user to call an elevator with their smartphone - no need to touch elevator buttons.
- KONE Elevator Call is used with the KONE Flow app to make elevator calls from anywhere in the building.
- The KONE Flow app is available for smartphones using the latest iOS and Android operating systems

KONE Elevator Call



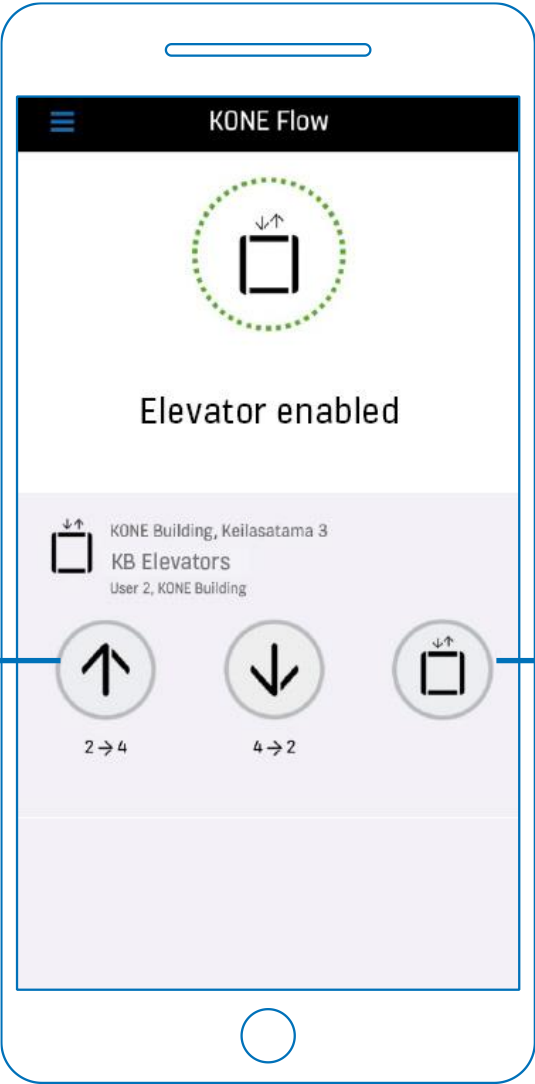
KONE Elevator Call



KONE FLOW APP: FUNCTIONALITY & USAGE

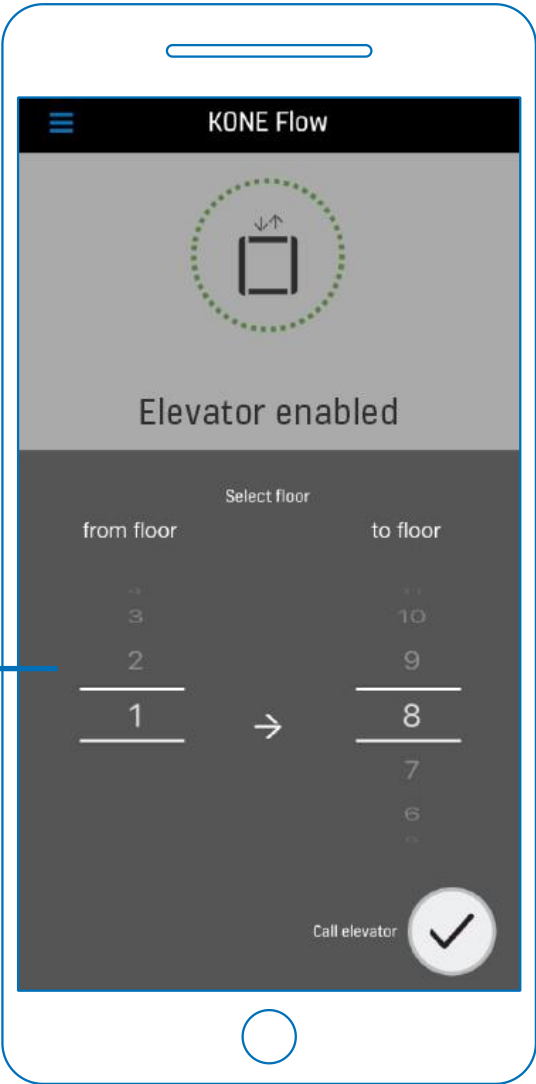
Users can add shortcuts to their favorite floors.

The user calls an elevator by tapping the shortcut; the name of the allocated elevator is displayed in the box above.



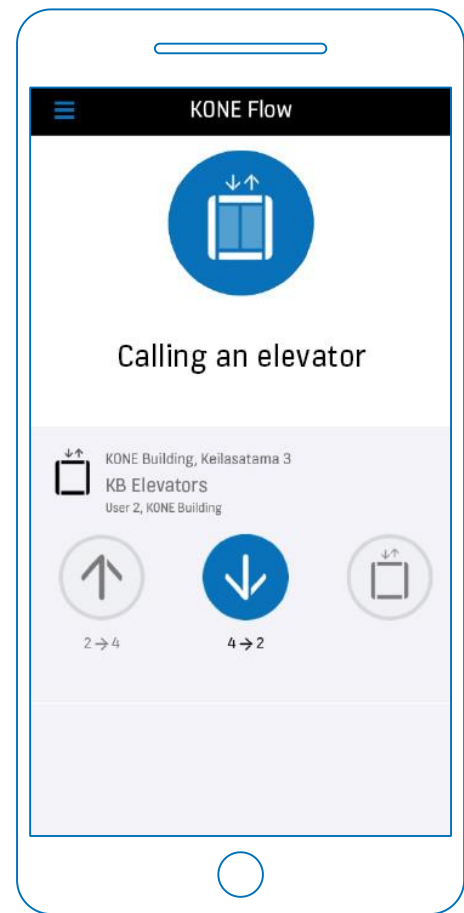
Users can also set “from” and “to” floors for every call.

If the desired journey is not part of the favorite list, the user can call an elevator by tapping the elevator car icon and then selecting their departure and destination floors.



KONE Elevator Call

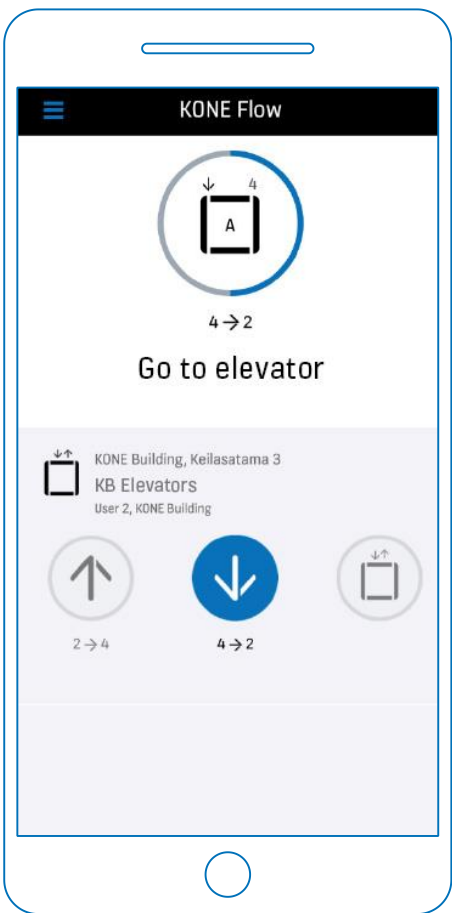
KONE FLOW APP: HOW IT WORKS



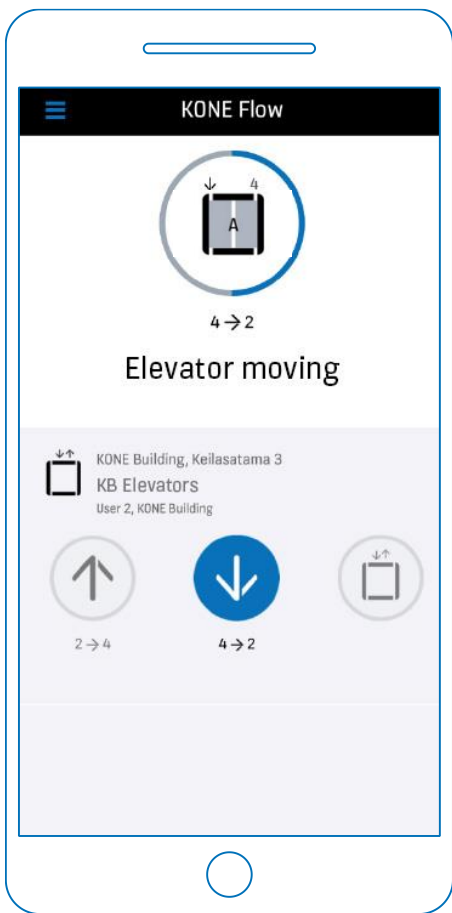
User calls the elevator



Elevator call is processed



Allocated elevator is displayed



Elevator journey begins

KONE Elevator Call

KONE FLOW APP: SECURE ACCESS

- 1 Access to Cloud Application Programming Interfaces (APIs) is authenticated and encrypted.

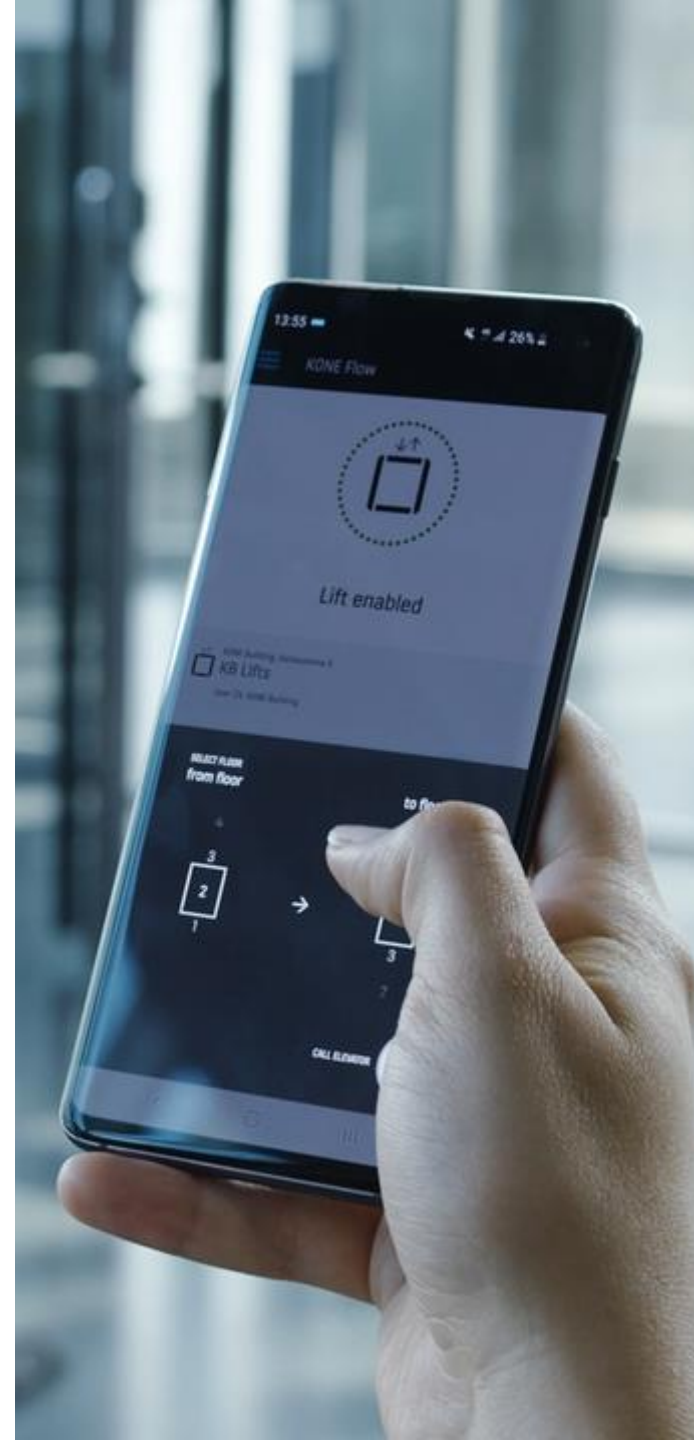
KONE Elevator Call's cloud services run on secure IoT cloud platforms.

- 2 All elevators have independent control, emergency intercom, and safety systems. KONE Elevator Call operates separately from these.

It is impossible to stop the elevator car or control the elevator's functions remotely via the KONE Flow application.

- 3 Our cybersecurity monitoring system alerts us to suspicious events to ensure a quick response to potentially harmful activity.

We keep a constant eye on our digital environments.

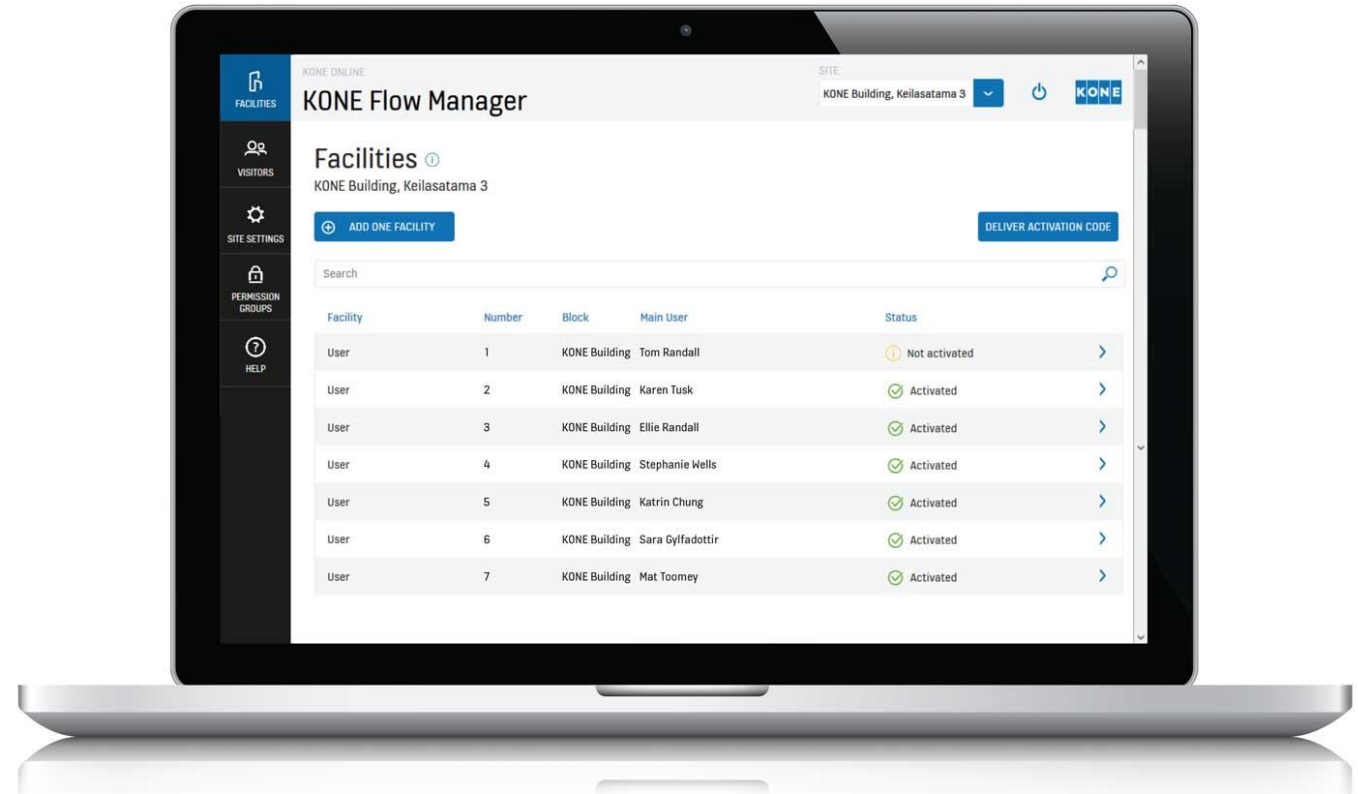


KONE Elevator Call



MANAGING KONE ELEVATOR CALL IN YOUR BUILDING

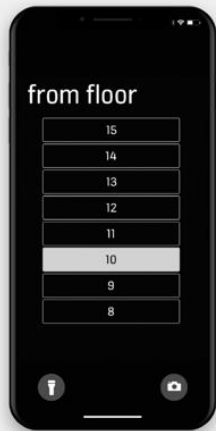
- The KONE Flow Manager tool is used for account creation, configuration, and management of KONE Elevator Call users' access throughout the building.
- There is no limit to the number of the KONE Elevator Call users within a building.
- The tool is intended for building admin staff (e.g. reception staff security, facility managers).



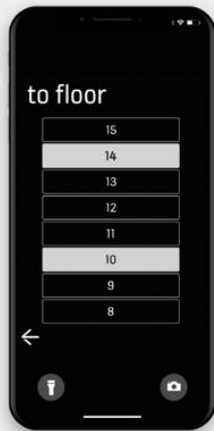
KONE RemoteCall™

KONE RemoteCall™ is an innovative **mobile application** for smartphones. It allows passengers to make personalized elevator calls **quickly and conveniently** from anywhere in the building. It is available for mobile phones using the latest operating systems.

HOW IT WORKS



1 User indicates departure floor



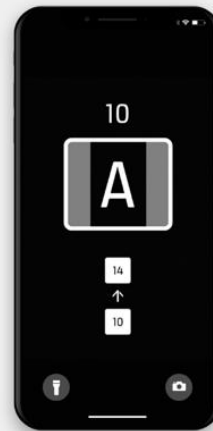
2 User indicates destination floor



3 Elevator call is processed



4 Allocated elevator is displayed



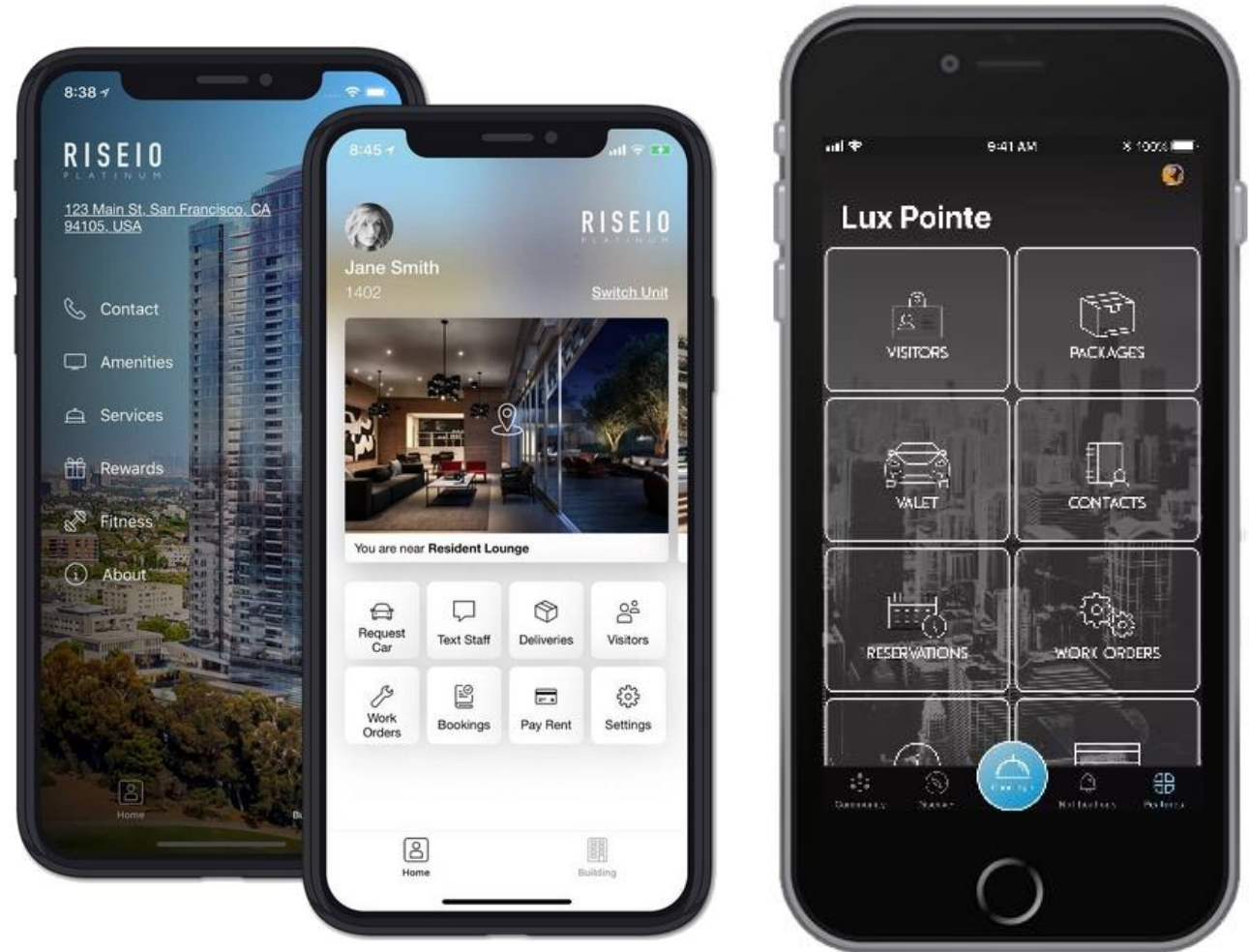
5 Elevator arrives, passenger goes directly to the indicated destination



KONE Integrated Solutions

THIRD PARTY BUILDING APPS

- Integration into existing building apps
- Only one app for building to manage
- Partnership development
- Flexible
- Future opportunities



MAD: Germ-Free Elevator Solutions

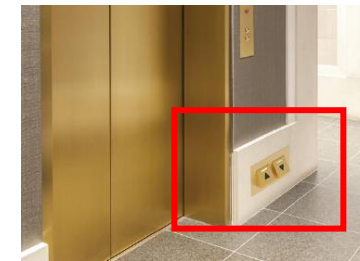
Offered by KONE



Reduce the risk of transferring germs by creating a hands-free experience

MAD: Toe-To-Go Foot-Activated Call Button

- Allows activation of hall & car station buttons by shoe
- Robust durable design to withstand abuse
- Stainless steel or PVD brass finish
- Surface-mount option for hall station
- Keypad option for COP
- No code alteration or submission required for modification



MAD: Touch-To-Go Touchscreen System

- Easy-to-clean glass surface
- Clean with any glass-approved solution, including 70% alcohol to kill germs and viruses.
- Unlike mechanical pushbuttons, contaminants will not get trapped on the smooth glass surface.
- Calls can be placed by touch with a gloved or covered hand, which could further prevent the transfer of germs.
- Standard sizes available in 21" and 15".



Facility elevator stickers

KONE or no KONE logo options (these stickers are in development)



Floor Stickers (Can be used inside or outside the elevator to indicate where to stand)

Wall Stickers (if an elevator floor is carpeted these are other options)



Outside Elevator Stickers



OPPORTUNITIES FOR DISCUSSION TODAY

- What do you think about these solutions and their applicability for your customers?
- What are some other most pressing issues we should discuss today?
- What are the biggest challenges facing your business in the current situation?



Dedicated to People Flow™



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