How digitalization is changing the buildings

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KONE CORPORATION
A typical day at KONE

~1.3 million units in service

~70,000 maintenance visits

> 450,000 customers

> XX orders booked

> XX units delivered

Operations in > 60 countries

We move > 1 billion people per day
Urbanization Drives growth

Need for affordable, accessible housing
Need for safe and reliable infrastructure
More mixed use and flexible spaces

Technological disruption Creates new opportunities

Smart, sustainable buildings
IoT and AI
Autonomous systems
Digital identification and verification
We have entered a new phase

Customers’ expectations are changing

New technologies bring opportunities to add value for customers in new ways

Co-creation with customers and partners

Increased differentiation
Customers want to buy outcomes, not product features
Customers’ needs and expectations are fundamentally changing

Changing use of buildings
Flexibility and adaptability play a key role

Ease & Convenience
Seamless experience increasingly important for building users

Speed
Speed and efficiency during construction time key KPI for customers
Digitalization brings opportunities to add value for customers in new ways

All-new KONE Care™

Differentiating end-to-end in Modernization

24/7 Connected Services

Residential Flow
Customer co-creation for new services

- Mass customization becomes possible for services
- Customized service solutions designed together with customers
- People Flow Planning and consulting with many customers to improve journey times, use of floor space, and value
- Positive customer satisfaction
How it works

The system keeps a constant eye on critical parameters

Intelligent technology analyzes maintenance needs and predicts faults

Our technician gets the right information at the right time

You get trustworthy insights into the health of your assets and proposals for the future
Analyzing equipment data helps us predict the most common failures*

- **32% DOORS**
  Door opening and closing not working properly (significant increase in openings or closings) due to problem with curtain of light.

- **7% SIGNALIZATION**
  Malfunctioning push button preventing optimum use of elevator or resulting in complaints from users.

- **5% EMERGENCY PHONE**
  Emergency phone not functioning properly.

- **22% CONTROL SYSTEM**
  Malfunctioning drive causing shaking or jerking during ride
  Elevator not moving due to problem with load weighting device or software issues.

- **8% ELEVATOR CAR**
  Misaligned magnetic switches resulting in poor leveling accuracy.

*Slide shows few examples of most common failures.
Examples of key parameters monitored

- Doors opening and closing behavior
- Push button functioning
- Stopping accuracy and stopping behavior
- Position and movement in shaft
- Mileage and drive time
- Usage statistics
Data tells us when equipment needs attention

EXAMPLE: ELEVATOR DOOR REOPENINGS

- Significant increase in openings
- Indicates curtain of light issue
- Visible at least two weeks earlier, helping to prevent breakdown
Investing for a digital future in our entire business

CONNECTED CUSTOMERS
Increased business value through better communication and productivity

CONNECTED USERS
New, personalized experiences for users in residential and commercial

CONNECTED EQUIPMENT
Connecting >1 million units to the cloud

CONNECTED EMPLOYEES
Supporting the collaboration and efficiency of our people and new mobile tools

KONE DIGITAL PLATFORM
Real-time data collected from the equipment, maintenance operations and people flow

- Elevators
- Escalators & Autowalks
- Doors & Turnstiles
- Maintenance Operations
Early symptoms found and proactively addressed and resolved during the first 6 months – any of which could have developed into equipment breakages.

“We want to contribute to a better living environment and increased quality for all our customers. Our lifts are an important part of the customer’s experience in our real estate, and we therefore want to minimize unplanned stops and maximize technical life, which requires new innovative ways to work with preventive maintenance and service.”

- Peter Lind, Facility Manager

- Swedish property owner
- 53 properties located in central Stockholm and surrounding areas
- KONE 24/7 Connected Services installed in 65 elevators to support a high-quality customer experience for Humlegården’s own customers