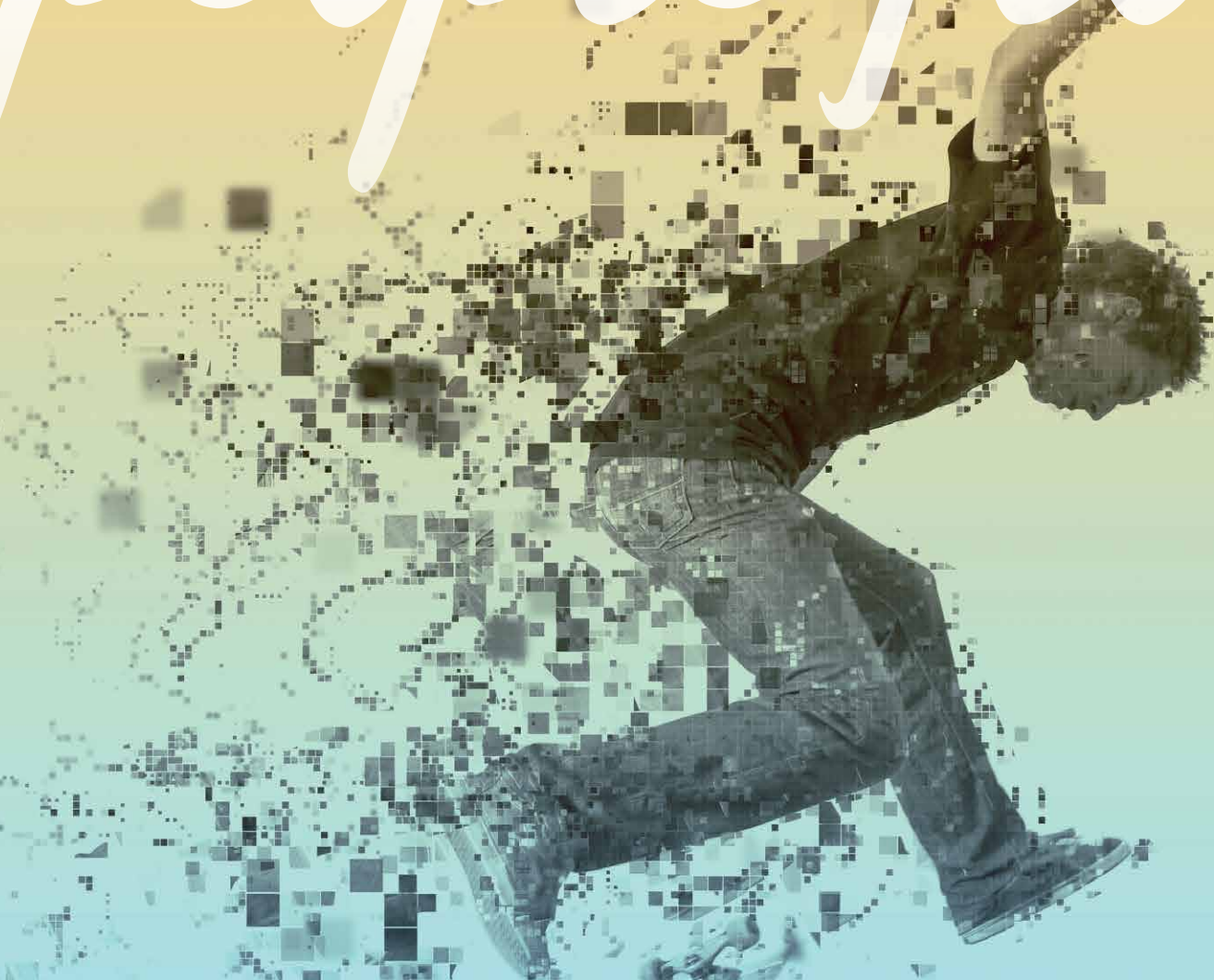


people flow



Driving change with **DIGITAL**

+

NEW RULES OF THE GAME
SERVICE TECHNICIAN'S BEST FRIEND
STRUCTURAL EXPRESSIONISM
ATTENTION: STARTUPS WANTED!
ACCESS ALL AREAS



Powering towards digitalization

Digitalization is changing the face of where we live and how we work. Rapid advances in the capabilities of sensors, connectivity, analytics and mobile technologies are redefining many industry sectors, from medicine to automotive; and from energy to construction.

For our business at KONE, it means using real-time data and analytics as preventive maintenance gets smarter. It also means improving customer experience through real-time transparency. Or it can mean sustainable, smart buildings making better use of energy and resources. For users, it means a better, personalized experience through the whole elevator and escalator journey, from access to destination.

We have a long and successful history of innovation in areas like technology, safety, and eco-efficiency. And in the drive towards digitalization, it is tempting for companies to try to master everything in-house. It can be more effective, however, to adopt a "digital culture", and co-create new products or services together with customers and partners. At KONE, this is something we are doing today and it is an area where we intend to lead.

Another aspect of digitalization is the potential to improve speed and efficiency, and we are working hard to bring innovations closer to customers, and get new services and solutions faster into the market. That is why we will establish both a new Technology & Innovation unit, and a New Services and Solutions business unit, which will be in place at the beginning of 2016.

The way people interact with their cities, buildings and their surroundings is changing. At KONE, digitalization means we can provide new value and new services for our customers and users and it means we can improve the quality and productivity of our operations.

I am very excited at the potential that lies ahead.

HENRIK EHRNROOTH
PRESIDENT & CEO, KONE CORPORATION

KONE IN BRIEF

KONE is one of the leaders in the elevator and escalator industry. The company has been committed to understanding the needs of its customers for the past century, providing industry-leading elevators, escalators and automatic building doors as well as innovative solutions for modernization and maintenance. The company's objective is to offer the best People Flow® experience by developing and delivering solutions that enable people to move smoothly, safely, comfortably and without waiting in buildings in an increasingly urbanizing environment. KONE is present in close to 60 countries with more than 47,000 dedicated employees and distributors to serve you globally and locally.

people flow



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Driving change with digital

As digitalization sweeps through the automotive industry, will today's major brands be the leaders of tomorrow?

TEXT DAVID NIKEL PHOTO GETTYIMAGES & VOLVO ILLUSTRATION VOLVO

Long at the forefront of innovation, the automotive industry gave rise to the first mass-scale assembly plants, while lean principles with origins in Japan lowered costs and increased efficiency, quality and reliability.

Today the industry has to continue to adapt to an unstoppable force that looks set to impact every aspect of the business. As we move from an analog to a digital society, digitalization presents a major challenge, yet massive opportunity if companies get things right.

Technology opens up opportunities for disruption from within the industry but also from unexpected external threats. Trends such as the rise of mobile connectivity, data and machine learning, 3D printing, cloud computing, Application Program Interfaces (APIs) and the sharing economy have broken down traditional barriers to entry and accelerated the speed of change. Blink and you'll miss it.

Names like Tesla, Uber and even Google are at the forefront of the automotive industry's digital transformation. How quickly the traditional players adapt to these challenges will dictate what role they have to play in the future of the car industry.

AN INDUSTRY IN TRANSITION

Industry analysts universally predict major change by 2020. According to Frost &

Sullivan, 70% of new car sales leads are likely to be generated digitally, while Gartner estimate there will be a quarter of a billion connected vehicles on the road, enabling new in-vehicle services and automated driving capabilities.

Such rapid digitalization requires new skills, flexible organizations and a sustainable approach to collaboration. The industry needs to adapt quickly to these new approaches, according to Professor **Paul Jennings** from WMG (formerly the Warwick Manufacturing Group) at the University of Warwick.

"Electric cars, connectivity and automation present a radical transformation of the industry. Previously an automaker's research and development was focused on mechanical engineering, but today it requires a multidisciplinary approach involving chemistry, electrical, telecoms, computer science, and even psychology," he says.

Hiring the best automotive engineering graduates will no longer be enough. Attracting the right mix of talent into the industry will be a vital component to future success. WMG runs an academy for local 14–18 year olds who are excited by digitalization but turned off by more academic disciplines. Targeting this age group is crucial to guarantee a future supply of multidisciplinary engineers to the industry.

"The industry recognizes they need to develop research skills and nurture new digital talent outside the traditional

engineering fields. This multidisciplinary approach is essential especially as right now, no one knows if the likes of Apple, Google and Microsoft will be collaborators or competitors,” adds Jennings.

Potential competition goes beyond products and into long-standing business models. The likes of Uber, Lyft, Relayrides and Getaround present the sharing economy as a viable alternative to owning a car. Many people wouldn't consider life without a car, but in growing, urbanized societies populated by a millennial generation who have grown up renting, leasing and streaming rather than owning, it's feasible that new car sales could face a long-term decline.

The impact of digitalization on the industry caught the attention of the public at the 2015 Consumer Electronics Show (CES), which was dominated by the connected car. Both established companies and newcomers used CES 2015 to demonstrate new technology and new business models, largely based on the Internet of Things (IoT).

For example, Nvidia unveiled a new Tegra X1 processor specifically designed for tablets and car dashboards, AT&T and Samsung announced a research partnership focused

on the connected car, while Volvo Cars presented a vision where connected cars and cyclists could be warned of dangerous close encounters.

ADAPTING TO A DIGITAL WORLD

“We are looking at how the safety tradition of Volvo can continue into the era of the connected car,” says **Jonas Rönnkvist**, Director of Business Development & Strategy for Consumer IT Services at Volvo Cars. “This is why we are currently pioneering the field of “Connected Safety” as we call it. With sensors, our cars have the possibility to detect potentially dangerous situations, for instance if there is slipperiness on certain sections of road. Soon they will be able to share this information in real time, through the cloud, with other cars and thereby contribute to a safer driving environment.”

He says everyone at Volvo Cars understands the challenge ahead.

“Traditionally it takes a couple of years to develop a new model, followed by a five-to-seven year production run, with a further twenty years of support and service. That thirty year time frame simply doesn't fit into the speed of change in the digital world.”

Rönnkvist uses the example of how quickly consumer technology is changing to highlight the challenge ahead. “If we incorporate a specific connector into a new car design, we run the risk of that connector being obsolete by the time the car hits the market. Just think about what phone you were using a couple of years ago, and what has changed in that time. We are shifting focus to work with software and standards instead of specific hardware to be sure our cars stay relevant in the future.”

BIG DATA IN THE VALUE CHAIN

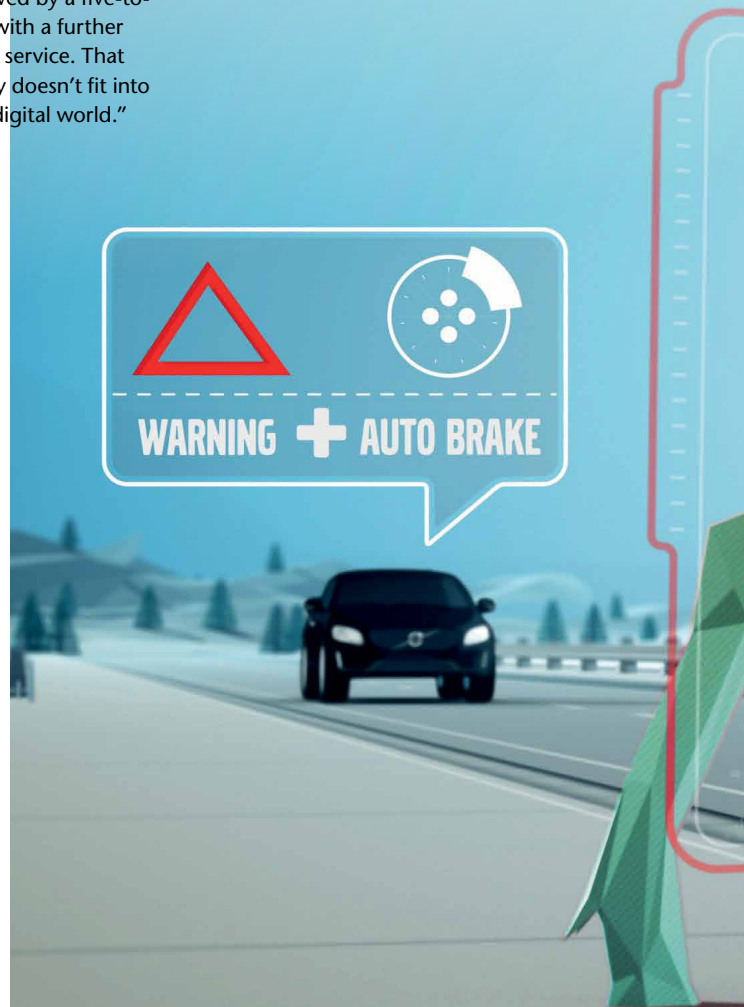
Away from the public eye, a group of IoT technologies otherwise known as the ‘Industrial Internet’ looks set to alter the way of working for the entire supply chain, from Original Equipment Manufacturers (OEMs) right through to operations on the factory floor.

Big data analytics should help brands and OEMs to make sense of the oceans of

“We are shifting focus to work with software and standards instead of specific hardware to be sure our cars stay relevant in the future.”



Auto pilot: Mode of the future.



data available to make improvements to performance, logistics optimization, and predictive service and warranty information. Remote diagnostics and 3D printing can bring about innovations in after-sales service, taking the customer experience to whole a new level.

A concrete example of how the Industrial Internet will change the driving experience comes from insurance firm Aviva. Their black box technology monitors a driver's behavior on such factors as acceleration, braking and cornering. The safest drivers earn a reduction in their insurance premium of up to 20%.

THE TIME FOR STRATEGY IS NOW

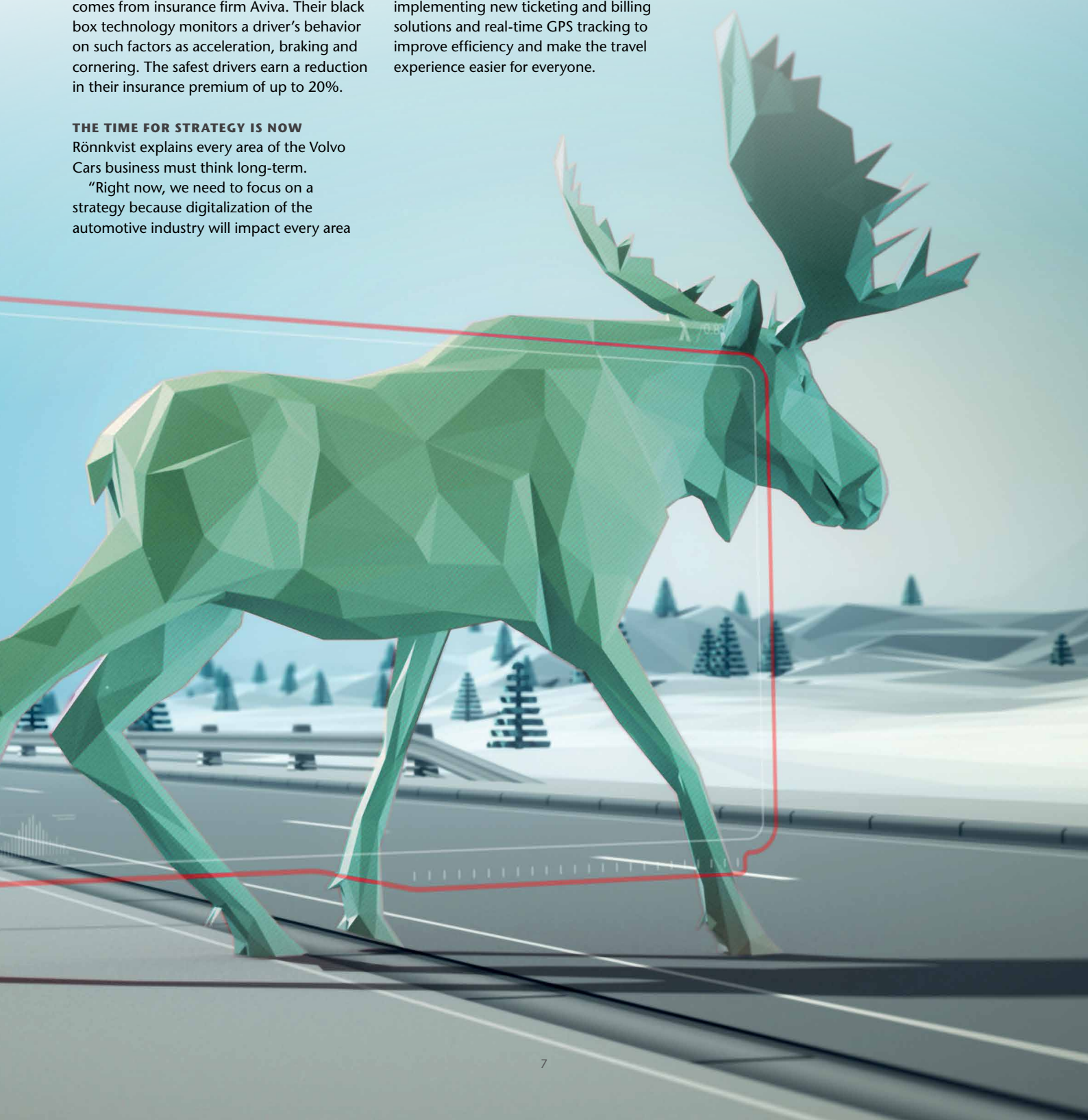
Rönnkvist explains every area of the Volvo Cars business must think long-term.

"Right now, we need to focus on a strategy because digitalization of the automotive industry will impact every area

of our business: electronics, mechanics, the environment, active and passive safety, sales and service. We must also consider the bigger picture and understand that digitalization isn't just a trend affecting the automotive industry."

Indeed, digitalization is impacting travel and the way we move about beyond the car. Our public transport networks are implementing new ticketing and billing solutions and real-time GPS tracking to improve efficiency and make the travel experience easier for everyone.

"Digital and connected solutions will impact every part of society from healthcare to professional services," adds Rönnkvist. Twenty years from now we will be able to reflect on the journey that we are only just beginning. /



New rules of the game

Digitalization has the power to transform industry, improve quality and bring innovations to the market more quickly. Antti Koskelin, CIO at KONE explains how and why KONE is shaping its operations to make the most of the biggest trend in business.

TEXT SCOTT MCMAHON ILLUSTRATION ISTOCK

Digitalization is a global phenomenon that touches all of our lives.

In fact, many of our day-to-day activities have been transformed over the last decade.

Secure online banking, driving and transport, irrigation, crop farming, even disease prevention services have all been enhanced by digitalization.

Yet despite the changes so far, almost every industry sector still faces a challenge to rethink the notion of what creates value for customers.

As a leader in its industry, KONE has been adapting to digitalization for some time, working hard to combine technology know-how and business agility, while adjusting to changes in the market and customer needs.

“Digitalization has an impact on every area of our business, and it is very, very exciting,” says **Antti Koskelin**, CIO at KONE.

He adds that it has become a basic competitive requirement. “We are moving quickly. Is there another option? Can we stand still? No. if we want to have the best elevator, escalator and door selection for the best people

flow experience – as well as the best performing field service – we will not get there by not doing anything.”

THE ROAD LESS TRAVELED

One of the main challenges for any company of course, is to have the courage to continuously renew processes and approaches.

Antti explains: “Take the car industry as an example. Today, the majority of the innovation in the car industry comes from software and digitalization. You start out with

a very mechanical product, wheels, a chassis, engine, and some other components.

“But now we see autonomous cars, remote servicing, and diagnostics, very software driven. Connected cars are a reality, and consumer services are being added to a traditional equipment and maintenance business. There are many similarities to our businesses at KONE.

There is no doubt the use of innovations can change business models and provide new opportunities for differentiation. And the KONE CIO believes success will first come from understanding five crucial areas.

“The first component of digitalization is the ability to make equipment more intelligent and accessible through the use of sensors, just as we do today, with access control, integrating sensors in elevators, doors and smartphones.

“Then second, is connectivity, because with today’s technology, remote diagnostics are possible. For instance, we inspect thousands of elevators many times a year and if the elevator was able to be accessed, or could highlight potential issues, then our technicians would not have to always travel to a site.

“The third area is data storage. Terabytes of storage are so cheap. That takes things to a whole new level with almost unlimited capacity and cloud technologies.

“Fourth is analytics. With powerful analytic engines and algorithms, and we can look at parameters and data in

more effective ways, for instance, improving People Flow in crowded urban areas.

“And finally, what I call mobilization, which means being able to bring together a combination of the four others. At KONE, we if we are able to put all of this into the hands of our field service technicians, it will lead to better services for our customers and we have set the standard high on this front.”

RIISING AMBITIONS

For users, mobilization means the ability to introduce new and exciting services and applications that make it smoother and safer to move around in buildings, or the ability to make personalized digital services.

However, it is clear that companies need agility, too. For product and service development, that means far shorter and faster processes to bring something to the market quickly, test, feedback, improve and commercialize.

“In digitalization, customer experience and user engagement is everything,” continues Antti. “The service level expected from suppliers in a digital era is very high. Just think that in the US today, the Y-Generation makes up 51 per cent of the workforce!”

“New ways of working mean increased transparency. If we miss a service call, it is there. If we don’t deliver on a contract or if we invoice incorrectly, it will be there. That creates pressure on internal systems. The question is, are companies ready for that?

“At KONE, we are definitely raising our ambition level.”

From his perspective, as CIO, the writing is on the wall for the future. In years to come, it could mean the possibility of “just in time” 3D-printing of spare parts in the back of KONE service vehicles, before technicians arrive onsite. Developments are moving fast.

Digitalization definitely brings an entertainment value or cool-factor, clear operational value which brings efficiency and there can also be fantastic business value.

The combination is priceless. /

“In digitalization,
customer experience
and user engagement
is everything.”

Service technician's best friend

The Field Mobility App is transforming the service KONE provides. It allows employees and customers alike to access key data about equipment performance, maintenance and breakdowns.

TEXT SIMON HUNTER PHOTO ÁLVARO HERNÁNDEZ

We use it for everything. Right from the start of the day, we receive information, whether it's for maintenance and repairs or for our daily work routes. We use it for practically everything related to work," says **Manuel Luis Rando**, a KONE service technician from Madrid, Spain, describing a tool that is just important as a spanner set or a torque wrench – the KONE Field Mobility App.

Digitalization and development of technological enablers such as mobility, connectivity and analytics are driving change in the elevator and escalator industry on the whole, and altering the nature of services KONE can offer to its customers. The Field Mobility App is one such advancement. Manuel attests its importance from the central office of KONE Iberica in the Spanish capital. He says it is 'transforming the way he and his colleagues carry out their day-to-day tasks'.

"We are sent the addresses and locations of jobs through the app," explains Manuel. "Everything is on the app. If a customer tells me that my colleague was there last night, I can immediately find out who was on site, what problem was addressed, and look at all the jobs and see how the work has gone on there."

The app can even make use of GPS location data to choose the next destination for each technician, ensuring that the route is the most efficient.

THE 'HAPPY PATH'

The man who oversees this technology – which started as an independent PDA (Personal Digital Assistant) and is now an app integrated into a heavy-duty smartphone – is **Markus Huuskonen**, Global Maintenance Process Owner at KONE.

"We wanted to have real-time information for our customers and provide guidance to our technicians," says Markus, explaining the origin of the project.

"For the technicians, the workflow means you don't have to start opening different applications – everything is there available at the right time when you are doing your job. We call it the 'happy path' since it makes everything as easy as

possible for the technician, by minimizing the number of times the technician has to click the screen," he notes.

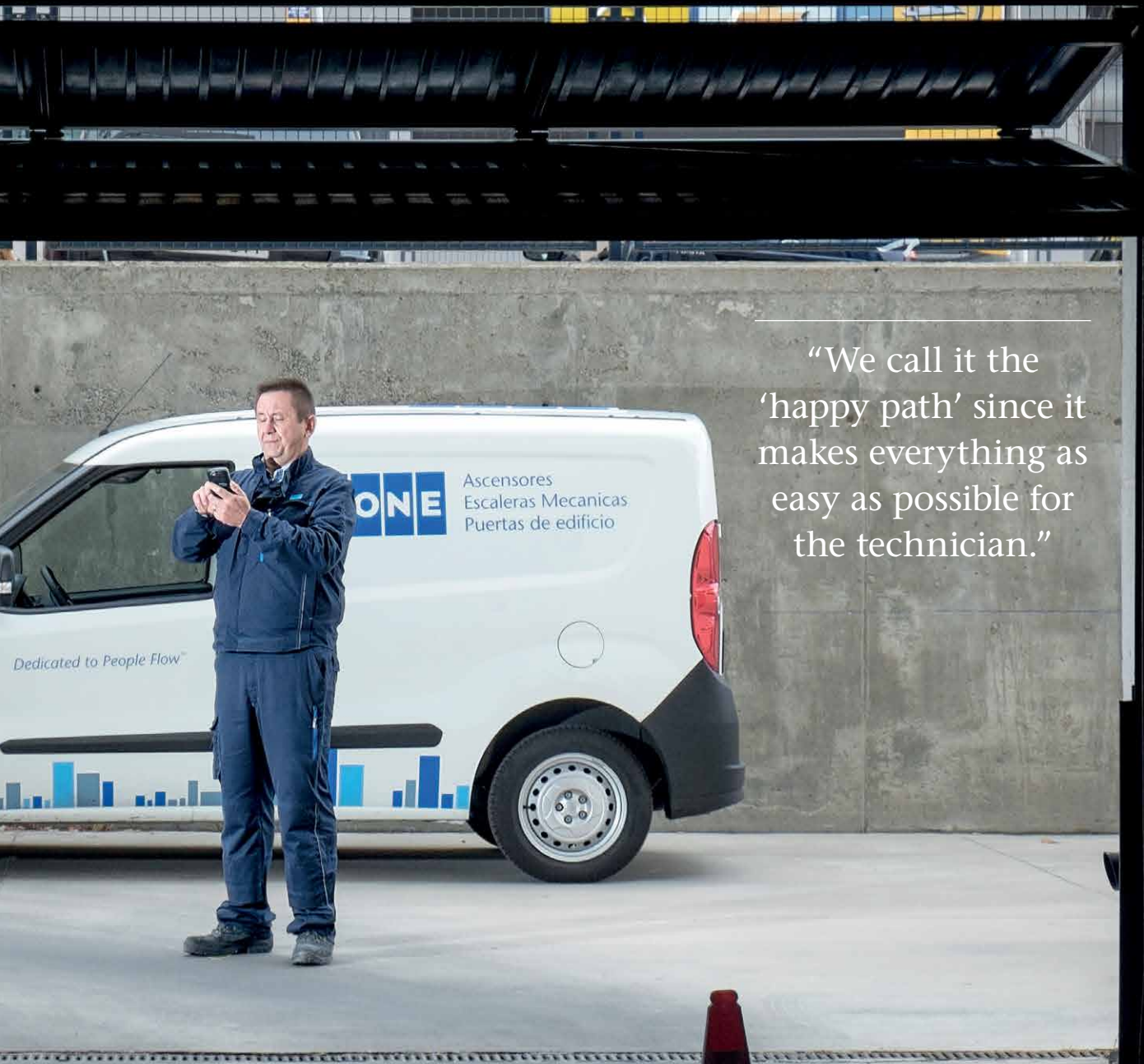
Meanwhile, the customer can use KONE Care Online service to access or track KONE's actions in addressing the issue at hand.

"There are different options for each type of customer," explains Markus. "We can either send SMS messages to keep them updated or send the information via email. We even have a customer mobile application."

"Equipment performance, maintenance, breakdowns, repairs – it's all there for the customer to see in real time," Markus points out.



Manuel Luis Rando uses the Field Mobility App on his phone.



“We call it the ‘happy path’ since it makes everything as easy as possible for the technician.”

WORKING OFFLINE

The app also works offline - important for a technician who might easily lose network connectivity while working in an elevator shaft.

As Manuel explains, the application almost entirely eliminates the use of paper, to the point where his customers can sign off work via his smartphone. By using the Mobile Minerva function – an online catalogue of all KONE materials – technicians can search for and order spare parts directly from their terminals. And there is more to come.

“We are in a constant process of improvement,” says

Markus. “We are going to add a new functionality to enable the technician to create a tender on site and inform the customer of the cost, so that there are no surprises.”

Remote monitoring information which is currently collected from KONE equipment will in the future also be connected to the application – the company’s escalators and elevators will literally be talking to the integrated online system. “That way technicians will know beforehand what they need to focus on,” adds Markus.

An indispensable tool of the trade then, and one that Manuel in Madrid will certainly not be leaving home without. /

Structural expressionism

The mold-breaking design of the Leadenhall Building, also known as the Cheesegrater, is an architectural marvel and a world first. It has taken views of London's skyline to breathtaking new heights.

TEXT SILJA KUDEL PHOTO KONE

SUMMARY

FAST FACTS

- Completed: 2014
- Height: 224 m
- Floors: 45
- Maximum speed: 8 m/s
- Building owner: British Land and Oxford Properties
- Developer: British Land and Oxford Properties
- Architect: Graham Stirk of Rogers Stirk Harbour + Partners
- Contractor: Laing O'Rourke

KONE SOLUTIONS

- 24 KONE MiniSpace™ scenic elevators
- 2 KONE MiniSpace™ elevators
- 6 KONE TransitMaster™ 120 escalators
- 2 customized platform lifts
- KONE Polaris™ Destination Control System
- KONE E-Link™ monitoring system

30 seconds. That's all it takes for the world's fastest panoramic elevator to transport you from ground level, all the way to the 45th floor at the Leadenhall Building, the latest iconic addition to London's skyline.

Incorporating enough glass to cover nine football fields, the structure is livened up with an array of 22 fully glazed scenic KONE elevators, which can be seen behind the building's glass encasing.

Designed by **Graham Stirk** of world-acclaimed architects, Rogers Stirk Harbour + Partners, the 45-story skyscraper is the tallest building in the Square Mile financial district, with 57,000 square meters of office space providing spectacular views across the Thames River and beyond.

BOLD REINVENTION OF DESIGN

A masterpiece in the making since 2011, this was one of the most challenging and rewarding projects for KONE.

The successful design and technical integration of the elevators was central to the architecture, affirms architect **Maurice Brennan** from Rogers Stirk Harbour + Partners. "We had a close working relationship with KONE. From the beginning, every component was under the radar. The visual design, technical solutions and strategy for delivery were developed in parallel. Any other methodology would not have achieved the unique world-class installation we see in the building today."

VERTICAL EVOLUTION

"Every component is a one-off designed according to precise specifications," says **Michael Williams**, Managing Director of KONE Great Britain.

The color accents of the minimalistic elevators match the signature elements of the architecture. Wrapped around the glazed car is an eye-catching sling in striking orange for passengers and bright green for goods, with integrated balustrades making the car appear taller.

The secret to the clean look is the absence of trunking and electrification in the shaft. All wiring is subtly concealed in floor zones and interfaces adjacent to the elevator well.

"This is a world first," reveals Williams. "The pedestrian traffic below can look up and see nothing but a perfectly empty shaft. The clean visual lines look simple, but the simplicity was massively complicated to achieve."

Another world first is the special auto-transfer software integrated in the KONE Polaris™ Destination Control System. "A passenger is able to transfer between the low-, mid- and high-rise elevator zones at the push of a single button, was the system automatically allocates the designated car," explains Williams.

INSIDE-OUT MASTERPIECE

The skyscraper has no real ground floor, but sits on stilts above a grassy public concourse. KONE escalators provide seamless transition into the reception area, and everyone who enters can see internal components and the escalators constantly moving and working.

The Leadenhall Building is truly a showpiece, as both the escalators and elevators are 100 percent visible from outside. "They are the front door of the building," says Brennan, who praises KONE's willingness to get the fine details millimeter-perfect. /

"The pedestrian traffic below can look up and see nothing but a perfectly empty shaft."

Attention: Startups wanted!

Startups are hip, agile and innovative. Corporate giants have the muscle to make ideas happen. Put them together in partnership and everyone wins – if the chemistry is right.

TEXT SILJA KUDEL



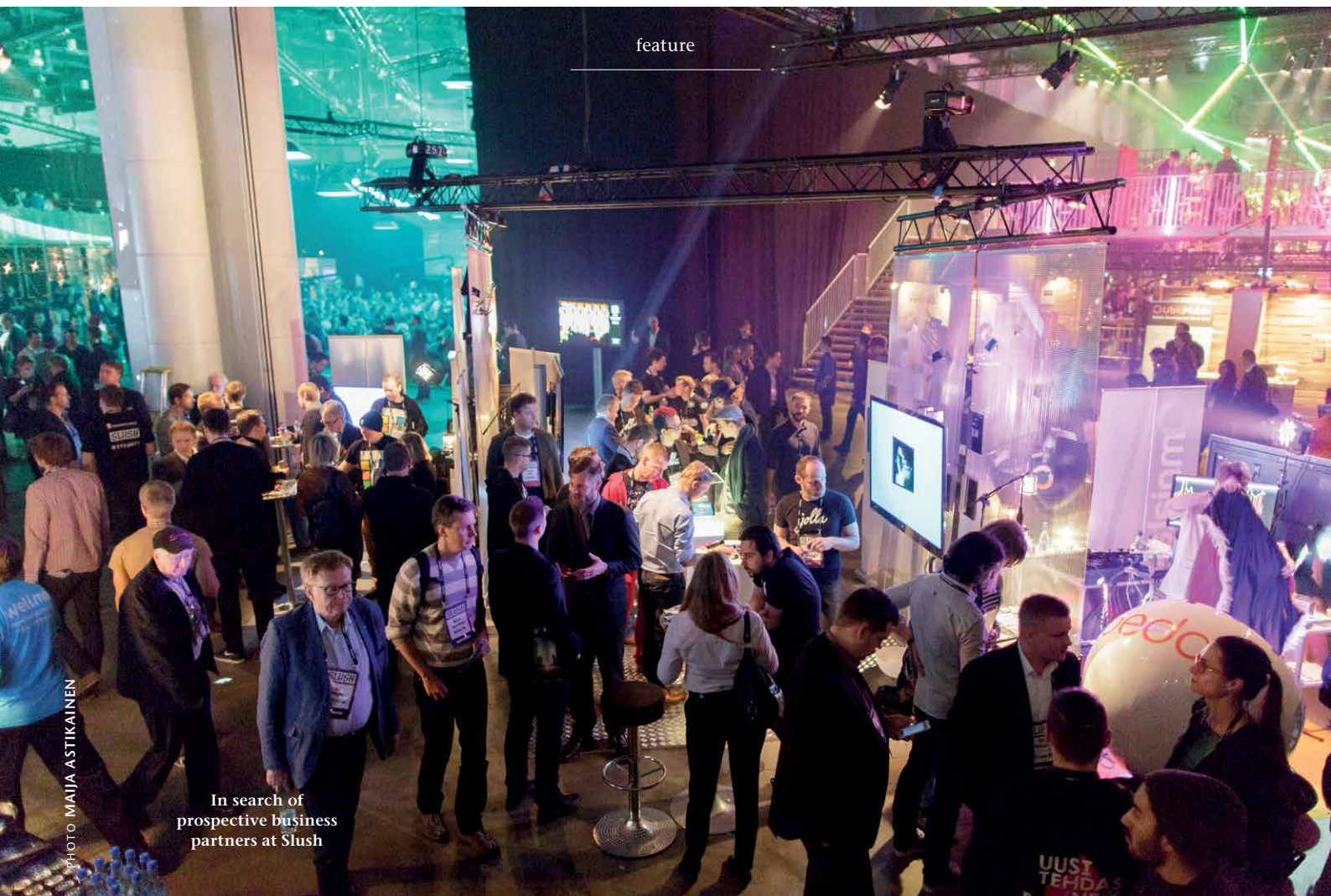


PHOTO MAIJA ASTIKAINEN

In search of prospective business partners at Slush

It's a chill November day in Helsinki, but the temperature inside the Exhibition & Convention Centre is hotting up by the minute. On stage, beads of perspiration glisten as young hopefuls pitch their ideas to angel investors.

This is Slush, one of the world's leading events where startups and tech talent can meet with top-tier international investors, executives and media.

Seated near the stage is **Jukka Salmikuukka**, KONE's Director of New Business Concepts. But what does a corporate goliath like KONE expect to gain from an event for newbie entrepreneurs?

"We're always looking for fresh ideas and opportunities to partner with innovators. We work with startups to speed up our innovation process because they're creative, fast, and willing to adopt new technology," says Salmikuukka.

SECRET SAUCE OF SUCCESS

KONE is already an industry-leading innovator – why reach outside the company for new ideas?

"Digitalization is changing every industry. It's not about individual companies competing anymore, but more about competing ecosystems. In today's business environment, it is difficult to succeed with a closed model of innovation. Open cooperation is the only way to go."

Smart buildings are fueling this trend. "Everything from elevators to air conditioning systems are starting to talk to

each other. By integrating them, we can create an endless array of smart services," explains Salmikuukka.

"But if you think of what it means to improve People Flow it's clear that we at KONE cannot innovate everything on our own. By pooling our talents and offering solutions together with third parties, we deliver greater value."

If KONE is the supertanker, startups are like high-speed motorboats. By leveraging their agility, KONE can focus on its core ecosystem and let speedier visionaries find new angles for enhancing the customer experience.

"In return we link them up with our global customer base. And, by working together, we ensure that their innovations are compliant with our systems. We believe that $1 + 1 = 3$."

WELCOME TO THE KONE ECOSYSTEM

Corporations from Apple to Google are all hooking up with small, agile tech businesses, says Slush CEO **Riku Mäkelä**. This is because a large corporation's overall ecosystem is always more valuable than the enterprise itself.

"There's a multitude of ways for big companies to become more open and collaborative. Cooperation might take the form of pilot projects with selected startups, opening up digital interfaces and APIs (application programming interfaces) to new apps, or running hackathons and competitions," says Mäkelä.

KONE actively uses all three approaches. In its API Challenge at last year's Slush, KONE threw down the

“Slush is the world’s leading startup event and we want to be there to promote the KONE ecosystem.”

KONE HACKATHON 2016

KONE will be hosting its first-ever Hackathon in March 2016. The event is targeted at individual software developers who want to learn more about KONE and how to connect to its systems.

The participants will be selected in January. “We plan to invite as many as we can fit on the coach from Helsinki to our R&D center in Hyvinkää, where we’ll pick their brains for smart ideas with specific challenges and wild card tasks. We’re mainly looking for software skills and a nice mix of talent from around the world,” says KONE’s Jukka Salmikuukka.

To find out how you can work with us, please go to www.kone.com/bestpeopleflow

3 STARTUPS TO WATCH

iBeacon.fi

Combining Apple beacon technology with design sensibility, the winners of last year's KONE API challenge will be piloting their yet-to-be-unveiled world-first mobile interface for better People Flow at Slush 2015.

ibeacon.fi/

Bttn

KONE is working with Finnish startup Bttn, creators of the world's simplest internet interface: an irresistibly cute one-press button that can be programmed to execute any preset task from calling an elevator to hailing a cab, from any location of your choice.

bt.tn/

Indoor Ninja

The new smartphone-based visitor management app is expected to be ready for commercial launch in 2016. KONE supported the Estonian startup in piloting the new system in Tallinn.

indoor.ninja/

“Everything from elevators to air conditioning systems are starting to talk to each other.”



“Working with Indoor Ninja was a great learning opportunity. Their agility and responsiveness was inspirational.”

PHOTO TIIT VEERMAE



following gauntlet to app developers: “If we give you the interface, what apps would you create to benefit us?” The winners, iBeaconfi, received €15,000 in prize money to be used for joint prototyping with KONE.

Instead of repeating the API Challenge this year, At Slush 2015, KONE is inviting start-ups and others to join the KONE Ecosystem, and become part of a partnership community. The idea would be to create the Best People Flow Experience within buildings and cities around the world. “This was the logical next step. We want to attract a larger pool of partners into the KONE ecosystem. The Open Call goes beyond a tech focus and helps startups produce commercially viable products.”

SECURE WITH INDOOR NINJA

A KONE-mentored pilot is currently taking shape in Estonia, one of the world’s most digitally agile societies. A new visitor management app developed by local startup Indoor Ninja is being prototyped at Navigator, a futuristic office complex in Tallinn. The app was designed wholly by Indoor Ninja with integration support from KONE.

Whereas most access control systems leave visitors locked out of elevators and stuck in the lobby, Indoor Ninja’s app enables the building’s tenants to manage their guest flow via their personal smartphones. After the host accepts the guest, an elevator automatically takes the visitor to the desired floor.

“The elevators can be used only by people authorized by the tenant. This improves security and reduces costs,

as it eliminates the need for reception staff. To top it all, this solution takes us one step closer to the smart city era,” says **Marko Kull** of Capital Mill, owner of the Navigator building.

The fit between small and big was perfect in this pilot, says **Peep Paum**, founder of Indoor Ninja and CEO at Mobile Digital OÜ.

“A start-up might have a good idea, but without financial traction, it can easily become worthless. Nowadays speed is of high importance in every business. We believe big corporations can gain in agility, and efficiency in prototype development via set-ups like ours.”

MAKING THE MAGIC HAPPEN

Chemistry is also a big issue in getting the synergy flowing, adds Paum. “We established a really good dialogue with KONE and found our cooperation truly inspiring. All our questions were answered fast and our ideas were discussed thoroughly.”

Paum’s praises are echoed by KONE: “Working with Indoor Ninja was a great learning opportunity. Their agility and responsiveness was inspirational.”

Salmikuukka adds that Indoor Ninja offers a foretaste of bigger things to come. “Soon we’ll see navigation systems that think for themselves, automatically doing everything from calling elevators to turning on lights and guiding you to your destination. This is what People Flow integration is all about – a service experience that feels like magic.” /

Access all areas

As urban populations continue to grow, the ability to manage access control within buildings while maintaining smooth people flow has become more critical than ever. KONE is meeting the challenge with the help of digitalization, holistic thinking and, most importantly, through working with the right partners.

TEXT STEVE ROMAN PHOTO ISTOCK

What does it take to ensure the best people flow experience? For an increasing number of KONE's customers, the answer is a single system that seamlessly integrates access control with elevator control, creating a highly efficient way for users to get from A to B without compromising security.

In 2012, KONE partnered with Swiss-based firm Kaba (dorma+kaba as of 1st September 2015), a leader in state-of-the-art access technologies, to create a comprehensive package that achieves just that. Dubbed KONE Access, the system relies on Kaba's most advanced software application, Exos, known for its reliability even in large, complex installations. The work on KONE Access solution has grown from a single module to a more modular, sophisticated solution.

"We developed an embedded Exos software module, specifically for KONE, that integrates all the functions needed for specific elevator controls," explains dorma+kaba CEO **Riet Cadonau**. "So whenever a customer asks for KONE Access, he receives the full suite of Kaba access controls along with this elevator control system module."

LESS INTERFACING, MORE EFFICIENCY

Whereas most building control systems require separately-developed software packages to interface with one another, KONE Access represents a leap forward in that it was developed as a single, integrated system, Cadonau says.

“That makes it unique in the sense that you can look in the application and immediately see the person’s privileges in the elevator, his or her authorised floors and the elevator’s default behaviours in addition to the person’s access to private rooms,” he says, adding that the single-system approach also means that updates and changes are easier to implement.

In addition to flexibility and modularity, Cadonau says that a key element of Kaba-backed systems like KONE Access is convenience. “Security has to be effortless for the user, otherwise it will not be secure because it will be overridden,” he notes.

The collaboration with dorma+kaba reinforces just how important it is to work together with the right partners in today’s industry. By working together, new ideas, new innovations and new value can be created

quickly and brought to market much faster, compared to a single company going-it alone.

The ability to partner and innovate together is a prerequisite for success.

PEOPLE-ORIENTED BUILDINGS

The convenience issue is also one that **Ari Virtanen**, KONE’s Senior Vice President for Access Control and Integrated Solutions, believes is central to the people flow equation.

“Fundamentally, buildings need to serve their users,” says Virtanen, noting that few of them, even among the modern ones, are up to the task. “First, users experience an access control system, then a security gate system then an elevator system. That is not very good end user experience at all and that’s something we want to change.”

One goal of developing KONE Access, Virtanen says, was to have users interact with a building as a single entity, rather than technology by technology, throughout their entire journey.

That same integration can also boost efficiency, he says, pointing to the Al Fattan Currency House in Dubai as a challenging example. The building was converted from residential to office use, but there was no option to rebuild the small elevator shafts or widen the lobby space to accommodate the peaks in traffic flows.

KONE Access, however, was able to increase people flow through strategic placement of security turnstiles, also developed by Kaba, which also automatically call elevators for the users as they enter. The system then groups travellers into the same elevator if they are going to the same floor.

THE DIGITAL HORIZON

In addition to generating better functionality for users and, by extension, a higher-value offer from owners to tenants, KONE Access saves architects and construction companies the cost of dealing with separate providers during the building phase, Virtanen points out.

The construction industry is still very partitioned, he says, with building systems that control elevators, escalators, doors, lighting, heating and ventilation still being developed in their individual silos. But he predicts that the benefits of merging these systems, now far easier thanks to digitalization, will eventually push the trend towards integration.

Cadonau, for his part, sees digitalization itself as a way to keep up with changes in society, managing the complexities of increasing mobility and shared use, all the while maintaining convenience and flexibility.

“Digitalization is a powerful growth driver: Combined with other growth drivers such as urbanization and increasing need for security, it will have a significant impact on people flow solutions,” he says. /

“Security has to be effortless for the user, otherwise it will not be secure because it will be overridden.”

Co-created by KONE and dorma+kaba: KONE Access featured in KONE Turnstile.



The birth of a new Technology & Innovation unit at KONE

The year 2016 will begin with a bang. KONE will establish a new Technology and Innovation unit, which will bring together KONE's Research & Development and IT functions. The new unit aims at leveraging digitalization opportunities and speeding up development in a changing business environment. It will tap exciting and unique ways to improve customer and user experience as well as the quality and productivity of KONE's operations.

Tomio Pihkala (40) will be heading the new unit, as the Chief Technology Officer at KONE. Pihkala has worked in various roles within KONE since 2001, and has been a member of the Executive Board since 2013, responsible for Operations Development.

The new unit
aims at leveraging
digitalization
opportunities.



THE INNOVATIVE STREAK

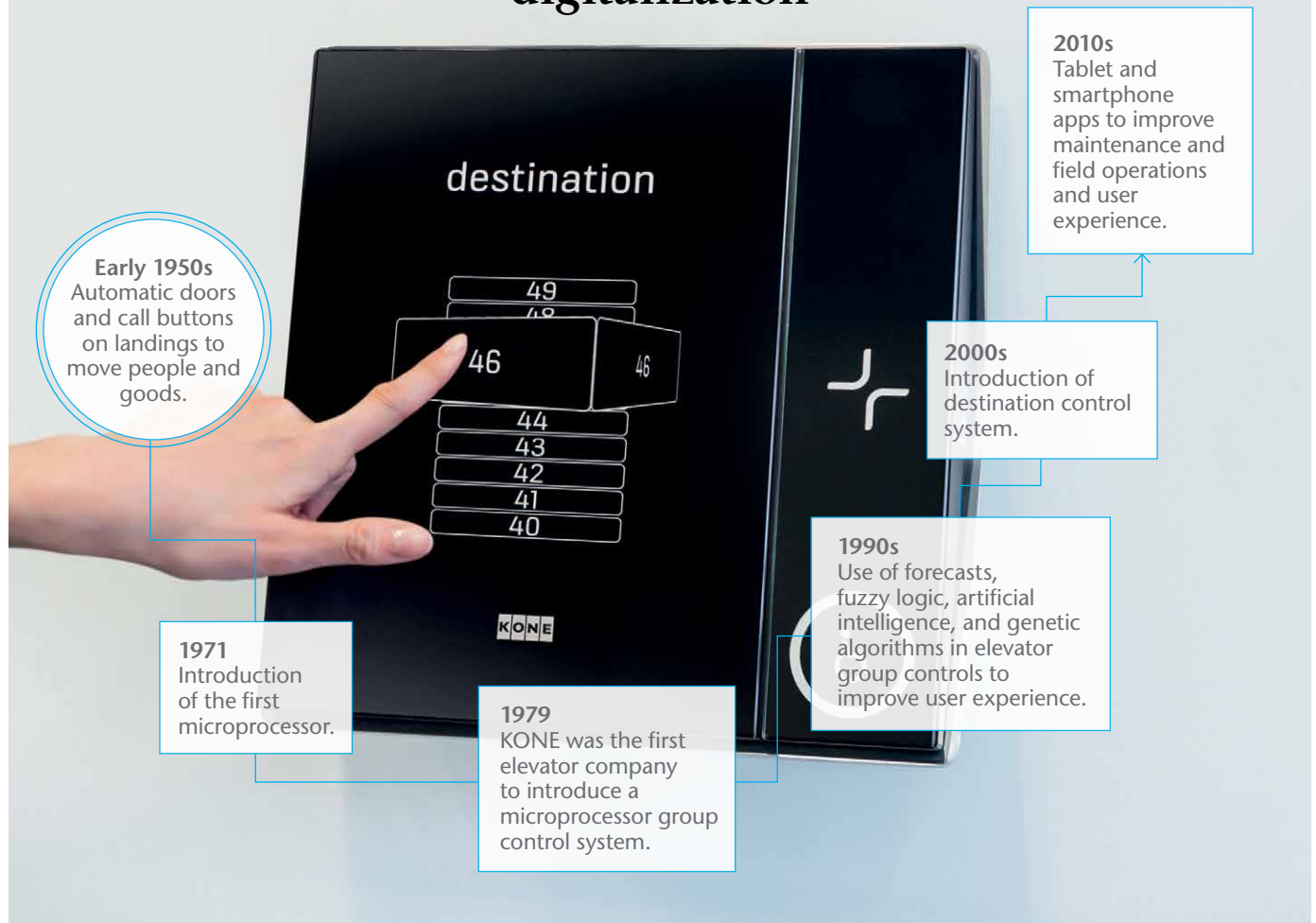
KONE has been ranked 48th on the list of the world's top 100 most innovative companies by the business magazine Forbes.

KONE's recent breakthrough innovations include its high-rise elevator hoisting technology, KONE UltraRope®, which enables future elevator travel heights of one kilometer – twice the distance currently feasible. The technology will be used in Saudi Arabia's Kingdom Tower expected to be the world's tallest building with a height rising over one kilometer once completed. Another innovation highlight is the KONE family of People Flow Intelligence solutions, which makes navigation through buildings ever smoother and smarter.

Featured on the list for the fifth year in a row, KONE ranks as the 5th most innovative company in Europe.



KONE's road to digitalization



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