

KONE'S MAGAZINE

ISSUE 13

KONE

people flow

SUSTAINABLE BUSINESSES
RELY ON PEOPLE

LEARNING TO MOVE
THE MASSES: MODERN
INDIA SUCCESS STORY

AIMING FOR
THE LONG TERM

Sustainability equals competitive advantage

Sustainable practices have been an integral aspect of KONE's business for many years. Every day, our people flow solutions help to address the challenges created by urbanization, climate change, demographic change and increased safety demands.

We connect sustainability to everything we do. By continually improving the eco-efficiency and safety of our solutions and operations, we can have a major impact on sustainable development.

In the area of environmental responsibility, our biggest opportunity to contribute is by minimizing the energy consumption of our products. In this respect, KONE is a clear leader in its industry.

We have also made good progress in safety, and our objective is to promote a zero-accident culture. This applies to employee safety as well as to the safety of the users of our equipment.

I strongly believe we are on the right track. We receive positive feedback on our sustainability efforts in our employee survey and in our customer loyalty survey. External organizations have acknowledged our achievements, too. Most recently, KONE was named the 12th greenest company in the world in a study conducted by *Newsweek* and we scored full marks in the 2014 CDP reporting.

As we move forward, we continue to develop KONE in a profitable, responsible and transparent manner. This long-term mindset will help us stand out in the competitive marketplace.



Henrik Ehrnrooth

President & CEO, KONE Corporation

KONE IN BRIEF

KONE is one of the global 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 over 150 countries with more than 43,000 dedicated employees and distributors to serve you globally and locally.

www.kone.com

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TEXT KATJA PANTZAR PHOTOS MIKE LEWIS

A

company is the function of the quality of the people.

“If you have the best people, you will be the most competitive company with employees who are motivated and proud to be part of a business that is responding to the challenges of our time and reconciling what we do with the state of the planet,” says **Toby A.A. Heaps**.

He is the CEO and president of Corporate Knights, the official research partner for the Newsweek Green Rankings that are published by leading weekly news magazine *Newsweek*.

The annual Newsweek Green Rankings, in their fifth year, assess the world’s largest companies on corporate sustainability and environmental impact. On the 2014 list, KONE ranked as the world’s 12th greenest company – it was the only top 50 company representing the elevator and escalator industry.

“The Newsweek rankings indicate KONE is looking to the horizon at a longer time period than the average company,” says Heaps. “The company is a long-term value creator and one I would be more likely to invest in, work for, or even do business with,” he adds.

STANDING OUT FROM THE CROWD

“What we’re seeing more and more is a direct link between corporate sustainability, reputation and financial success,” says **Elijah Wolfson**, senior editor at *Newsweek*. “Many of the world’s largest public companies have begun to recognize that in order to be successful, they need to openly account for their environmental impact. The goal of the Newsweek Green Rankings is to add to and push for this type of accountability.”

The Green Rankings show which companies stand out from their industry peers on an important suite of performance metrics based on eight indicators including energy, greenhouse gases, water, waste, fine and penalties, linking executive pay to sustainability targets, board-level



THE HUMAN FACTOR



Toby A.A. Heaps, CEO of Corporate Knights, in the courtyard of the company's headquarters in Toronto, Canada.



committee oversight of environmental issues and third-party audits.

PEOPLE POWER

“The upward tick in environmental disclosure identified in the rankings is a well-documented macro trend,” says Heaps, whose company is headquartered in Toronto, Canada’s largest city. “We believe this reflects growing pressure for expanded corporate reporting from investor groups and the growing number of jurisdictions that require environmental disclosure.”

There are many reasons why sustainability is important, but having the best people is at least three times more important than any other reason.

“From talking to executives from major companies around the world, the top factor that comes up time and time again is employees. If you want to inspire, attract and keep the best employees, the most powerful motivator is providing a place they’re proud to work,” he says.

“That means a company that does things to solve the core challenges of the world we live in. Good companies have a competitive edge; in order to keep their edge they need to have the best people.”

In addition to environmental awareness, there’s another key reason employees look for responsible workplaces. “In Western societies, as per Maslow’s hierarchy of needs, most people have food, shelter, and their basic needs taken care of. People are looking for meaning in what they do,” says Heaps.

UNDERSTANDING METHODOLOGIES

The Newsweek Green Rankings uses methodology that takes context into consideration.

“We don’t compare a bank to an oil

company on carbon emissions, but rather to a company in a like industry,” says Heaps. “That allows us to roll up data into a finite comparison table that does make comparisons between different companies. It’s similar to how university biology students are rated against their peers in their biology courses for a grade point average that can be compared with the grade point average of students in a different discipline such as engineering,” explains Heaps.

The evolving nature of corporate financial reporting has affected sustainability reporting.

“One hundred years ago companies didn’t report profits to their stakeholders. Then there started to be various parts of the stakeholder realm that involved regulatory responses and formal reporting requirements. It’s not a perfect system, but today we have a fairly articulated system of financial reporting. And we have the same happening with non-traditional reporting factors,” says Heaps, who credits early sustainability reporting pioneers for creating different standards for defining carbon emissions such as the Global Reporting Initiative, the World Business Council for Sustainable Development, and the World’s Resource Institute.

“And of course the Carbon Disclosure



KONE placed 12th on the Newsweek Green Rankings, which is one of the world’s foremost corporate environmental rankings. The project ranks the 500 largest publicly traded companies in the United States (the US 500) and the 500 largest publicly traded companies globally (the Global 500) on overall environmental performance. The 2014 rankings follow five core principles:

Transparency

The precise methodology of the ranking and the results of the process are fully disclosed.

Objectivity

Eligible companies will only be assessed using quantitative data and performance indicators.

Public data

Only data points that are part of the public domain are used.

Comparability

Companies are compared

against their industry group peers based on performance indicators for which the underlying data are reasonably well disclosed by their industry group globally.

Engagement

Companies eligible for the ranking will be informed prior to the ranking, so as to have an opportunity to ensure the necessary data is made available publicly.

Source: www.newsweek.com/2014-newsweek-green-rankings

FUTURE DISCLOSURE TRENDS: HELSINKI NUMBER ONE

"This year, Helsinki, Finland, is the best stock exchange for disclosure in the world," says **Toby A.A.**

Heaps, CEO and president of Corporate Knights, which launched the world's first global corporate sustainability ranking (Global 100 Most Sustainable Corporations in the World) in 2005.

"We crunched the numbers and looked at the 46 world major stock exchanges that had more than USD 2 billion dollars (1.55 billion euros) of trade. We looked at what percent of companies from each exchange are reporting environmental biometrics. We discovered several surprises, for example, China is catching up fast on disclosure issues – and that holds true for other parts of Asia."

Project, a really bold initiative started about ten years ago on a shoestring budget by lawyer James Cameron was key," says Heaps. "If we can get the largest investors in the world to write to the biggest companies in the world asking what their carbon emissions are and what they are doing about climate change, then we have a better chance of getting a response. The not-for-profit dedicated to environmental disclosure now sends questionnaires to companies across the world on behalf of investors with USD 87 trillion assets. If you are a major company in the world you do not carbon report."

WHY REPUTATION MATTERS

According to Heaps, sustainability is key to a company's reputation for many reasons: "If you look at the average big company in 1980, 80 percent of its value was to do with tangible assets. If you look at the average big company today, it's totally flipped – now 80 percent of its market value has to do with intangible assets and a large part of intangible assets is reputation, such as sustainability and environmental profile, which is four times more important than it was in 1980. It's a lot more important in 2014 than it was back then," he says. ■





AIMING FOR THE LONG TERM

TEXT REX MERRIFIELD PHOTOS PIIA ARNOULD AND KONE

Sustainability is about being able to do good business over the long term. That is the consensus of five senior KONE executives who put their heads together for People Flow to discuss the crucial place of sustainability in business, now and in the future.

Sustainability goes to the heart of what KONE is about. It is part of the culture and the daily practice. And it informs all aspects of the business, from design to the factory floor, to installation and maintenance,

driving continuous improvement in products, processes and services.

“We are a forward-looking, future-oriented company, and have a very important role to play in sustainable, urbanized societies,” says **Hanna Uusitalo**,

KONE’s Environmental Director.

She points out some of the facts: cities take up about two percent of the world’s land surface, but account for 75 percent of energy consumption; they are also responsible for 80 percent of manmade carbon emissions.



“We are a forward-looking, future-oriented company, and have a very important role to play in sustainable, urbanized societies.”

Reducing the impact on the environment is essential for a more sustainable future and has driven the development of different eco-innovations.

“The aim is to save energy, reduce the materials needed, and keep working toward targets for net zero energy building requirements in future,” Uusitalo says.

SUSTAINABILITY EQUATION

Through a clear vision, the company has consistently met and even beaten ever-tougher targets, putting it into the top 10 percent of the toughest category of carbon-related sustainability measures. And it has also won a place in the top dozen of the Newsweek greenest company rankings.

From research and design, sustainability has a crucial role all the way along the supply chain to the client, for new products, maintenance and services.

“It is very important in the sourcing

and supplier networks and we also work systematically with our logistical suppliers, to issues such as packaging, efficient routes and energy performance in delivery vehicles and in our service vehicle fleet,” Uusitalo says.

And environmental concerns are just a starting point, given the importance of the social and economic aspects too, she adds.

The other executives agree.

“Sustainability is a pre-condition for pretty much everything we do,” says **Tomio Pihkala**, Executive Vice President for Operations Development. Putting it at the heart of the business also sets the KONE brand apart in the marketplace, he says, adding that safety is a vital element of the sustainability equation.

“Every accident is one too many,” Pihkala says. “And we demand, and get, the same approach from our subcontractors and suppliers.”

LOOKING OUT FOR EACH OTHER

Increasing awareness of risks and aiming for ever-tighter targets have had a measurable effect: not only have work-related accidents been decreasing,



“Safety is a vital element of KONE’s sustainability equation.”

but the average number of days lost to injury has also been falling.

The improved safety culture has also contributed to increased reporting of near-misses, where accidents were averted or avoided and where corrective action could help in the future.

Installation and maintenance teams also prioritize getting information to customers and passengers.

“We want everybody to go home safely, every day,” Pihkala adds.



“Sustainability is about developing a culture of working together, and of trust.”

The goal of zero accidents is an important aspect of providing a safe, healthy working environment not only for KONE employees – but also for customers and the people using KONE’s equipment.

Yet reaching the strategic aim of being a great place to work demands more, says **Kerttu Tuomas**, Executive Vice President for Human Resources.

“Building a sustainable company is also about motivating and developing our employees,” she says. KONE’s Winning Team of True Professionals



Green means gold for Kunshan

KONE's largest manufacturing unit has won gold. KONE Park in Kunshan, eastern China, has been awarded the coveted LEED Gold certification for green buildings.

"I am very proud of Kunshan's achievement," says **Luca Galbiati**, Senior Vice President for KONE's Global Manufacturing and Supply. "This is very important for us."

The highly respected rating for the energy and environmental performance of buildings rewards the sustainability of the plant, which includes an engineering facility and research and development center, three elevator factories and an escalator factory.

"China is by far the biggest single elevator market in the world and we wanted a highly energy-efficient manufacturing site, which also delivers a majority of our elevators around the world," Galbiati says.

Kunshan was opened officially in April 2013 to meet KONE's global supply network needs. It was planned using the principles of lean manufacturing – maximizing efficiency and eliminating waste, reducing energy and water use, and minimizing the carbon footprint.

Galbiati points out that other KONE

facilities have also achieved major milestones in sustainability metrics, including KONE's Czech manufacturing unit, which achieved ISO 50001 energy management certification last year. At the end of 2013, KONE adopted a Global Facility Policy that sets the goal of reducing the facilities-related carbon footprint by 15 percent by the end of 2016.

And KONE as a group has beaten its targets for sustainable energy use. "We have a systematic track record of achieving our global target to reduce our carbon footprint for operations by three percent annually, relative to net sales," Galbiati says. "Last year we achieved a 3.5 percent reduction," he adds proudly.

That measure includes energy consumption in all of KONE's offices and manufacturing units alike: Kunshan and the Czech unit, as well as operations in Italy, Finland, the United States, Mexico and India. The Italian unit uses green electricity and the Finnish unit has been awarded by the local community for its energy-efficiency efforts, including the construction of a LEED Gold certified visitor center on site. ■

development program is just one of the ways Tuomas sees KONE encouraging professional advancement, fostering management and leadership skills.

TRUST IN ALL AREAS

Having a workforce of more than 45,000 people, at many different sites, makes it essential to have a code of conduct that all employees know and respect. And in taking an ethical approach, KONE also promotes employee wellbeing and ensures discrimination is not tolerated.

But over and above that, sustainability is also about “developing a culture of working together, and of trust”, Tuomas adds emphatically.

There is a chorus of agreement from the others.

“Trust is at the heart of all that we do,” says **Eriikka Söderström**, Chief Financial Officer. “It has to be if we are really to achieve sustainability, because we are in this for the long term.”

Good economic performance helps to serve customers better, provide jobs and keep supplier networks running. But that is only part of the picture.

“We aim to have profitable growth, but it also has to be sustainable growth,” she says, adding that many investors in KONE pay close attention to this.

“Our investor community is very much focused on how sustainable businesses are doing. And those who pay increasing attention to this are expecting more measurement.”

Assessing KONE’s progress in setting, achieving and exceeding sustainability goals is crucial. But just as important is reinforcing the message from KONE to employees, suppliers, customers and investors that sustainability is a continuous process of improvement.

“Our success relies on people supporting us by buying our solutions, investing in us, promoting our point of view and delivering on our strategy,” says **Liisa Kivelä**, External Communications Director. “To do this



“Those companies who pay attention to sustainability expect more sustainable measurement.”

they need to trust we will deliver on our promises. This trust is built on a good reputation,” she adds.

PERSONAL COMMITMENT

Kivelä sees maintaining KONE’s reputation as a sustainable business as the responsibility of all employees.

“All of us can help to support our reputation by doing our best. This means that we deliver on our promises, keep an eye on potential issues and proudly share our great stories,” she says.

Those stories include technological innovations: making sure customers are aware of KONE’s advances is as important as the breakthroughs and incremental improvements themselves in spreading sustainable solutions.

KONE’s volume elevators now consume about 70 percent less energy than they did just six years ago. So through a process of modernization, partnerships with KONE can ensure continuous improvements in customer operations too, the executives agree.

Just as sustainability is part of busi-

ness life, the executives see it playing an important role in their personal lives.

Uusitalo establishes an obvious starting point in respecting resources: avoiding waste, aiming for energy efficiency and ensuring the longest possible life for manufactured products.

Reusing and putting old goods to new purposes can also help. “Even worn-out clothes can find a new lease of life, when I turn them into rag rugs,” she says with a laugh.

For Söderström, recycling and composting are important basics of life at the traditional Finnish cabin, where preserving nature is something of an obsession.

But for Pihkala, at the basic level, it is really all about attitude.

“If you really think about sustainability, it is that you care for the people around you and you care about your environment,” he says.

“And that’s really what we expect from every KONE employee: that you can be proud of what you have done, that you were acting in a responsible way and were looking out for others.” ■



“Maintaining KONE’s reputation as a sustainable business is the responsibility of all employees.”

Rotterdam's newest architectural icon is a building of superlatives: not only is it the biggest and most breathtaking, but it is also one of the greenest structures in the Netherlands.

TEXT SILJA KUDEL PHOTO KONE

ECO-CITY in a city

Part of a revitalization scheme breathing new life into the historic Wilhemina Pier, De Rotterdam is a mixed-used vertical city created by celebrity architect Rem Koolhaas and his studio OMA.

The complex spans the area of a soccer field, comprising three glass towers atop a six-story pedestal overlooking the Maas River. Inside is a miniature city of offices, apartments, a lifestyle hotel, conference and leisure facilities, shops and eateries.

KONE worked closely with the developer to achieve timely completion of the project. As many as 600 workers moved up and down the towers several times a day. Successful execution boiled down to well-planned logistics.

"Together with KONE's experts, we installed three KONE JumpLift solutions which played a very important role in transporting people and materials to the right spot at the right time," says **Jan van't Westeinde**, Senior Sustainability Manager at MAB Development.

KONE also worked closely with designers and a local cab decoration supplier to meet the architect's expectations. "The operating panels are one-of-a-kind. The contours of the building are etched into the stainless steel faceplate and filled with vertical white LEDs. There is one LED per stop, which lights up with every passing floor," says KONE Project Manager **Vincent Meijer**.

Winner of numerous awards including the CTBUH Award for Best Tall Building of Europe 2014, De Rotterdam has received special recognition for its commitment to sustainability.

With more than 5,000 people moving through the vertical city daily, the eco-efficient KONE elevators significantly reduce the building's energy consumption by returning power back to grid.

"We challenged KONE to reach our mutual goals in terms of timing, budget and eco-targets. After four years of hard work, we literally reached the top together," concludes van't Westeinde. ■

DE ROTTERDAM

Completed: 2013

Size: 162,000 sqm

Floors: 44

Building owner: De Rotterdam CV

Developer: MAB Development with OVG Real Estate

Architect: OMA (Rem Koolhaas)

Contractor: Zublin GmbH

KONE SOLUTIONS

15 KONE MiniSpace™ elevators

7 KONE MonoSpace® elevators

2 KONE MonoSpace® scenic elevators

3 KONE JumpLift construction time elevators

6 KONE TravelMaster™ 110 escalators

KONE E-Link™ monitoring system

KONE Polaris™ Destination Control System

2025

THE ROTTERDAM CLIMATE INITIATIVE STRIVES TO REDUCE THE CITY'S CARBON EMISSIONS BY 50% BY THE YEAR 2025.

HOLLAND'S FOODIE CAPITAL

Ranked eighth by *The New York Times* on its list of "52 Places to Go in 2014", Rotterdam is stepping out of Amsterdam's shadow as the Dutch epitome of cosmopolitan cool. And it's not just the skyline that is making headlines. The culinary scene is also becoming a lure, with new eateries and cafés springing up around Wilhemina Pier, dubbed by locals as "Manhattan on the Maas".

The futuristic Markthal, a horseshoe-shaped indoor Market Hall in the Laurens district, is considered the Soho of Rotterdam. Inside its cavernous interior – decorated with giant

3D photos of food – patrons can go one-stop shopping for fresh organic produce at over 100 food stalls or grab a bite at any of the dozens of eateries.

Fans of molecular gastronomy must not miss the new restaurant owned by double-Michelin-starred chef Francois Geurd, master of flavor fusions. The only restaurant in the country with its own experimental food laboratory, FG Food Labs offers informal dining inside a converted railway arch in the trendy Hofplein nightlife district. Enjoy chargrilled langoustines Provençal in a t-shirt and cut-off jeans: perfect chemistry.

Sustainability at the core of future cities

For more than 100 years, KONE has been in the business to innovate and imagine the future. In anticipation of another successful century, KONE R&D executives take an in-depth look at complex trends poised to drive change and shape tomorrow's urban environments.

TEXT EVELIINA LINDERBORG PHOTOS JENNI-JUSTIINA NIEMI AND GARETH BLACKETT

Smart urbanization, household atomization, a purpose economy, new geography of life, human-to-human experience. These concepts surface when KONE's head of Technology and R&D **Giuseppe Bilardello** and Design Director **Anne Stenros** envision the prospect of sustainable cities.

But what are the trends behind these terms? Do they serve as a source of innovation for KONE and how can they be harnessed to build sustainable urban environments of the future?

UNDERSTANDING THE COMPLEXITY

The megatrends driving KONE's business are urbanization, demographic change, concern for the environment and safety. However, the evolution of future cities is influenced by more complex and interlinked developments. For KONE, these global macrotrends need to be followed very carefully.

According to Stenros, the complexity begins with urbanization. "We must understand that what's happening in



Giuseppe Bilardello

Nairobi is different from what goes on in Sao Paolo, Shanghai, Los Angeles or even Paris."

In the US and Europe, for example, the rise of solo-living is emerging as both young and elderly people move

out from suburban areas to live in city centers. As a result of this changing household landscape, the population density gradually increases. The pace of growth in Africa and Asia is significantly faster. Stenros notes that continuing population growth and urbanization are projected to add 2.5 billion people to the world's urban population by 2050, with nearly 90 percent of the increase concentrated in Asia and Africa.

Bilardello suggests that the complexity of changing demographics should not go unnoticed either. In addition to aging populations and the growing number of middle-incomers in today's cities, more attention should be put on the shifts happening around education, employment and changing lifestyles.

"The working environments of tomorrow are transforming. People travel more and remote working is becoming popular," he says. "The future of work will change dramatically with less office workers and more telecommuters." This has direct implication when planning for office buildings, he points out.

In addition to "geography of life", meaning and purpose is playing a



bigger role for urban dwellers. The work-life choices that employees make prioritize family and relationships over status and materialistic values. “People are seeking higher meaning at work and in their personal lives. This will impact the success of sustainable business practices,” Bilardello comments.

ADDING THE HUMAN FACTOR

For Bilardello, one thing is clear when understanding future scenarios. “Technologies will always adapt to future environments; the key to sustainable growth is for humans to be at the heart of everything we do.”

Stenos agrees: “In elevator and escalator design, we identified the shift away from B-to-B toward a human-to-human user experience. We’ve noticed that so called ‘first movers’ or young people are already sending signals of moving away from living in a hyper-connected and a monitored world. Instead, these early adapters want to be more out-of-reach and they are seeking a life where personalization and human touch have a central role.”

MULTIDIMENSIONAL THINKING

For KONE’s R&D, the emerging macro trends call for a somewhat new approach to monitor the surrounding world. This translates into finding ways to listen to the customers and end users.

“Once a year, KONE organizes a People Flow Day in more than 30 countries with the aim to keep our finger on the pulse of the needs of our customers and building users. This is a great opportunity to better sense the future directions and individual aspirations and we see ourselves taking a more active role in these events,” Bilardello says.

BEING THERE FOR SOCIETY

Competition is expected to continue and the industry bar will be high for future innovations. According to Bilardello, winning means truly being there for society and creating innovations in a sustainable way. “To me, profitable growth equals sustainability,” he says.

Enhancing life results in the need to rethink R&D. “Instead of focusing too

As growth in China’s coastal cities slows, inland cities like Xi’an are the new focus of urbanization.

much on R&D management as such, one crucial focus area is to secure versatile talent within our teams,” Bilardello says. Cultural and educational diversity will become an asset. “In the future, our teams will consist not only of engineers but also of human scientists, futurists and sociologists. These interpreters of society are capable of thinking horizontally and seeing bigger trends.”

CO-CREATING PEOPLE FLOW

Openness, transparency, partnerships and trust will be an essential part of innovation processes. “In order to turn the complex trends into a real advantage for society, we need our customers, employees, local authorities and other stakeholders to get together to create sustainable solutions.”

Already there are companies who have opened up their innovation portfolio to local and global innovation communities with the objective to create solutions that adapt to local conditions, Bilardello explains. ■

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KONE keeps DELHI ON THE MOVE



TEXT PIA HEIKKILÄ PHOTOS AMIT ARORA, KONE AND ISTOCK

Delhi – a megacity of more than 20 million people – was for years known for its terrible traffic, poor roads and even poorer infrastructure. Millions struggled with their daily commute because the city lacked a proper public transport system. When the city’s new metro plan was unveiled in 2002, the mammoth project was as ambitious as it was urgent.

There had never been a subway of this magnitude built anywhere in India before. In fact, it was quite unlike any other project due to the sheer scale of it.

A decade later, the Delhi Metro has been hailed as one of the success stories of modern India.

Today the Delhi Metro carries 2.7 million passengers daily safely to their destination across 190 kilometers of track and through 137 stations.

LEARNING TO MOVE THE MASSES

One of the key functionalities of any

metro station is to keep people moving smoothly – from the platform to the train, from the concourse level to the street.

Delhi Metro is no exception. It became apparent that Delhi Metro Rail Corporation (DMRC) needed a delivery partner with vast experience in moving people in transit stations.

“When we evaluated our needs for equipment, we began listing qualifying criteria. One benchmark was experience in similar projects elsewhere in the world. We discovered that KONE fulfilled this, and in fact several other conditions we had set,” says **Anoop**

Gupta, Director (Electrical) of DMRC.

Soon after the Delhi Metro was operational, it was agreed that passenger flow at the stations was inefficient.

Work was already underway to extend the network, so passenger numbers were expected to swell even further.

The issue of people flow needed to be addressed urgently.

KONE conducted a study of the people flow as well as passenger needs at four different stations: Rajiv Chowk, Kashmere Gate, Civil Lines and Vidhan Sabha.

Each station was carefully chosen based on its uniqueness in size,



Above: Anoop Gupta, Director (Electrical) of DMRC at DMRC headquarters; Below: Anil Mehta, Chief Project Manager at KONE India at the Paschim Vihar East metro station.



FAST FACTS

Delhi Metro Rail Corporation
 Project completion: ongoing
 Flow: 2.7 million passengers daily
 Coverage: 6 lines serving 137 stations
 Owner: state-owned

KONE SOLUTIONS

395 KONE MonoSpace® elevators
 75 KONE TransitMaster escalators
 KONE Care™ Maintenance Service
 (24/7)

2.7

THE DELHI METRO CARRIES
 2.7 MILLION PASSENGERS
 DAILY SAFELY TO THEIR
 DESTINATIONS.

architecture and user behavior.

In addition to studying the flow at each station, the study focused on how to improve movement of people from one place to another and what was causing the slowdown.

“We were surprised to hear that many people were using a metro for the first time. When a person wonders how to use an escalator and hesitates, a busy passenger becomes frustrated and might even push aside that novice passenger,” says **Hannu Nousu**, Senior Expert, Usability, Market and Customers at KONE.

Based on the study’s findings, KONE realized the stations needed to be carefully re-planned to improve the people flow situation.

“If a metro station is located in a transit area between long distance trains or even a bus, passengers have bigger bags and walk at a different pace than busy office workers,” Nousu says.

KONE also learned that culture often dictates user habits. For instance, passengers naturally stand left or right on an escalator.

“Additionally, the study uncovered other variances to behavior. When a passenger arrives to a platform, those

who do not know how to use an elevator will not press the call button. This drove us to design elevators that automatically travel between floors without any prompting,” says **Anil Mehta**, Chief Project Manager at KONE India.

SPECIFICATIONS TO LOCAL NEEDS

Everything about the project was new, specifications were tough and compliance was demanding. KONE incorporated its own know-how when faced with localization challenges.

“DMRC may have modeled its blueprint design from the Singapore Metro, but in practice the project was like no other,” Mehta says.

“Power fluctuations occur because the quality of electricity is poor in Delhi. Our elevators are backed up by a battery in case of a power failure. As a result, an elevator will reach its nearest landing and the doors will open.”

Add to this the local climate, which in Delhi’s case is likely to be a major issue. Extremely hot summers, cold winters, dust and monsoon rains mean the exterior of the elevators needed to adapt to those conditions.

“We came up with a detailed plan to carefully protect the elevators from the elements. We installed a water gate



PLANNING: KEY TO SMOOTH PEOPLE FLOW

In addition to providing products for better people flow, KONE is a leading expert in people flow planning around the world. Project segments include retail, public transportation, medical, buildings, residential and hotels.

Consider the public transportation segment. Traffic is often times heavy and continues for 16 to 24 hours per day.

KONE provides customers with guidelines that help to determine optimal people flow. In addition, KONE is able to define the most suitable equipment, size them accordingly and strategically locate them in a busy transit station.

A major component of KONE's planning process is to send in its People Flow experts to assess the various elements of a passenger's journey.

It is essential that people can move forward smoothly without forming queues or blockages during their journey through a station. Timing of the day matters since rush hour creates bottlenecks and can vary from station to station.

People Flow experts also study behavior during peak hours and off-peak hours. If passengers have too many distractions, it can create confusion and obstructions.

Detailed planning allows KONE to come up with solutions for a smooth, safe and efficient movement of passengers.

With the help of KONE's planning expertise, transport solutions are eco-efficient, accessible, reliable, safe to use and easy to maintain. ■

inside the elevator pit because water can ruin electrical components. In case of water in the pit, the elevator sends out an alarm," Mehta comments.

The megacity is also known for its pollution and poor air quality, thanks to the relentless traffic.

One of the chief aims for DMRC was to create a more environmentally friendly transport system and this green ethos of the company had to be mirrored by suppliers.

India is starved of energy and DMRC stressed the added value of eco-efficient technology. The KONE EcoDisc® not only provides the highest total efficiency, but contains no oil to run the elevators.

"Getting rid of the waste oil is a complex process. With our technology, DMRC achieved another eco-friendly goal," Mehta proudly says.

"KONE is very focused on the environment and sustainability. There was no compromise on this issue, which is our principle, too," says Gupta.

LONG-TERM COMMITMENT

For DMRC, moving nearly three million people smoothly 24/7 is of utmost importance. Maintenance and repair of equipment must be kept to a minimum.

"Disruption has been much less than what we expected and what the specifications originally stipulated. I believe this is due to KONE's understanding of preventative maintenance," Gupta says.

KONE's partnership with DMRC is going from strength to strength. KONE has been awarded with 143 more units, which are to be installed in phase 3, the next stage of the project, due to be completed in 2016.

"KONE has repeatedly gone beyond their contractual duties. The company has a great attitude that puts the customer first.

"It is in KONE's DNA to listen to the customer. Add to that the technical know-how and the eco-friendliness, well you have a winning team," summarizes Gupta. ■

Having a corporate conscience is more than an add-on strategic initiative. It is a responsibility that stretches beyond environmental duties. And it is this mindset that shapes KONE's social behavior – and guides the company to pursue an active role in communities around the world.

TEXT AND PHOTOS JOHN SIMON

GIVING BACK

The KONE Centennial Foundation (KCF) was founded in 2010 to help young people at the margins of society gain the knowledge and skills necessary to participate in improving their lives and those of the communities in which they live.

KCF's first project in 2011 was the creation of what we believe to be China's first mobile library and certainly the first designed specifically for children. It serves the sons and daughters of migrant workers in China's rapidly growing cities. The second project, from 2012, was support for the Rotary Nagar Youth Center in a slum in Chennai, India. Here, poorly served local children receive the educational support that children in other parts of the world routinely receive as part of their normal schooling.

CHILDREN DRIVE CHANGE

In South Africa, KCF has been instrumental in conceiving and enabling the creation of a youth center with a truly challenging goal: to turn a drug- and crime-ridden area with painfully high levels of unemployment into a safe and productive community through the leadership of its young people. With the help of numerous partners, the multi-service Westbury Youth Center (WYC) has been established in a former hostel of the Westbury Secondary School.

KONE South Africa volunteers helped renovate the facilities, and "refreshed" computers donated by KONE have enabled the youth to gain access to the Internet and the world.

Young people from Westbury and nearby unofficial settlements can participate in such programs as Make It Better (learning through community involvement), Digital Curiosity (looking at their community through the lens of a camera), Social Media (how to use the Internet to make your voice heard), and mLearning (introduction to entrepreneurship and the world of work via digital media). This fall, two volunteer teachers from Finland have begun holding workshops on the creation of local radio programs by WYC participants. The center also houses drug prevention and family violence intervention teams, and plans have been made to bring other health, cultural and educational services onboard. Last but not least, WYC has its own community garden.

In just two years, WYC has grown from an idea into a vibrant contributor to community wellbeing. Youth participants make their presence felt outside the confines of the center, whether by participating in community events or by recording daily life through their photography, blogs or radio interviews. KCF is committed to the long-term sustainability of the Westbury Youth Center and is working with WYC staff

KONE CENTENNIAL FOUNDATION (KCF)

- Founded in 2010 in honor of KONE's centennial celebration.
- Independent non-profit organization with a mission to advance and support developmental, educational and cultural activities for children and youth around the world.

OTHER ONGOING PROJECTS

- China: Joy of Reading Mobile Library for migrant children
- India: Rotary Nagar Youth Center in Chennai
- South Africa: Westbury Youth Center

to find other supporters, both public- and private-sector, to ensure the further development and stability of this exciting initiative and the contribution of future generations of skilled workers, responsible parents, and community-minded adults in Westbury and its surrounding neighborhoods. Core project partners so far have been the Westbury Secondary School, KONE South Africa, Khulisa Social Solutions, the Finnish Children and Youth Foundation, Finland's Ministry of Foreign Affairs, Investec and Carlson Wagonlit. ■



According to UNICEF, children are the experts on their own lives. They can contribute valuable knowledge to validate and enrich the evidence base – if only they have a chance to be heard. They can also use knowledge that they obtain through research to effect change in their communities.

Source: The State of the World's Children 2014



SKY HIGH RANKING

KONE ranked 42nd out of the top 100 most innovative companies in the world by the well-known business magazine *Forbes*. Out of all European companies listed this year, KONE ranked an impressive sixth – and is the only elevator and escalator company featured on the *Forbes* list this year.

Innovation and technological advancement have been at the core of KONE for

decades, and will continue to be moving forward. Some of the most prominent innovations include the introduction of a machine-room-less elevator in 1996.

The latest groundbreaking solution is the new high-rise elevator hoisting technology, KONE UltraRope™, enabling future elevator travel heights of one kilometer – twice the distance currently feasible.

Last May, KONE announced that the KONE UltraRope technology would be used in Saudi Arabia's



Kingdom Tower, expected to be the world's tallest building with a height over one kilometer once completed. ■



KONE TAKES GREEN LEAD IN SINGAPORE

KONE is the first elevator company to receive the Green Label certification by Singapore Green Building Council (SGBC) for KONE N MiniSpace™ and KONE N MonoSpace® elevators. Through this certification, KONE's elevators are recommended for Green Mark certified green buildings.

KONE Singapore received the confirmation of the Green Label certification in October 2013 and received the green product certificates at Singapore Green Building Council on September 3, 2014.

Contributing to development of next-generation green buildings is one of KONE's priorities and receiving the Green Label certification is a testament to our dedication to provide eco-efficient solutions that help people move safely and smoothly in our increasing urbanized environment. ■

The Marina Bay Sands resort in Singapore has made a further commitment toward energy efficiency with the new KONE UltraRope™ elevator hoisting technology.



Top marks in climate change reporting

KONE received the best possible score of 100 in the Carbon Disclosure Project (CDP) 2014 reporting. The high score indicates excellent data management and understanding of climate change related issues affecting the company – from solutions to the company's own operations and the whole supply chain. This was the fifth year KONE's achievements have been recognized by CDP.

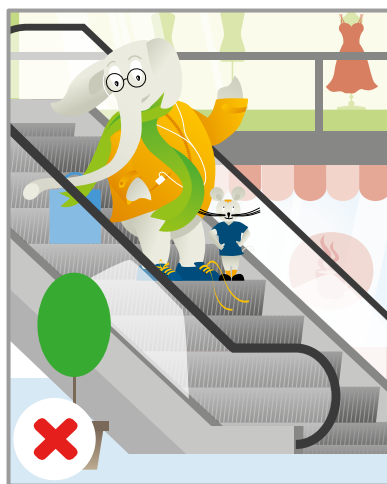
KONE's long-term environmental objectives are to further improve the eco-efficiency of its solutions, modernize existing elevators and escalators to make them more energy-efficient, and to further reduce the environmental impact of its operations – especially its carbon footprint.

CDP is an international, not-for-profit organization providing the only global system for companies and cities to measure, disclose, manage and share vital environmental information. CDP works with market forces, including 767 institutional investors with assets of USD 92 trillion, to motivate companies to disclose their impacts on the environment and natural resources and take action to reduce them. CDP now holds the largest collection globally of primary climate change, water and forest risk commodities information. ■

DOING OUR BIT

KONE is an active participant in organizations that develop codes, standards, and guidelines for improving safety, accessibility, energy efficiency, as well as other organizations that advance sustainable development. These include:

- The European Committee for Standardization
- The International Organization for Standardization
- International Trade Associations
- World Business Council for Sustainable Development
- European Round Table of Industrialists' Energy and Climate Change Working Group
- Green building councils
- Council on Tall Buildings and Urban Habitat
- UN Global Compact



Little things matter in safety

An untied shoelace on an escalator, a quick phone call while driving, using faulty tools or not wearing the proper equipment at work. At KONE, we have found that most accidents are caused by things we don't worry about, because they are too little and too familiar. Millions of people use our equipment every day, and our top priority is to keep our employees and end users safe.

In addition to continuously developing our people and processes, we work together with our partners, and actively communicate the safe use of equipment to users. One way of working toward our ultimate goal for zero accidents is to provide education material to equipment users and to organize global events on safety. We also educate children with the help of KONE's safety mascots Max and Bob. ■

Dedicated to People Flow™



MARINA BAY SANDS, SINGAPORE

Safety for all.

At KONE, safety is everyone's concern. It can be seen in our working methods and processes, our travel and driving policies, the way our factories operate, on-site communication and end-user safety trainings, to name a few. www.kone.com