Volvo Group magazine 4.2015

MADE FOR CHINA INSIDE VOLVO CE'S JINAN TECHNOLOGY CENTER

FUTURE FORESIGHT HOW GTT IS PREPARING FOR TOMORROW, TODAY

GETTING INVOLVED THE COMPETITION FOR CONNECTING WITH STUDENTS

"Communication is key."

Annie Gao, Product Platform Engineer at Volvo CE's Jinan Technology Center

Ready for a changing China

As China's economy continues to transform, the Volvo Group is taking action to meet the market's new needs

Future success is all about change

HIS ISSUE OF Volvo Group Magazine focuses on China, a country whose GDP has increased fivefold since the turn of the millennium. The rate of change has been extremely high and there is perhaps no finer example of the way the desire to change can make an economy flourish.

Change can be difficult if you are not involved in driving it. At the same time, it is our own capacity for adaptation and change that creates the conditions that enable us to be involved in leading change. Change has brought us to the position we currently enjoy – but the things that took us here are not enough to take us to the next level.

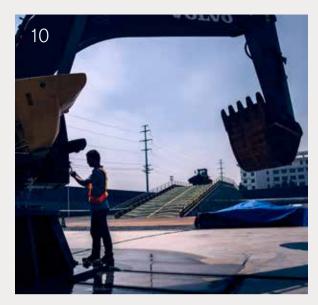
IN THE SAME WAY, I am convinced that our most successful customers are the ones who are best at utilising change or actually driving change in their sectors. The very best of them use their determination to change to challenge us to do our very utmost and constantly improve our

performance.

When you read this, yet another change will have taken place, with Martin Lundstedt taking over as President and CEO of the Volvo Group.

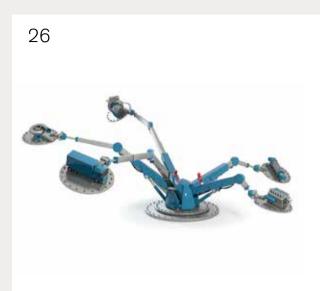
> JAN GURANDER CHIEF FINANCIAL OFFICER, VOLVO GROUP

VOLVO GROUP MAGAZINE is aimed at all the co-workers within the Volvo Group. It is published six times a year in Swedish, English, German, French, Portuguese for Brazil, Polish, Russian, Japanese, Dutch, Korean, Thai, Chinese and Spanish. There are three editions of the magazine: Operations, Technology and Sales. PRINT RUN approx. 88,000 copies ADDRESS Volvo Group Magazine, Volvo Group Headquarters, Dept AA13400, VHK3, SE-405 08, Göteborg, Sweden PHONE +46 (0)31 66 00 00 E-MAIL groupmagazine@volvo.com EDITOR RESPONSIBLE UNDER SWEDISH PRESS LAW Markus Lindberg EDITOR-IN-CHIEF Ann-Mari Robinson EDITORS Lotta Bävman (Operations), Carita Vikstedt (Technology), Tobias Wilhelm (Sales), Jaanna Gatzyńska (Business Areas). A Group-wide Editorial Network also contributes content. MARKET LANGUAGE REVIEW Ann-Mari Robinson EDITORIAL PRODUCTION Spoon (project team: Maria Sköld, Nic Townsend, Lina Törnquist, Hanna Zakai, Janne Saaristo, Pernilla Stenborg, Charlotte Sundberg) PRINTED BY RR Donnelley CHANGE OF ADDRESS Contact your local HR TRANSLATED BY Jeanette Kliger













Volvo Group magazine 4.2015

10 China up close

Volvo Group Magazine visits Shiyan, home of the Volvo Group's new joint venture DFCV. We also look at some of the key trends changing the country.

26 A fierce competitor

In Business Intelligence's latest analysis of the Volvo Group's main competitors, Daimler Group is in the spotlight. Daimler is one of the rivals in the heavy-duty truck segment.

30 The long-term plan

The quest to be a leader in technology and innovation tomorrow, starts today. Find out how the Volvo Group is already positioning itself at the forefront of development and preparing for the future.

36 The importance of uptime

Markus Efraimsson, Vice President Uptime, Group Trucks Sales, explains why the new department has been created, what it hopes to achieve and why uptime is so important in today's industry.

50 Solving problems once and for all

By examining late deliveries of Volvo trucks and working all along the chain, it was possible to find, isolate and eliminate the root causes. Delivery precision immediately improved.

44 Getting involved

Through INVOLVE, the Volvo Group is benefiting from fresh new ideas from promising young graduates, while also engaging with the academic community.

start



Engineers demonstrated ongoing research

The Volvo Group's vision is to be not only the world leader in sustainable transport solutions, but also the leader in safe transport solutions.

During the Vehicle Dynamics and Active Safety demonstration days at the Hällered and AstaZero proving grounds, organised by GTT in June, key results and activities in several on-going research projects were showcased. These were mainly within three technology development programmes; Driving Assistance & Active Safety, Vehicle Automation, and Vehicle Dynamics.

The technologies demonstrated were at different levels of maturity, with some in early phases and others being more advanced.

"We actually only presented a teaser of what is ongoing within our Technology Development portfolio," said Philippe Ravoux, Director Vehicle Technology & Safety within Advanced Technology & Research in GTT.

"We definitely have more in the pipeline and can be proud of the many talented engineers who help provide these cutting edge technologies for the Volvo Group".

READ MORE ABOUT THIS IN A COMING ISSUE OF VOLVO GROUP MAGAZINE

Mack telematic services are being awarded

Mack Trucks has been named the 2015 Telematics Commercial Vehicle Maker of the Year by TU-Automotive (formerly Telematics Update), a leading advocate and information hub for automotive technology and connectivity.

"It truly does connect man and machine." This is how Phil Cary, Mack Truck's Regional Fleet Service Manager for the Southeast Region, describes how GuardDog Connect, ASIST and Mack OneCall work in symphony to perform the all-important task of keeping drivers on the road in well-performing trucks.



Mack Trucks' GuardDog Connect, ASIST and Mack OneCall are some of the services that helped win the 2015 Telematics Commercial Vehicle Maker of the Year award.

1,500 MACK TRUCKS SOLD TO CANADA

Mack Defense, part of Governmental Sales, has been awarded contracts to supply more than 1,500 trucks to the Canadian armed forces. The two contracts are valued at 725 million CAD. Deliveries will begin in the summer of 2017 with completion in the fall of 2018.





WFP partnership expanded

Renault Trucks is expanding its 2012 partnership with the World Food Programme for another three years. Renault Trucks' volunteer staff members, keen to pass on their knowledge, will be travelling to the Democratic Republic of Congo, the Central African Republic, Ghana, Sierra Leone, Liberia, Chad and Uganda over the next three years, leading training sessions focused on a Renault Kerax 6×6, configured as a mobile training unit. In all, 150 World Food Programme mechanics, workshop managers, fleet managers and trainers will benefit from this instruction between now and 2017.



Working with today's youth

Youth for Public Transport (Y4PT) – an international youth-led prosustainable-mobility organisation with some 5,000 volunteer members – teamed up with Volvo Buses in Milan, Italy, during the UITP World Congress, the biggest event in public transport. The organisation learnt about Volvo Buses' plans for electro-mobility.

'It is our strong belief that ecofriendly sustainable transport is absolutely necessary for individual and collective well-being," said Alessandra Gorini, Co-Founder and Director, Y4PT.



I would like to hear your thoughts

Since the beginning of the year, the Volvo Group owns 45 per cent of the Chinese truck company Dongfeng Commercial Vehicles, DFCV, with 19 plants and a market share of around 16 per cent. I am very pleased that *Volvo Group Magazine* is able to provide the inside story of the new Chinese venture in this November issue. Our reporter Lina Törnquist spent a week in China earlier this year to profile a market that is changing at a tremendous pace. Read her stories on pages 10-25.

This is the 4th issue of the *Volvo Group Magazine* and you have hopefully got used to – and appreciate ⁽³⁾ – its format, layout and content. An evaluation is being carried out

to hear some of our readers' thoughts in a more structured manner. There are so many examples of how employees contribute to great achievements every day.

It is the aim of this magazine to highlight these as well as provide insight to the bigger picture of our Group direction. I would like to hear your thoughts as well! Please drop me a line at groupmagazine@volvo.com

ANN-MARI ROBINSON EDITOR-IN-CHIEF

ANSWERS FOR THE QUIZ ON PAGE 52 1. B | 2. B | 3. C | 4. A | 5. Volvo Buses 8%, GTO 33%, Volvo CE 15% HVO for Euro 5

After extensive field-testing. the renewable diesel HVO (Hydrotreated Vegetable Oils) has been approved for all Volvo Trucks Euro 5 engines and certifications are being prepared for Euro 6. In addition Volvo city buses and intercity buses in Euro 6 are ready for the new fuel. HVO has the same properties as regular diesel, such as storage life and cold-resistance, and reduces CO2 emissions between 30 and 90 per cent. The two fuels can also be mixed.

UD Trucks' future vision unveiled

The Tokyo Motor Show between 28 October and 8 November saw the unveiling of the 'Quon Vision', a concept truck to show UD Trucks' future vision to go the extra mile for smart logistics. A second highlight was the UD electric demonstrator, a new innovative technology solution for a full electric truck with high volume load capacity. And finally, another recent customer focused initiative to mark the 80th year anniversary of the brand, was the UD Road Support for proactive around the clock customer service.

11% LESS FUEL WITH OPTIFUEL

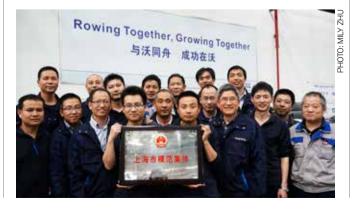
The independent body TÜV Rheinland has certified a 10.9 per cent reduction in fuel consumption for a Renault Trucks T Optifuel compared with a standard T model, after drivers had benefited from Optifuel Training instructions. TÜV Rheinland carried out its tests over three days on a 200 km route, typical of a long distance interregional haulage run. Both vehicles carried a 32 tonne load. This very strict procedure made it possible to isolate the two vehicles' intrinsic performance and exclude any impact on consumption from outside factors such as ambient temperature, differences in the two semitrailers' rolling resistance or the prevailing road traffic.



Volvo Penta team in Lingang awarded

A production team at the Volvo Penta Lingang plant in China has received the 'Role Model of Teamwork' award by the Shanghai government. The award is presented every five years to promote continuous excellence in the workplace and contributions to society. The Volvo Penta team was selected from a field of 126 participating companies. Commitment to Volvo Group's core values was a key factor in winning. With its strong focus on safety, the plant has had zero accidents since it was established in 2008. It has scored 98 per cent in customer satisfaction and the facility is also viewed as a benchmark when it comes to waste recycling.

"This award is an encouragement to continue to work with excellence and with a strong teamwork spirit," says Chew Koon Teng, General Manager, Lingang plant.







10,000

Volvo trucks have been delivered in India, making Volvo the first premium European truck brand to reach this milestone. The 10,000th vehicle was a Volvo FMX delivered to M/s Mahalaxmi Infracontracts Pvt Ltd in Bangalore on June 18.



Investing in platooning system Volvo Group Venture Capital part of developing integrated safety

Volvo Group Venture Capital, a subsidiary of the Volvo Group, has invested in Peloton Technology, a developer of vehicle technologies that deliver safety and fuel savings to fleets in the trucking industry. Peloton's truck platooning system is an integrated safety, efficiency and analytics platform that builds on advanced safety technologies such as collision mitigation and adaptive cruise control systems.



Perfect timing

Arriving in time is important in all transport operations, but for time-critical assignments it can be crucial to retaining a contract. With Volvo Trucks' new positioning service, Positioning+, it is possible to track the vehicle's geographic location, minute-byminute, thus creating even more efficient logistics.

"One good example is the concrete industry," says Johan Östberg, Product Specialist. "Timing is everything – down to the very minute the truck must roll up to take delivery of its load of concrete."

Safety pioneers

The Volvo Group reinforced its commitment to safety at two key international conferences, Enhanced Safety of Vehicles and Towards Zero – both held in Gothenburg, Sweden, in June – where important research and ground-breaking technologies were presented and demonstrated. Presentations with experts from GTT covered the topics of challenges for a safe human-machine interface design and automatic control of low speed manoeuvring of trucks and trailers.



start AROUND THE WORLD WITH THE VOLVO GROUP

A special delivery for Randy

Randy Blose, Purchasing Manager at Governmental Sales, Mack Defense in Allentown,

USA, and a Volvo Group employee since 1977, shares a rare and very special experience that also made him a hero in the local paper. Here is his story:

"My wife and I were going to meet some friends when the driver in front of us made a fast manoeuvre through a red light and



and Randy Blose

raced into a parking lot. We pulled aside the car and asked if everything was OK. It turned out that the

driver, Jon, was frantic about his wife having a baby. His wife Casey immediately delivered a baby girl! We called 911 and grabbed a blanket from our car to wrap the baby in. My wife sat holding the hand of Casey and I stood behind Jon patting him on the back telling him what a great job they were doing. Everything went well. We stay in touch with the family and baby Stella on Facebook. It was an exciting and rewarding experience to

be able to help. I know some people might not want to get involved but we had a feeling we needed to stop and are glad we did. Very few things in life compare to the birth of a child."



Why not take the bus straight into the library? This unusual concept was tested in Gothenburg during the Volvo Ocean Race final. In collaboration with the Gothenburg City Library, Volvo Group built a temporary bus

Sustainability by the book

stop combined with a library, to showcase the opportunities provided by quiet, emission-free buses. Visitors were able to sit down to read or listen to audio-books in silence – just like in a real library. "With noise and air pollution out of the equation, the vehicles can get closer to where people are – even indoors," says Håkan Agnevall, President Volvo Buses.

QUICK AND POSITIVE SERVICE REWARDED

Quick to respond, serviceminded and always with a positive attitude – this is how colleagues describe Alex Chin, who works with resolving software and hardware issues at IT Services in Malaysia. The management team at Group Trucks in Malaysia decided to recognise his services by making him Employee of the Month.

"I feel truly honoured to receive the award; it is a wonderful way to express appreciation in addition to raising morale," says Alex Chin, who has been with the Group for almost five years.

Alex Chin, Service Desk Engineer at IT Services.

NEW INITIATIVE, NEW GRADUATES

It is estimated that around 100,000 graduates in Sweden with a non-Swedish degree are unemployed or highly over-qualified for their current job. At the same time, Swedish companies can expect a shortage of



Teresa Krook

engineers in the coming years. The Volvo Group is trying to reverse the trend and has offered 15 graduates work and language experience for six months in 2015, as part of the national initiative 'Äntligen jobb' ('Finally working').

"In the long-term we will need to recruit graduates, mainly engineers, so this is an important target group. We also want to increase diversity and gain new competencies," says Teresa Krook, Director, Talent Management, HR CoE Sweden.

ENERGY GOALS FIVE YEARS AHEAD OF PLAN

In the US Department of Energy's 'Better Buildings, Better Plants Challenge', Volvo Group North America achieved its energy reduction goals five years earlier than anticipated. The Volvo Group's goal had been a 25 per cent reduction in energy consumption at its eight manufacturing plants in the USA between 2009 and 2020. By the end of 2014, energy consumption had been reduced by 26.8 per cent, making the Volvo Group one of only 11 companies to meet its goal early.

"Reaching this milestone required the diligence and dedication of all our employees and we will continue to strive for improved energy efficiency," says Rick Robinson, Director of Health, Safety and Environment for the Volvo Group North America.

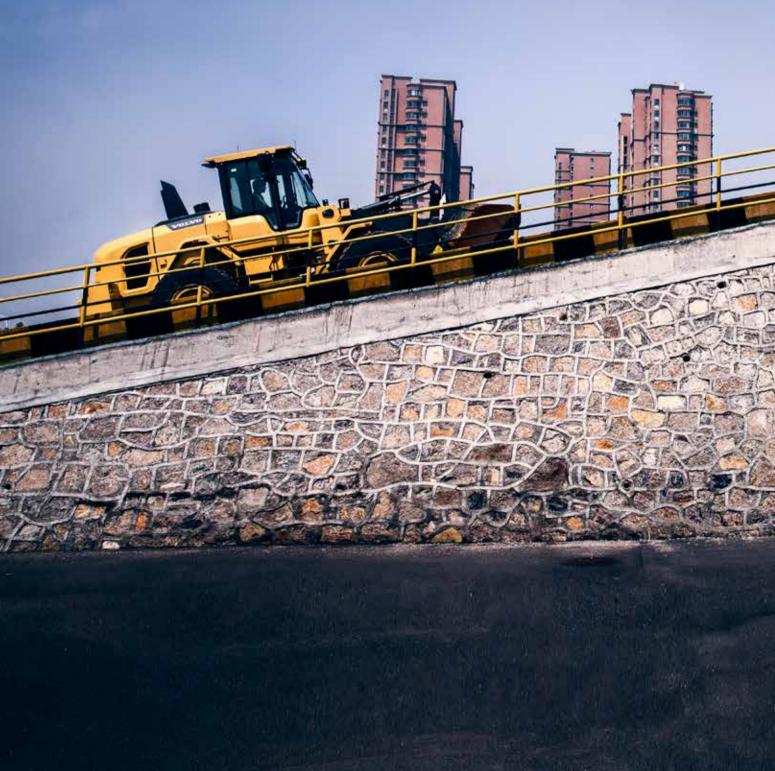
Getting their voices heard for wellness

Singing in a choir can be a lifetime experience, a way to express joy together and make new friends. Some 100 Volvo Group co-workers in Lundby and Arendal in Gothenburg, Sweden, have discovered this as part of employee wellness activities during the first half of the year. They have been rehearsing for 1.5 hours after work each week under the guidance by choirmaster Lars Brandström, who has experience of leading choirs in genres like gospel, R&B, pop and ballads. The spectacular finale took place in June.



SUPPIAH

PHOTO: VIJAYALETCHUMI



China is undergoing a huge economic transition, which is bringing challenges but also plenty of opportunities. We take a closer look at the trends transforming the country and how Volvo Group is meeting them – from the coastal province of Shandong to inland city of Shiyan, home to Volvo Group's joint venture DFCV.

LINA TÖRNQUIST

PHOTOS NICKE JOHANSSON

i Guixiang assembles water tanks at Dongfeng Commercial Vehicles' (DFCV) new cab assembly plant in Shiyan, a city in central China's mountainous inland. Opened in 2013, it is one of the most modern automotive plants in the country.

Robots scurry along the floors. Three islands of trees have been planted alongside the line with benches where workers can rest. The production line is designed to be flexible and can handle over 1,000 different truck configurations.

Li Guixiang has been manufacturing Dongfeng trucks for 20 years. She grew up poor, she says. "Life was tough then, I have three brothers and only my father worked. But, today, it's getting better and better." Li Guixiang now owns a flat and a car and likes to travel to nearby cities at the weekend. Travelling around and seeing Dongfeng's trucks on the road makes her proud: "I think to myself – I built those."

Volvo Group Magazine is in Shiyan to meet the people working with DFCV, the Volvo Group's new Chinese joint venture, which holds 16 per cent of China's massive market for medium- and heavy-duty trucks. The city is located in China's industrial heartland, Hubei Province, where 80 per cent of DFCV's supplier base is also located. Still, it is surprisingly green with newly-built skyscrapers nestled among verdant, forest-covered hills.

Shiyan, and the truck company that has developed into today's DFCV, were carved out of the surrounding mountains in 1969, when China was still largely closed off to the world. At the time, the area consisted of just a few villages. Since then, China has transformed itself into a leading global economy and the world's largest truck market. Today, 16 of DFCV's 19 manufacturing plants are located in the city, as well as offices and headquarters.

During China's past decades of growth, much of its population have followed a similar path to plant worker Li Guixiang. China has become a middle income nation.

NOW, AS ITS ECONOMY matures, the country is changing in ways which are transforming both its society and its truck market. DFCV and its customers are right at the centre of these changes.

One major change currently underway is the ongoing consolidation of China's fragmented logistics sector. Until recently, the country had a relatively undeveloped and inefficient logistics market that focused primarily on exports and consisted of a myriad of small players. In 2014, China's 20 largest logistics firms made up barely two per cent of the market, according to *The Economist* magazine





12 VOLVO GROUP MAGAZINE 4.2015





Team leader Du Wei has manufactured Dongfeng trucks for ten years. Today, his team is assembling DFCV's red Kingland long-haul truck. The colour red is considered lucky in China. The red "heavenly dragon", as the company's long-haul model is called in Chinese, is a best seller.

"The customer profile is changing"

The structure of China's truck market is shifting.

Major changes are underway in the make-up of China's truck customers, explains Gao Chao, Sales Department Director at DFCV. He divides Chinese truck customers into three main types: third-party logistic operators, in-house company logistics and independent owner-operators. Accounting for around 50 per cent of the market, owner-operators are the largest customer group in China. These customers typically buy a truck



Gao Chao

with money saved up or scrounged together from friends and family. Their operation is often inefficient with a lot of downtime and low pay.

Now, too many drivers, coupled with the on-going drop in construction and mining, are pushing many of these drivers out of business. Instead, thirdparty logistics operators are gaining traction. These logistic companies often operate large fleets with hundreds and sometimes thousands of trucks. Today, they account for around one-third of the market, estimates DFCV, but they are getting a big push through government incentives and China's booming e-commerce market, which demands reliable, overnight deliveries. These third-party operators care more about uptime and total operating costs. With such large changes underway, what will be key for future customers in China? "Reliability, fuel efficiency, telematics," says Gao Chao. "Cost will continue to be a key factor, too. To meet this future, developing both our products and our aftermarket will be crucial."



and the country had a whopping 700,000 owner-operators.

But as domestic consumption grows in China, sped on by rising incomes, it is making way for a more efficient logistics sector with larger national players.

The result? "The profile of China's truck customers is changing," explains Gao Chao,

Sales Department Director at DFCV. "Third-party logistics operators are quickly gaining ground." These larger players, sometimes with fleets of hundreds of trucks, will still compete on cost, he expects, but are also set to focus more on efficiency and uptime.

Luo Yiiiao

DFCV may be well positioned to meet the needs of this changing market.

For one, the truck-maker already counts many of China's large, third-party operators as customers. Through its partnership with Volvo Group, it is now upgrading its technology to increase the performance of its vehicles.



The company has licensed the Volvo Group's 14-speed SMT gearbox technology and also signed a licence agreement in June to develop and produce an 11-litre engine based on Volvo Group technology, which will strengthen DFCV's position in the Chinese market.

Gary Huang

A CONCERTED EFFORT is also underway to raise quality standards overall, says Luo Yijiao, Chief Engineer of the Quality Insurance Department, which has been supported through DFCV's collaboration with the Volvo Group. "We are now taking a customer-oriented approach to our quality efforts and this has improved our way of working," she says.

But even as some parts of China's economy, including its service sector, are expanding, others are contracting. Following decades of rapid urbanisation, China's property market, which has powered almost a fifth of the economy, cooled last year. As a result of this and



Yang Changyong has a red Kingland model. Since he bought his truck one month ago it has covered 22,000 km. "The truck is more precious than my life, I would go without dinner if necessary in order to maintain it. It is my entire livelihood."



Service technician Li Kun has repaired Dongfeng trucks for six years. "With each generation, Dongfeng trucks are getting better and better." On the wall behind him is DFCV's slogan "Care about every person. Care about every truck."





Team Dongfeng brought its brand to global audiences

When the Dongfeng team first started training a few months before the Volvo Ocean Race, where it would be up against some of the best sailors in the world, it included crew members who had never slept on a sailboat.

Despite these obstacles, and other hurdles including a broken mast during a key leg of the race, the Dongfeng team finished third – a feat few thought possible at the outset.

As one of the most talked-about boats in the race, Team Dongfeng has been a platform for launching the Dongfeng brand globally. Having turned Dongfeng into one of China's largest truck brands, the company now has its sights set on expansion into emerging markets including Africa, Latin America and Asia. "Through our global alliance, the Volvo Group is strengthening its position in China and DFCV can bring its Dongfeng brand overseas. The strength of east and west can turn us into a truly global partnership," says Gary Huang, DFCV's President.

other factors, China's truck market dropped 35 per cent during the first six months of 2015. DFCV's sales were down 20 per cent during that period.

To find additional income streams in a shrinking market, DFCV is expanding its service offer. "There is large potential in China's aftermarket," says He Xiaorong, Deputy General Manager Service Assurance Department at DFCV, who manages the spare parts strategy for the company.

In the past, truck dealerships in China mainly offered repair service and bought parts directly from the open market.

But since 2013, Dongfeng's aftersales division has been attempting to raise standards and expand its aftermarket by grading and coaching authorised dealerships. It is also encouraging them to be active and approach customers directly. Through such efforts its spare parts business has been growing by 20 per cent a year (albeit from a low base).

"Our aim is that one-third of profits will come from the aftermarket in ten years' time," says He Xiaorong.



Half-finished building projects, like this one outside Jinan in Shandong province, are a common sight in China in 2015. After massive spending on infrastructure and housing during the past decade, China's property market, once one of the country's largest economic drivers, has slowed. Meanwhile, other sectors, including consumption, are growing. Taken as a whole, China is quickly moving to higher income status.

DFCV is also seizing the opportunity to better position its product mix.

"There hasn't been a strong tradition in China of product differentiation. So there's work to be done on that front," says Claes Svedberg, Senior Vice President, China JV. "We are mapping the product portfolio and working on a product strategy that is designed to meet the needs of different customer groups."

TO INCREASE THE MARKET for Dongfeng trucks, DFCV also aims to expand into other emerging economies in Asia, Africa, the Middle East and Russia. Its successful participation in the Volvo Ocean Race earlier this year provided a platform to market the Dongfeng brand globally.

Another large change, brought on by higher incomes, is the rising standard of living in the country, which is leading to better working conditions.

In line with these developments, DFCV's new engine and assembly plants have been designed to improve productivity but also ergonomics to ensure the health and safety of staff. Magnetic cables and automated-guiding vehicles are helping to improve both ergonomics and productivity at the plants.

Safety and environmental care are also key areas in which the Volvo Group can contribute expertise and know-how.

Rajesh Mittal, Head of Manufacturing and Quality at DFCV, is one of four managers from the Volvo Group that hold top management positions in the company as part of the joint-venture. He is now leading a number of large safety and environmental initiatives at DFCV.

"Safety is not only a question of equipment. It is a culture, and we are trying to build a safety culture here and work through step-by-step improvements," says Rajesh Mittal. He is pushing to improve safety measures on many fronts, including reporting procedures.

As part of this work, Rajesh sends out a safety tip to all workers at DFCV at the start of each day. "We want to show that this is a top priority, every single day. Safety is a core value at the Volvo Group and it is one of many important areas where we can make a difference," says Rajesh Mittal. • Rajesh Mittal gets ready to smash at one of dozens of sports facilities open to DFCV staff. Since moving to Shiyan, he has started playing badminton with his colleagues three times a week.

DONGFENG COMMERCIAL VEHICLES - DFCV

Employees: 28,000 Headquarters: Shiyan, China

Formation: DFCV was established in January 2015 as a joint venture between the Volvo Group, which owns 45 per cent of the company, and the Dongfeng Group, one of China's largest automotive conglomerates. However, the company's origins as a truck manufacturer dates back to 1969, when it was called China's Second Automotive Works. Today, four out of eight top-level management positions at DFCV are held by the Volvo Group and four are held by the Dongfeng Group.

Market share: The company held 16.3 per cent of the country's market for medium and heavyduty vehicles in China in June 2015. (Dongfeng gained 1.3 per cent market share over the same period in 2014) Sales 2014: 156,155 vehicles





As head of manufacturing for DFCV and one of the only foreigners in DFCV's hometown Shiyan, Rajesh Mittal has gained a great deal of insight into Chinese culture and business.

"First understand and then be understood"

Rajesh Mittal was recruited by the Volvo Group to head DFCV's manufacturing in its hometown of Shiyan, China, leaving a senior management position at VE Commercial Vehicles, the Volvo Group's joint venture with Eicher Motors in India. When he arrived in March 2014, he was practically the only foreigner in the city.

Living and working far from his family, where few people speak English, has been extremely challenging, explains Rajesh Mittal. But the experience has also helped him grow both professionally and personally.

"The work is exciting. I manage 13 plants and also oversee quality, safety and environmental work. I'm also learning Chinese and going on market visits to meet customers all over China. So I am getting a lot of insight into the market."

Spending time in China has also disproved many of the misconceptions he had when he first came. "I thought perhaps people wouldn't be so friendly, but I found people very friendly and very approachable. People are open and willing to learn. I also thought China would be conservative like many other Asian countries, but women and men work shoulder to shoulder here."

For the DFCV joint venture to succeed, strong cross-cultural collaboration will be key. His advice to others is: "First understand and then be understood. We cannot come with the idea that we know everything. DFCV is a huge company and a large success story in China. So you need to be ready to learn and work hard. If you have that mindset – you can do well here".



5 QUESTIONS TO FRANCIS SUM President of Sales Region China, Volvo Construction Equipment

How has the market changed in the last 10 years?

Over the past ten years, Francis Sum, President of Sales Region China, has followed developments in the Chinese construction equipment market closely. As the China market enters a new phase, he and his team are tasked with positioning Volvo CE for the future.

TEXT LINA TÖRNQUIST PHOTOS NICKE JOHANSSON

AFTER DECADES OF fast-paced growth, the size of China's construction machinery market dropped significantly in 2015. In spite of this, China remains one of the world's largest markets for construction equipment: "We are committed to this market and we need a strong presence here," says Francis Sum, President of Sales Region China. Here, he discusses the market developments in the country and the roadmap Volvo CE is drawing up for the future.

In the past ten years, how has the Chinese market changed?

"I came to China about ten years ago from Singapore. What I saw then was a strong hunger for



fast-paced growth and a desire for China to develop and to deliver its vision to the world. Demand for new machines was strong. Today, we are seeing a new type of market. The current downturn is significant; the market is down by almost half of 2011 levels. China has become a replacement market where we need to deal with trade-ins. But there is still market momentum due to large demographic shifts and continued development of the economy."

Are you seeing a shift in customer needs?

"Previously, a global brand carried a lot of weight with customers here. Today, it is important to prove

"I believe that the customers we support at times like these will stay with us."

FRANCIS SUM, PRESIDENT OF SALES REGION CHINA, VOLVO CONSTRUCTION EQUIPMENT

Workers lay a road at a Volvo CE customer site in the city of Jinan in the coastal Shandong. Though road building is slowing, it still remains a relatively robust part of the country's construction sector.

that you can deliver. Customers know exactly what they are looking for in terms of specifications and can go to a website and compare prices and products from the whole market. So it is key to know how to position ourselves. We also expect to see a general shift towards a focus on productivity, durability and fuel-efficiency."

How is the current market downturn affecting Volvo Construction Equipment's customers?

"The industry is going from being fragmented to a phase of consolidation. We are seeing weaker customers who are not committed to this market pulling out, while others are strengthening their positions. I believe that the customers we support at times like these will stay with us."

In the current market climate are there business areas that are doing better than others?

"The current drop in commodity demand has shifted the market away from mining. But urbanisation in China is set to continue and this necessitates small machines for urban construction. Road building is also continuing – albeit at a slower pace than before. We are also seeing a general shift towards higher quality of life, safety and the environment." How is Volvo Construction Equipment preparing for the future? What are some key trends to keep an eye on?

"The market is changing quickly and it is important to focus on the right things. We have started the China 2.0 programme by reviewing the 5 Ps – people, products,



Francis Sum

position, price and promotion. We are looking at questions such as: What products do we need? What role will telematics play? We are also developing our aftermarket. Through GPS data we can identify which of our customers' machines need servicing and we are visiting around 2,000 key customers in China together with our dealers in order to service their vehicles and discuss their business. We have decided to be active and responsive." "The excellent performance of Volvo CE's machines gives me confidence in this fiercely competitive market," says Li Junping, Key Account Manager for Road Business at JNTY, a local dealership in the city of Jinan, China.

New routes to growth

As China's continent-sized economy has grown, so has its road network. Today it has a whopping 4.5 million kilometres of roads including 110,000 kilometres of hybrid highways, which is about twice that of the US, estimates Ju Rongyun, Vice General Secretary at China's Road Institute and a key thought-leader in China's construction industry.

Despite a difficult year in China's building sector, road construction remains relatively robust, explains Ju Rongyun.



"We expect the pace to slow down from around 9,000 km of new highways per year over the past decade or so to around 8,000 km this year. Most of these new roads are being built in China's less developed central and western regions," he says.

With new road construction activity moving inland, China's coastal provinces are feeling the pinch.

For example in Shandong province, Yuan Peng, Director at Jinan Urban Construction Company, one the province's largest road developers, has seen the market tighten this year.

"This year we have seen both tougher competition and a market drop of around 60 per cent," he says.

In the city of Jinan, only around five per cent of road tenders are for road maintenance. But according to Professor Ju, road maintenance projects are set to grow across China since the country's giant road network will need repairs.

"The key to winning this market is not selling products - it is to provide solutions."

Local development lowers overall cost

The team at the new Jinan Technology Center have been tasked with developing construction equipment to help Volvo CE and Lingong win ground in emerging markets. With the construction sector in China and elsewhere undergoing rapid change, localised R&D is proving crucial.

TEXT LINA TÖRNQUIST Photos Nicke Johansson **TO STAY COMPETITIVE** in emerging markets, low product cost is critical. But making components that are both high quality and inexpensive is no simple task.

Cutting the production costs of the electrical circuit board in a locally produced wheel loader, for example, needed careful engineering, several redesigns and collaboration with local suppliers. But by doing so, Frank Guo, an Electrical & Electronics Engineer at the new Jinan Technology Center (JTC), managed to cut the cost of electrical circuit boards in locally produced wheel loaders by around 40 per cent.

"Despite the cost difference, the quality of this board and the original, built in Europe, is the same. It's been field-tested for 8,000 hours and there were no failures."

Volvo Construction Equipment first set up a small R&D team in Jinan in 2010. Now, it has a newly inaugurated $50,000m^2$ building dedicated to >





product development, with more than 160 staff. The team has been given the difficult task of developing new, lower-cost construction equipment products for SDLG and Volvo Construction Equipment. The centre already has a test track and is now investing in test rigs to become a fully-fledged R&D centre.

THE WORK IS COMPLEX. Not only does the team need to develop advanced machines at a reduced cost, the centre also manages projects across three sites: product development in Jinan, major marketing activities handled in Sweden and production in Linyi, a three-hour drive away. The team also develops products for two brands: SDLG and Volvo CE, and across three product categories: wheel loaders,

"I adapt excavators for Lingong. It can be tricky to collaborate across two corporate cultures, but often it is possible to resolve issues by being flexible and talking things through," says Forest Wang, Product Platform Engineer, Excavators at JTC.



excavators and compactors, which means that it needs to collaborate tightly with Volvo CE Tech centres in Shippensburg, Eskilstuna and Changwon.

Despite the complexity, the Jinan team already has several products under its belts. In June, production started on three mid-sized wheelloader models aimed at emerging markets: L60Gz, L90Gz and L120Gz. Meanwhile, production of the new SD110B–M road machine, which includes a very high percentage of component localisation, is scheduled for later this year.

The results of this hard work are machines that are cost-effective with quicker delivery and shorter lead times.

The fact that the team has already been able to deliver strong results is in part down to workplace culture at the centre, says Anna An, Chief Project Manager, who has headed the development of the three wheel-loader models that went into production in June.

"We've managed to develop several products in a short amount of time. This is largely because we have built up a strong team. We are a new organisation and have many young members but you can really feel the team spirit here."



Anna An



"This year, we have seen a dramatic market drop in China. In my experience, a market never looks the same after a downturn. It's always a different market when it bounces back."



"Communication is key," says Annie Gao, Product Platform Engineer. She works with product performance and ensures that machines meet regulations overseas. Frank Guo, Electrical & Electronics Engineer, cut the cost of a circuit board by 40 per cent.

WITH THE CHINESE MARKET changing fast, having a local R&D team keeping up with developments is proving increasingly important, says Mats Sköldberg, Vice President of Technology at Volvo Construction Equipment, who heads the centre.

compactor went into production in August.

"This year, we have seen a dramatic market drop in China. In my experience, a market never looks the same after a downturn. It's always a different market when it bounces back," he says. "We can see that the market is changing quickly, when it comes to both hard products and aftermarket solutions." he says.

Now Mats Sköldberg expects strengthened service solutions in China, including telematics, as well as changes in the aftermarket. With so much being sold and bought online in the country – even cars – spare parts could well be sold directly online in the future, he expects.

Product quality is also set to improve as Chinese brands expand abroad. And electro-mobility could



Mats Sköldberg

develop quickly.

"With so much going on right now, having strong tech development in China makes sense – we are close to both customers and market developments and can design directly for local production here."

"Price is key for us"

Shandong Highway and Bridge Group is a major local construction player in Jinan. Its team have been field-testing the Volvo L120Gz wheel loader for eight months, a machine that was developed at the Jinan Technology Center.

"Serviceability, fuel consumption and productivity are key for us when considering what machines to buy," says Sun Hao, work-site manager. Production Manager Ma Jinlai leans over and adds: "And price!"

Both Sun Hao and Ma Jinlai agree that the wheel loader has performed well. Its productivity is better than many other machines they use. "It's quick, powerful and easy to operate – that's the feedback we have received from the operators," says Ma Jinlai. They have found that the L120Gz is also considerably more fuel efficient – consuming 0.2 litres less fuel per cubic meter of material it handles, compared with other loaders they use on the site. As with many emerging markets, machine price is a sticking point. "Price is key for us. As long as the price difference of the Volvo machine is at a reasonable level compared to other alternatives, I will happily buy it."



Sun Hao and Ma Jinlai are field-testing the Volvo L120Gz wheel loader developed in Jinan.

THREE TRENDS SHAPING CHINA

In just a few decades, China has become a leading world economy and is continuing to change at a tremendous pace. Here are three major trends transforming the nation, and how they impact the Volvo Group.

LINA TÖRNQUIST

NICKE JOHANSSON

1 E-commerce

Alongside rising incomes, personal consumption is growing at a tremendous pace in China and a huge chunk of this spending is happening online.

China has now become the world's largest e-commerce market and many of the largest distribution companies for online retail are choosing Volvo Trucks due to its high quality products and strong service network. In the past year the Volvo Trucks brand has won several large tenders to supply trucks in the e-commerce sector, including an order to deliver 51 trucks to YTO, a logistics company for Alibaba, China's largest online retailer.

In the first half of 2015, the retail segment accounted for around 80 per cent of Volvo Trucks' overall sales - up from 20 per cent in 2012.

2 The fight against air pollution

China's fast-paced economic growth has also led to a rapid rise in air pollution. After record-high levels were recorded in 2012, the Chinese government set tough targets to reduce air pollution by ten per cent from 2012 levels by 2017. Stricter emission requirements are now being introduced across several industries.

The renewed focus on clean air represents an opportunity for Sunwin

Buses, a Shanghai-based joint venture between the Volvo Group and SAIC.

In 2014 Sunwin sold 1,500 hybrid buses, mostly to the city of Shanghai. This year, it launched its third generation of fully electric city buses, which are scheduled to go into production in late 2015. The jointventure also sold over 300 fully electric shuttle buses for companies transporting employees to and from work.

3 Going global

Due to a host of factors, including overcapacity, weaker domestic growth and better global knowledge, the number of Chinese manufacturers expanding globally is surging.

And while most Chinese companies are expanding into South America and Africa, some companies are also finding a footing in the US and Europe, most notably in the construction, energy and consumer goods industries.

Through its investment in Dongfeng Commercial Vehicles, Lingong and Sunwin Buses, the Volvo Group is now part of China's global push and the three jointly owned brands are benefiting from the Volvo Group's global expertise and distribution networks.

DO YOU HAVE A LICENCE TO KILL?

Every year, the Volvo Group spends an estimated one billion SEK on IT licences, yet many are either underused or not even being used at all. The Licence Management Office supports efforts to eliminate this waste and create a more efficient portfolio.

TEXT NIC TOWNSEND ILLUSTRATION DAN HAMBE

OULD YOU HAVE two phone subscriptions if you only needed one? Or subscribe to a movie channel if no one was watching it? Obviously

not, for the simple reason that it would be a pointless waste of money. Yet, by subscribing to software that they do not need and are not using, parts of the Volvo Group are effectively doing just that every day.

The new Licence Management Office has been given the task of cleaning up the Volvo Group's licence portfolio and ensuring better co-ordination and control. The global team, who work within Process & IT, are currently mapping licence use and needs and has eliminated unused licences accordingly. They have already made some significant efficiency gains.

"During a review, we found that 20,000 SAP users are inactive and rarely use the system, of which 10,000 are never in the system at all," says Niklas Sandvik, Team Leader, Software Asset Manager. "And it's not just the number of licences but also the licence types that affect costs. For SAP, there is a price difference between the 'professional' and 'limited' versions. Those who don't need the more advanced version should naturally have the limited one."

The same principle applies to software. For example, Adobe Acrobat is available in both 'standard' and 'professional' versions. "Since most users only need the 'standard' version, we have been able to reduce the number of subscribers to the 'professional' version from 2,600 to just 600," says Fredrik Asknäs, Assignment Leader, Licence Office. "There is a big price difference between 'professional' and 'standard', so this represents a significant saving without affecting people's ability to work."

Currently, different parts of the Volvo Group are subscribing to the same licences, but the Licence Management Office is in the perfect position to identify synergies and potential for licence sharing.

"We need to consolidate our licences and use them in the best way," adds Fredrik Asknäs. "A good example is QlikView, a business intelligence tool that five different Volvo Group companies had bought. This meant that we had five installations and each server licence costs over 250,000 SEK. But we have removed four of them and today only one remains."

HOW YOU CAN HELP

▷ Only order software you actually need.

▷ Add applications when the need arises, not on speculation.

Go through your applications in Faros at least once a year and remove applications you no longer need.

If you are a manager, reflect on what your personnel need and do not automatically approve all requests.

The new Licence Management Office is cleaning up the Volvo Group's IT licence portfolio, eliminating underused and duplicated licences.



INSIDE THE DAIMLER GROUP

Daimler Group, Volvo Group and Volkswagen Group are the three major commercial vehicle clusters – all global players and technology leaders. Here we take a closer look at the Daimler Group, as analysed by Business Intelligence.

TEXT ANN-BRITT SEDIG ILLUSTRATION DAN HAMBE

aimler Group, with its headquarter in Stuttgart, Germany, can trace its history back to 1886. Daimler Trucks accounted for almost a quarter (24.9 per cent) of the Daimler Group revenue and some 30

per cent (82,743 employees) of the entire Daimler Group workforce in 2014. Daimler talks about three strategic pillars: Technology leadership, Global market presence and Intelligent platforms. Growth is built on strong partnerships with major players like Foton in China and Kamaz in Russia.

Daimler's vision is to be No.1 in the global truck industry, with a sales target of more than 500,000 units in 2015 (496,000 2014) and 700,000 units in 2020 (excl. Auman).

The profitability target is eight per cent return on sales over a business cycle. For 2014 it was 6.4 per cent.

Daimler Trucks' broad product portfolio has several brands; Freightliner, Western Star, Mercedes, Fuso and Bharat Benz. The Auman brand, produced by the Chinese joint venture, and Russian Kamaz (where Daimler owns 15 per cent) are also part of the portfolio.

GLOBAL PLATFORMS FOR trucks and engines have been developed by Daimler under the heading "as globally as possible and as locally as necessary". Partner companies like Foton and Kamaz are also included in the global concept. Three different engine series for Mercedes Benz, Freightliner and Fuso have been shifted to a single common global engine series platform (HDEP). Daimler Trucks is striving to



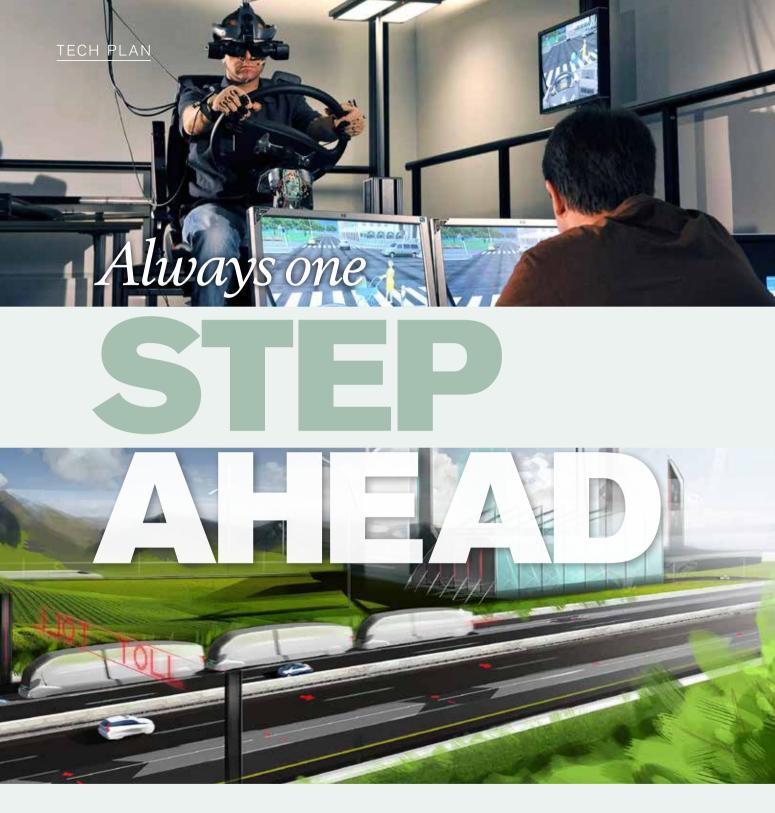
increase the percentage of non-variable parts from its current level of 50 per cent to 70 per cent.

For the triad markets (Western Europe, North America, Japan), the focus is to secure technological leadership and a strong market position. Traditional and proven technologies should be used in markets such as Brazil, China and Russia. Markets in India, Africa and certain Asian countries should be supplied with technologically simpler, robust vehicles.

MERCEDES BENZ IS the leading heavy-duty truck brand in Europe, but it cannot match the combined shares of the Volkswagen Truck Group or Volvo Group Trucks. Daimler is well positioned in Russia with co-operation with the leading Russian truck producer, Kamaz.

Freightliner is the US market share leader. It's top customers are large fleets and leasing companies. The Western Star brand will focus on more product differentiation and niche markets. Its strategy is shifting to bring in even more advanced technology, like connected trucks and advanced telematics. In 2015, Daimler Trucks North America unveiled the Freightliner Inspiration Truck, the first licensed autonomous commercial truck to operate on an open public highway in the United States. Brazil is the world's largest market for Mercedes-Benz trucks. For many years, Mercedes-Benz trucks had been losing market share in Brazil, but, in 2014, they improved significantly. Daimler Trucks has been working hard on its "Brazil turnaround" to regain market share and improve profitability and efficiency. The programme is even more demanding as the market slows down and Daimler is reducing its workforce in Brazil.

Daimler has several joint ventures in China. For trucks, it has a 50/50 joint venture with one of the major Chinese truck producers, Beigi Foton. The first jointly produced Auman truck was produced by Beigi Foton Daimler Automotive (BFDA) in July 2012. After an earlier joint venture in India failed, Daimler decided to set up its own business and develop a new brand for the Indian market. The production of Bharat Benz vehicles started in 2012. The initial production capacity of 36,000 units a year can be expanded to more than 70,000 units a year. 20 per cent of sales will be targeted for export to markets in Africa, West Asia and Southeast Asia. Most of the export vehicles are branded Fuso and sold through the Fuso network. Daimler's 700 MEUR investment in India is one of the largest investments outside Europe Daimler has ever made. .



If the Volvo Group wants to remain a leader, then the technologies and competences needed tomorrow must be secured today.

TEXT NIC TOWNSEND PHOTOS ANNA SIGVARDSSON



ORESIGHT AND FORWARD planning are essential for launching industry-leading products, which is why the Volvo Group is continuously analysing and tracking industry trends and trying to anticipate future challenges and customer needs. While we do not

know what the next industry-first innovation from the Volvo Group will be, the process for getting there has already begun.



Plans for the future – Volvo Group Technology Plan

One of the most important documents for the future direction of the Volvo Group is the *Volvo Group Technology Plan*. Updated yearly, it offers a common strategy for technological development for the whole Volvo Group over the next 15 years, including key innovation areas and top critical technologies.

"We start by asking where we want to be in 2030, and we then work backwards to identify the technologies we need to develop in order to meet that target," says Jan Ove Östensen, VP Advanced Technology & Research, GTT. "What do we need to achieve by 2015, 2020 and 2025? To meet these targets, we need to have a plan and we need to start now."

For example, before a new product can go into production, around three to four years are needed for product development. However, before product development can commence, the technology needs to be ready – and getting the technology means having the right competences.

"You can't efficiently develop a new product while developing new technology at the same time," adds Jan Ove Östensen. "*The Volvo Group Technology Plan* gives us a plan for the whole process, so that we can focus on the most important areas and secure the right technologies and competences."



For every technology area, the Volvo Group must evaluate the level of knowledge and competence that will be needed and how it should be secured.



Jan Ove Östensen

Depths of Engagement (DoE)

Once a technology area has been identified as strategically important, the Volvo Group then decides on the level of knowledge and competence that is needed. This is evaluated by Depths of Engagement (DoE), which helps GTT identify which areas that need to be prioritised.

"DoE helps us decide what knowledge we need to develop internally and what should be sourced out or developed in collaboration with a partner," adds Jan Ove Östensen. "For example, if we look at batteries, we need to have an understanding of how battery cells work, but we do not need to be experts in how to develop a battery cell, so that helps us know where we can draw the line."

By addressing future industry needs now, the Volvo Group can ensure that it is better placed to deliver industryleading products.

TECH PLAN

ndholmer

Cecile Calvet

Technology Specialists – a network of in-house expertise

When it comes to securing knowledge in important areas, GTT can rely on its Technology Specialists. In addition to securing knowledge in their respective area, each specialist is also responsible for engaging in relevant external activities, such as publicly funded projects, seminars and conferences, and for disseminating their knowledge internally within the Group.

"Collectively, we have a huge body of knowledge within GTT," says Cecile Calvet, VP HR Powertrain Engineering. "The Technology Specialist programme offers a structure that helps spread this knowledge, so that it is not confined to any one function. We want to make our specialists more visible across the whole Volvo Group, so that we can all benefit from their expertise."

The Technology Specialist programme also offers engineers an opportunity to develop and grow within the Volvo Group. The role is offered on three levels, with participants able to progress upwards over time. In addition to having proven expertise in their given field, Technology Specialists also need strong skills in communication, leadership and business understanding.

ELG 099

"Most engineers I speak to want to make a difference to improve transportation," says Helene Niklasson, Director, Transport Solution and Services, GTT. "There is a strong drive to have your skills and your work implemented and affecting the products and services that we put out into the market. The Technology Specialist programme is a way for them to go deeper into their area, and offers a clear path forward for further development."







Helene Niklasson



Guillaume Vaucher

Securing strategic competences

Strategic competences are the skills and knowledge that the Volvo Group believes will be vital to future product development. In contrast to core competences, which have already been secured by GTT, strategic competences are either hard to find or difficult to replace. "They also have a high value impact on the business," says Guillaume Vaucher, Director Talent and Competence Management, GTT. "We work cross-functionally with the different functions to define strategic competences and then devise action plans for securing them. This can be done by designing internal training programmes through the Volvo Group University, or we might look to build partnerships with universities so that we can recruit the necessary competences directly."

Obviously, none of these actions are quick-fixes, which is why forward planning is so important. But with so much at stake, these are issues that the Volvo Group cannot afford to neglect.

"We have a tendency to focus on immediate output, but, if we don't address the future now, we risk being left behind," says Guillaume Vaucher. "It could take us years to catch up and could ultimately cost us more. In short, we would be forced to follow rather than lead."

VOLVO GROUP VOICES

Working at the Volvo Group can lead to some exciting career shifts including changing countries or professions. Meet three co-workers who have undertaken their own personal journeys.

"Working in Sweden was an invaluable experience"

NAOKO KIMURA works as HR Business Partner, Powertrain Production Japan, but she has previously worked in Sweden. "I am now back in Ageo City, where I was born and grew up and where my parents still live," says Naoko Kimura.

"It took a roundabout route to return here, though. Having studied and worked in the USA for 16 years, I began working at UD Trucks back in Japan in 2007. Three years ago, I was offered the opportunity to go and work in Sweden. I moved to Gothenburg and worked with support to SVP and GTO global controlling. Working in Sweden was an invaluable experience and I enjoyed the food, nature, traditions and working freedom. I met Volvo people from all over the world and even tried to learn Swedish. When living in another country, learning a local language offers a greater understanding of the people and culture. It is also a way to appreciate and show respect for where you live.

"My background is in behavioural and social sciences, specifically Human Development and Multicultural Counselling. I knew that HR was the area that I wanted to work in after having been exposed to business management, network building and the Volvo way of working in Sweden. My manager there was very supportive of my next step towards working in HR in my home country. I applied for the HR post at Powertrain and, with great support from management in both Sweden and Japan, I was given this opportunity. I moved back to Ageo City in March this year and I am really enjoying my new role. I hope to be one of the bridges between Sweden and Japan. It's great that more people

have opportunities to work outside their initial 'job family' and their own countries."

PHOTO: JUN TAKAGI

WHO WOULD YOU LIKE TO NOMINATE as a Volvo Group Voice? Please let us know by sending an email to groupmagazine@volvo.com



PHOTO: JONAS LJUNGDAHL

Back in the 1970s





"I never thought of having a career, I just tried to do a good job where I was"

ANDERS LARSSON started on the shop floor in 1978. Today he is Executive Vice President of Technology at Volvo Construction Equipment.

"I'm from Eskilstuna, Volvo CE's Swedish hometown, but it was mostly just a coincidence that I began working at what was then called Volvo BM. After completing my military service, I applied for an entry-level engineering job. But there was an office-hiring freeze at the time, so I started out on the shop floor. I enjoyed the camaraderie of the job and worked my way up from being an operator, to being a substitute and later adjusting machine settings, something we needed to do back then. After a few years I ended up at the office as a trainee purchaser. From there, I went on to become a purchaser and later a team leader.

"I've never actively tried to pursue a career, I just tried to do a good job wherever I was. But that has led to new jobs.

"In the 1980s, I ended up in Braås, Sweden, where I worked with purchasing before I became a plant manager. The 1990s was a period of rapid expansion and I worked with global strategies. This was probably what got me recognised by Volvo CE's management in Brussels and I was recruited as President and CEO of Volvo Motor Graders in Canada. Our children were between six and 16 years of age when we moved there - to a small town outside Toronto. I then moved to Brussels, where I co-ordinated product development and industrial activities, before Volvo CE had today's more integrated structure. Recently, I have been involved in the transformation of Volvo CE and feel that the new organisation has taken shape. Especially when I work with change management, I feel that I can benefit from having taken the 'long route' into the company. Still, I'm not sure that this kind of career path is possible today."

"My family is looking forward to settling in Sweden"

MARCELO GONÇALVES is originally from Curitiba in Brazil. He will shortly move to Sweden to work as Head of Sales and Operations Planning, Group Trucks Sales.

"It's an exciting time. My family and I are now making final preparations for moving. This will not be the first time we have moved away from Brazil. I have worked for 23 years within the Volvo Group and was based in Lyon, France, between 2001 and 2005. I worked at Renault Trucks and travelled a lot around Europe. It was a rich experience for someone from Brazil and, on a personal level, it was an intense time for my family, a period that united us."

"My son was actually born in France. I had previously worked in retail development but made the career change to Sales and Operations planning, managing the demand process and the link with the production facilities. In Brazil, I worked until recently as Head of Vehicle Sales for Latin America and have now been appointed to this global role within Vehicle Sales at head office.

"I am delighted with this change and am very much looking forward to bringing my regional experience to the position. We are at the service of the regions. We talk to them each month to establish what they need, ensuring that the factories are producing accordingly and we secure matters with our counterparts at GTO.

"My family are looking forward to settling in Sweden. My son has a place at a new school there and we are currently busy packing our things. It will of course be a time of adapting to change, but we have done this before and look upon it as a time of opportunity."



"We deliver together"

What does the customer need to create a winning business? How can all the skills and expertise in the aftersales organisation generate the greatest benefits? These are just two of the questions *Markus Efraimsson* is considering. As Vice President Uptime, Group Trucks Sales, he and his co-workers are in the process of creating a new structure and new customer support objectives.

> TEXT SOFIA ERIKSSON PHOTOS CHRISTER EHRLING

Family: married, three children Lives in: Budskär outside Gothenburg Background: joined Volvo Parts almost 18 years ago, where he was involved in software development and implementation. In 2003, he moved to the Volvo Trucks International Division as Commercial Manager for Parts and Service. In 2007, he was given responsibility for Aftermarket Training. He was then appointed Vice President Customer Support, with added responsibility for Renault Trucks. The organisation is now known as Uptime. Leisure interests: family, friends, tennis, boats

MARKUS EFRAIMSSON





n the whiteboard in his office, Markus Efraimsson has drawn a Volvo Group customer with a speech bubble saying "I want uptime". Next to it, in red, is the word "HOW?", followed by a list of points

in a structured flow chart of thoughts and ideas about the organisation, together with the relevant business areas, objectives and possible solutions. Still some questions remain unanswered. And the whiteboard eraser is close by, because, as more and more people give their input, Markus Efraimsson needs to make changes.

"I want my co-workers and colleagues to be involved in creating the new organisation, partly because this will probably make it a better organisation and partly because I want everyone to feel that they are part of it and can influence things. They will then deliver more and have more fun at work. After all, it's up to all of us to pull together and help our customers succeed," he says.

Uptime is a new department at GTS. So what are the changes compared with the previous organisation?

"Most of Uptime's operations were previously part of Customer Support, which focused on region EMEA and also included technician training, competitions for technicians, such as VISTA and RTEC, and driver's handbooks. Uptime now focuses more specifically on service and customer uptime, plus a global function – that feels right. The staff at headquarters are only going to focus on governance and support to enable the organisation to do the best possible job. This means that a continuous dialogue between head office and the regions and markets is vital and this can be achieved through regular meetings with all the service managers, for example."

What are your objectives?

"Well, we were already working to be more proactive. After all, our aim is to ensure that vehicles stay on the road so that our customers can do their jobs. We are going to be even better than before at >

"If we can make our customers feel that we make it possible for them to become winners, we will have succeeded."

MARKUS EFRAIMSSON, VICE PRESIDENT UPTIME

creating uptime. Depending to some extent on how you calculate, we are currently around 97 to 98 per cent, but our vision is 100 per cent globally for all our brands and business areas."

How are you going to achieve this?

"One area we are looking to develop is diagnostics, both by making faster, more precise assessments and by offering vehicles that are built in such a way that they are easy to diagnose. We also want to develop connectivity, to increase the number of connected vehicles. As things stand, customers call Volvo Action Service, for example, if something happens and we conduct an analysis and send a service technician. In the future, we want to know as much as possible in advance so that the workshop can call the customer before a problem occurs and tell him or her what needs doing and when. The technicians can then schedule appointments, order parts and plan in good time. We will also be able to do much more on the internet. If we need to improve a function, customers will be

informed by a message on their instrument cluster and they will be able to update it themselves, without visiting the workshop. It goes without saying that they will still visit workshops, but, the more uptime we can create, the better."

How good is the Volvo Group when it comes to connectivity?

"In many areas, we are already among the leaders, while in other areas we are just starting out. From the customer's angle, features and quality can both improve even further. As more and more vehiclemonitoring systems are developed and more connected vehicles are sold, we will be able to predict and schedule even more effectively. The more people who have access to the tools, the better we will be. Right now, we can read large amounts of data at specialist functions at head office. The next stage is to optimise these data and make them available to the 22.000 technicians working in Europe, for example. I see this as a small revolution in the support we offer our customers."

MARKUS EFRAIMSSON ON...

... COLLABORATION BETWEEN GTS, GTT AND GTO

"If we are going to succeed with product launches and make our customers satisfied, this interaction is essential. We are currently working in projects on a more cross-functional basis, from production to aftersales. We have just started monthly management group meetings at which we openly discuss how we can combine forces and do a good job. This is then going to be communicated to the rest of the organisation."

... DEVELOPING THE OFFER

"Another thing I often say and implement is 'fail fast'. I think we should be faster when it comes to testing our aftersales products on reference customers and making adjustments with them. I want to have that dialogue at the earliest possible moment. The more customer awareness the staff at head office obtain in this way, the more we can help the regions, market companies and dealers to do a good job."

... HIS BOATS

"Boats are my passion. I devote a large amount of my leisure time to them and I have several that I am converting. Working on boats is both a form of relaxation and an opportunity to reflect on workrelated questions. I am currently in the process of converting a second-hand lifeboat into a picnic boat for trips with the family."

Markus Efraimsson, Vice President Uptime, at the Volvo Demo Center in Gothenburg.

"I regard our technicians as heroes."

UPTIME'S ROLE IN THE VOLVO GROUP

 Uptime is a new department at GTS with some 260 employees.
It performs a governance and support function with the service organisations globally.

UPTIME RESTS ON 3 "LEGS":

• Uptime Centers (Volvo Action Service, Renault Trucks 24/7 and the equivalent for UD Trucks in South Africa), which help customers with breakdowns; • Technical Dealer Support, which helps technicians use the different tools and optimise service schedules; • Region and Market Support, which ensures that the service organisation has the correct information.

▷ Uptime Centers service both truck and bus customers and are also the base of a pilot project focusing on monitoring Volvo CE vehicles with a view to improving uptime.

Technical Dealer Support includes Group Trucks, Volvo Buses, Volvo Penta and Volvo CE. Future connectivity and diagnostics projects will involve all business areas.

Why are aftermarket sales so important for GTS and the Volvo Group?

"This is where we can build long-term relationships with our customers. We often say that the salesperson sells the first vehicle, but the aftersales staff - the service technicians and advisers - sell the second. There are studies that show that two thirds of the customers who choose to leave a company do so because they are irritated by someone in the company. This makes it easy to understand just how important it is for the people who meet customers to have the right attitude. I am naturally biased when I assess the impact the aftersales market has on our business, but I regard our technicians as heroes. If we can make our customers feel that we make it possible for them to become winners, we will have succeeded."

How can each co-worker help to increase customer satisfaction?

"Everyone that works here should be able to answer the questions 'Why do I go to work?' and 'What do I do that has a positive impact on the customer?'. If co-workers are unable to answer them, their jobs are not enjoyable and they should be. Feedback on what they do to benefit the customer has an important effect on their self-esteem."

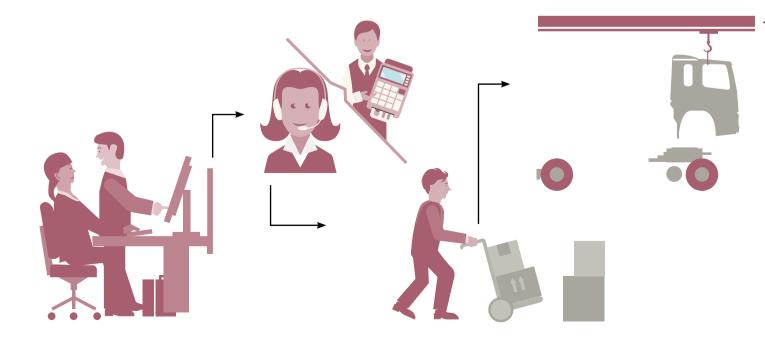
What are your answers to these questions?

"What motivates me is building winning teams and seeing the results, such as Volvo Action Service being chosen as the best call centre in our Heavy Truck Survey last year. In the same way, it's terribly frustrating that we came second this year. We aren't doing a poorer job, but our competitors have improved, so we need to make our offer even better and respond and provide solutions even more quickly. At the same time, it's more important to succeed than win – and we can do this if we make our customers winners." •

TACKLING THE ROOT CAUSE

Detective work often takes time, but its results can be richly rewarding. A recent project looked for clues when examining the root causes behind 100 late Volvo truck deliveries. By systematically tracing back from the point of delivery to the origin of the problem, the aim is to simplify the process of identifying where delivery problems originate.

> TEXT ALASTAIR MACDUFF Illustration Petter Lönegård



"We took an end-to-beginning perspective."

SAM GOHARI, PROCESS DEVELOPMENT AND BPM FRAMEWORK MANAGER, GTO

ate deliveries chiefly have a negative impact on end customers, but they also adversely affect dealerships and bodybuilders. Delivery Precision at Confirmed Delivery Date (CDD) is one of the main KPI's of the Produce and Distribute products process, owned by Group Trucks Operations.

It is currently the most customer oriented of its kind and its success is determined by everything

that is done between an order being received and a truck being delivered, for example, to a dealership or bodybuilder. It is therefore not a KPI target that GTO can achieve alone but through close collaboration with the other upstream processes at Volvo Group Trucks; DVP and MAS.

In order to improve delivery precision, a project analysed 100 randomly selected trucks that had



market during the period January to March 2015. The trucks came from GTO's plants at Tuve in Sweden and Ghent in Belgium. The purpose – identifying the root causes behind the late deliveries and eliminating them. A cross-functional team was assembled, featuring representatives

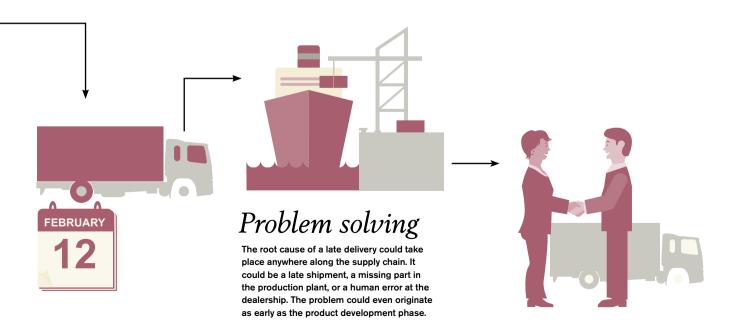
missed their delivery date to the

Sam Gohari

from the various main processes involved in the whole chain throughout Volvo Group Trucks until the agreed delivery point.

"We took an end-to-beginning perspective," says Project Manager Sam Gohari, who is Process Development and BPM Framework Manager, GTO. "What had gone wrong and where? We knew that the distributor needed two days to deliver a specific truck to a specific dealer. Yet when we went back

 \rightarrow



What are your views on performing root cause analysis and making fact-based improvements?

MARTIN RANÄNG,

VICE PRESIDENT SUPPLIER QUALITY ASSURANCE, GTO



"True root-cause analysis is often a very difficult and sometimes time-consuming process. It's essential to do it thoroughly and it often requires you to dig deep into a chain of events. Having proper facts and figures is vital to find the root cause and to develop a robust solution to prevent it from happening again."

ANNA FRANK,

MANAGER INVOICING AND DELIVERY SUPPORT, GTS



"It is extremely important to tackle the root cause of a particular problem. Simply attacking the symptom does not make us better, because the problem still remains. For me it is obvious that we should continuously measure our performance and use facts to make improvements."

"By working all along the chain, we could isolate the root causes and identify where they were generated."

SAM GOHARI, PROCESS DEVELOPMENT AND BPM FRAMEWORK MANAGER, GTO

VOLVO GROUP TRUCKS PROCESSES LEVEL 1

DVP: Develop Product and Aftermarket Product Portfolio MAS: Market and Sell Total Offer PRD: Produce and Distribute Products DCL: Deliver and Develop Customer Loyalty we found a three-day delay in production – a certain part was missing. What caused this? Our supplier had perhaps delivered late. Did the fault lie there or had an incorrect design perhaps been sent? Had something gone wrong during transportation or on the production line? Was it a human error or did it occur because the correct processes were not in place? By working all along the chain, we were able to isolate the root causes and identify where they were generated."

THE PROJECT HIGHLIGHTED the importance of having effective standardised processes in place to ensure predictable output and also to use as a base for continuous improvement and a sustained way of working.

"It is important that the documentation of our processes that are being developed and continuously improved is updated, to make sure that best practices are not just benefiting a single place but are shared with the entire organisation. We want to avoid 'firefighting'. If we just use short-term solutions and are unaware of the root causes of a problem, we can only expect to encounter the same situation time and time again," says Sam Gohari.

Case owners and case leaders have now been appointed to various 'improvement areas' identified by the project.

"This way of working will allow us to be more proactive, make fact-based decisions and use standardised, effective processes to benefit performance and customer satisfaction in future. This is not just a one-time shot, this is never-ending work," concludes Sam Gohari.



PHOTOS: MARTIN MANGTORN

THE IMPORTANCE OF on-time delivery cannot be overrated in any business. For the Volvo Group, this service does not simply fulfil the requirements of the end customer. Failure to deliver on time can result in customers having to delay valuable assignments and keep their customers waiting due to circumstances outside their control.

With the Volvo Group supplying not only complete trucks but also essential large parts such as chassis, the delivery precision of any order is vital to maintain uptime. Klaus W Rasmussen is Managing Director/CEO at Johs. Rasmussen Svebølle A/S in Denmark, a haulage company with clients in the building, medical and chemical sectors, among others. They build their own trucks at their workshop and order the chassis from Volvo Trucks, then fitting various systems to the trucks including tanks, compressors and hydraulics.

Why is it important for your business that you receive deliveries on time?

"With respect to our own business, we would be able to turn to our subcontractors if a chassis were not to arrive on time. However, during our three-year partnership, Volvo Trucks has been very reliable in this regard. Speaking more generally, of course there is a knock-on effect to customers if trucks or parts are not delivered on time."

How have you worked together with Volvo Trucks towards delivery precision?

"We have a plan for changing the chassis on each of our trucks. We know one year in advance when we will be changing them. In this way it is easy for our supplier, as they are aware of our requirements well in advance of when we need them delivered. I must say that we have been very happy with Volvo Trucks' delivery precision process." ●



ABOUT JOHS. RASMUSSEN SVEBØLLE A/S

Head office: Svebølle, Denmark Established: 1932 Truck fleet: 185 (approx. 50 per cent Volvo Trucks) Nature of business: Haulage contractor with 200 employees and affiliated business with 40 personnel. Customer solutions include tank haulage, concreteelement transport and transport of foodstuffs throughout Scandinavia.

Learning by INVOLVEment

For the Volvo Group, the university campus is a hotbed of fresh thinking, innovative ideas and undiscovered talent. Through the INVOLVE competition, it connects to students directly and unearths those ideas.

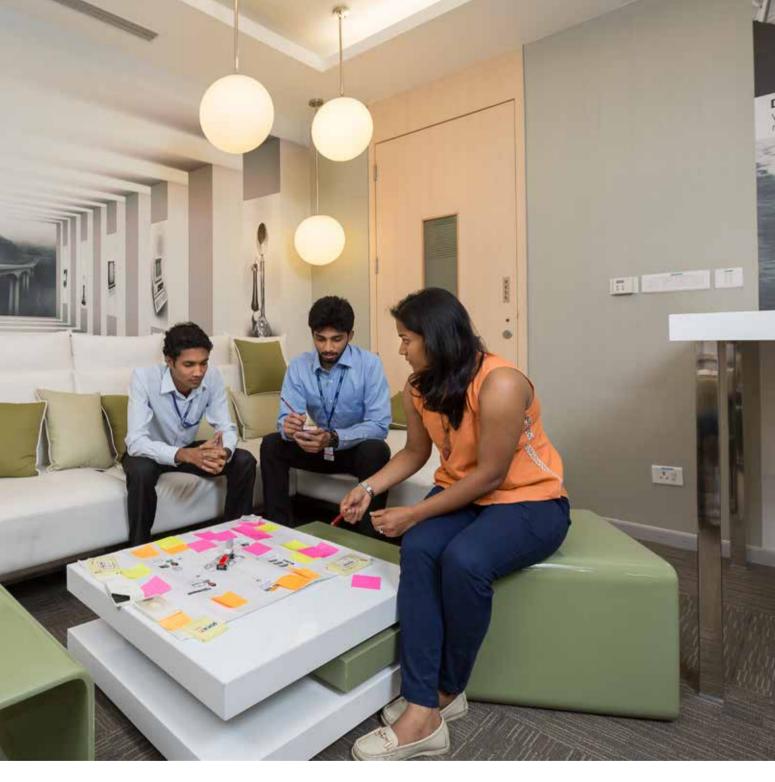
TEXT NIC TOWNSEND PHOTOS KIRAN NAMA

N 2014, DEEPU SURENDRAN and Sanaathan Krishnan were among 240 students who took part in INVOLVE India, an open innovation competition for students at NITK (National Institute of Technology Karnataka), which is one of twelve universities in the Volvo Group Academic Partner Programme. After being judged by an expert panel made up of professors from NITK and representatives from the Volvo Group, their idea for a magneto rheological fluid suspension system was announced joint winner. "Before INVOLVE, we just had an idea," says

Deepu Surendran. "But through the competition we got the opportunity to study it further and learn how to implement it."

AS PART OF THEIR PRIZE, Deepu Surendran and Sanaathan Krishnan are now undertaking a sixmonth Research & Innovation internship with Volvo Group India in Bangalore. "To be part of the Volvo Group family, even for a short duration, is a









Above (from left to right): Deepu Surendran, Sanaathan Krishnan and Anitha Botta sit in the Volvo Group India Innovation Lab in Bangalore. "This is where we do idea generation workshops and co-creation activities," says Anitha Botta. Left: Sanaathan Krishnan with Sawan Kumar. Far left: Playing with lego in the innovation Lab.

INVOLVE PROGRAMME

Sanaathan Krishnan, Deepu Surendran and Anitha Botta in front of the office's Inspiration Wall, where employees can display articles and images that will inspire their colleagues. MY INSP.

1009

140 141 147

1

GOU

and process is based on

の能

988

1

"It's a chance for us to explain to students the challenges we face and since they tend to think differently from an industry perspective, we tend to get many creative ideas in return."

ANITHA BOTTA, PROJECT MANAGER FOR INVOLVE INDIA 2014

privilege like no other," says Sanaathan Krishnan. "The employees in my department have been supportive and friendly despite their busy schedules."

IN ALL, TWO IDEAS WERE AWARDED and four students granted internships, but the faculty at NITK feels that INVOLVE was beneficial for all participating students. "It was an opportunity for our students to



Sanaathan Krishnan (to the left) and Deepu Surendran take some time out to enjoy some table tennis.

think differently and provide solutions to real-life problems and also make presentations to renowned experts in the field from a reputed organisation like the Volvo Group," says Professor Vijay Desai from Mechanical Engineering, who co-ordinated INVOLVE at NITK. "The students really enjoyed and cherished this experience and it was a very useful exercise."

From the Volvo Group's perspective, INVOLVE India also successfully generated new ideas and helped engage directly with some of the region's future engineers. "INVOLVE is a very strong platform for integrating with external partners and with the external community," says Anitha Botta, Project Manager for INVOLVE India 2014. "It's a chance for us to explain to students the challenges we face and since they tend to think differently from an industry perspective, we tend to get many creative ideas in return."

IN RECENT YEARS, INVOLVE competitions have been held in India, China, France, the USA and Sweden. Each competition is held in conjunction with the Volvo Group's academic partner universities in that country and while the exact structure and content can differ, the basic concept remains the same.

"We can't solve everything ourselves," says Marcus Enered, global co-ordinator for INVOLVE, GTT. "This is a fresh way of reaching out to students and giving them the chance to help solve future challenges. It is also good for company branding, positioning the Volvo Group as an exciting company and an attractive employer." (a)

THE INVOLVE PROGRAMME

INVOLVE originated in 2011 as a Volvo Group competition for ideas, targeted at external inventors in Sweden. But in recent years it has spread across the globe. In 2014, INVOLVE events were held in India, France, China and the USA. In 2015, competitions were held in the USA, China, France and Sweden.

understanding the world around us

QUESTIONS TO ANN-CHARLOTTE VEJLÖ

Subject Matter Expert and Process manager at Volvo Group Real Estate

Some 400 Real Estate employees are making sure that 2,148 buildings in 60 countries are adequate workspaces for the entire Volvo Group. That includes all the soft services you take for granted - like waste disposal, cleaning and security.

1. What does becoming one Volvo Group mean to Real Estate?

"It means implementing joint specifications and processes for services, contracts, maintenance and everything else connected to our properties. My colleague Bengt Gustavsson was part of this from the start and we are now working together with project teams and networks to implement these services globally. We collaborate closely with local organisations for support and understanding of the concept." 2. Can you name some of the advantages of global services?

"Implementing standards and being able to map, measure and follow up, together with efficiency gains, and the fact that we purchase services from sub-contractors according to set specifications. So far, we have managed to present cost savings in almost all involved sites - in some cases up to 30 per cent. One example from the USA is a 2 MSEK saving when we changed the set-up to have central storage of uniform office material where staff pick up material themselves instead of this being managed by internal resources.

3. What challenges are you experiencina?

"There are national differences to consider, such as regulations and handling of wild animals. In Sweden we may have elk and deer, in Brazil there are wild dogs, in Poland wild boars are damaging our lawns and, in France 80 tonnes of excrement from seagulls have proven a challenge as it is prohibited to eliminate the birds. Another challenge relates to cultural differences. One small example with a big impact for the individual is litter bins. In Sweden we would like to remove them. In other countries, staff might eat their lunch by their desk and need to throw the food paper in their bins because there are no joint service facilities nearby. Then we need to listen and adjust the global specifications."

4. What lessons have you learnt along the way?

"It takes time to implement change and it is not easy to estimate the consequences. Also, we shouldn't underestimate the need for training and always work closely with HR. It is a great advantage if changes are anchored with both top and local management."

ANN-MARI ROBINSON

PHOTO: ROBIN ARON OLSSON



"WE NEED A ZERO CARBON ECONOMY BY 2050"

The Volvo Group recently renewed its commitment to the WWF Climate Savers programme and is driving stronger ties with the wellrespected environmental organisation. Two WWF representatives were among the speakers at the first Construction Climate Challenge (CCC) Summit in conjunction with the Volvo Ocean Race final.

Environmental care is a core value of both the Volvo Group and Volvo CE, with continuous efforts to reduce the climate footprint, for product use as well as in factories and distribution centres.

The Construction Climate Challenge project was launched in 2014. It was born out of concern for the environmental impact of the construction sector and the conviction that only pan-industry collaboration along the industry's long and complex value chain could bring about the necessary changes. More than 150 people attended the flagship summit event in Gothenburg in June to jointly discuss how best to manage the challenges surrounding sustainable construction and listen to speakers from academia, public institutions, organisations and industry.

Professor Johan Rockström from the Stockholm Resilience Centre presented the latest planetary research which show that tough action to reduce emissions is now essential. We need a zero carbon economy by 2050, he said. But there is a serious risk of missing the current goals which could trigger a 'tipping point' with disastrous consequences.

Carina Borgström Hansson from the WWF stated that some 350 trillion US dollars will be invested globally in urban infrastructure over the next three decades. Very aggressive targets are needed to reduce emissions and increase the use of renewable energy sources, she stressed.

Niklas Gustafsson, Chief Sustainability Officer at the Volvo Group, talked about the company vision of becoming world leader in sustainable transport solutions and the need to form partnerships to achieve it.

"Leadership takes on a lot of responsibility and requires new thinking. We need to think outside the box, we need to reach out to catch the entire transport system and to find input from different partners," he said. NIGEL GRIFFITHS

understanding the world around us

A new era

By providing solutions to local needs, the UD Trucks Quester has potential to match a growing demand in South

Customers in areas like construction, agriculture and waste & recycling will benefit from the new range which focuses on the essentials," says Gert Swanepoel, Sales Director for UD at Group Trucks Sales South Africa - the largest market for UD Trucks outside Japan.

Having worked with the brand, formerly known as Nissan Diesel, for 25 years, Gert Swanepoel has seen a dynamic development of the South African truck market. He describes it as being quite unusual, both as a developed

market but also as a developing market. "You cannot have success if you don't listen to the voice of the customer. Earlier there was



Gert Swanepoel

a lot of focus on the specifications of the truck; today the truck is viewed as an asset that needs to give return on investment. This makes uptime and lifecycle cost the key influencers when purchasing a truck. The

general customers are very professional operators with good knowledge of transports who want to utilise their vehicles to the fullest."

Quester

CWE E70

IN TRUE OF

The UD Trucks Quon was first introduced in 2008 and was launched with an updated Group drivetrain in 2012. The main focus for Quon is on middle-distance deliveries. The launch of the Quester at Entabeni Game Reserve held in March 2015 was an opportunity to position the new range of dumper, mixer and sprinkler trucks for some 700 specially invited customers at a bush-

VOLVO GROUP IN SOUTH AFRICA

Sold trucks annually: Approximately 32,000 (40% light-duty, 20% medium-duty, 40% heavy-duty) Volvo Group brands in South Africa: Volvo Trucks, Renault Trucks, UD Trucks (UD Trucks entered the market in 1962)

Volvo Group market share in total: around 16% Main competitor: Daimler Number of dealers: 40 local independent dealers



like event. Regional launches have been taking place since March by some of their 40 independent dealers and Quester will also be introduced in some of the neighbouring countries during 2016. The trucks are assembled at the GTO plant in Rosslyn with semi-knocked down kits imported from the Thailand plant. The ambition is to sell 600-700 Quester trucks a year in South Africa.

"The reactions have been very positive so far. The concept of the Quester is a way to capture new opportunities here," says Gert Swanepoel. ANN-MARI ROBINSON

JOHAN ENGEBRATT

What characterises a skilled extreme skier?

ASSION? EXPERIENCE? COURAGE? A powerful death wish?! In all probability, all of them, apart from the death wish. I love so-called extreme sports, such as off-piste skiing and climbing, for the feeling of freedom they generate. I love them at the same time for the meticulous planning and control they require. It's a question of making the right decisions at the right time.

I really enjoy skiing on steep mountains where the risk of avalanches is a vital factor that has to be handled and you need to be extremely well prepared. Over the years, I have gathered my experience and best practices in imaginary checklists and a toolbox that I use to prepare every project. Some of the tools always need to be included, whereas others are only needed in some situations. I try to adopt the same approach to projects at work, where I am currently involved in developing a new engine platform. Many of the things I have learned from extreme sports can be applied at work. Our attempts to streamline research and development using RnD30 are just one example. Here are some of the similarities I have found:

Have a concrete target. To push your limits and achieve success, you need a clearly defined, common target which the team aims to realise together. Climbing to a particular mountain summit and getting down unscathed is one example. When it comes to RnD30, the target is clear. We are going to improve efficiency by 30 per cent. It's easier

to get the organisation to work towards a concrete target and generate better results than focusing on an unspecific desire 'to improve'.

Don't be afraid to think twice. The importance of preparation can't be overstated. You need to review your checklists before setting off up a mountain or starting a project. But, after that, you can't rely on processes and routines but must also keep an eye on how the situation is changing. RnD30 also means considering whether what we are doing is really adding value. If it isn't, we shouldn't do it.

Radical approach. Sometimes we need to think in a different way. There are classic climbs that were previously expected to take several days. However, by optimising everything it is possible to climb them in less than one day. This is the secret behind innovative thinking.

Johan Engebratt

is Chief Project Manager, Heavy-duty Powertrain Range, GTT

WHO ARE WE? TEST YOUR KNOWLEDGE WITH THE VOLVO GROUP QUIZ

What percentage of employees in the Volvo Group have blue-collar jobs?

> A. 35% B. 49% C. 70%

> > What percentage of the Volvo Group is under the age of 30?

> > > A. 5% B. 14% C. 25%

3 What percentage of Volvo Group managers are women?

> A. 6% B. 15% C. 18%

How many Volvo Group employees are based in Asia?

> A. 19% B. 22% C. 34%

5 What percentage of employees belong to each of the following organisations?

1/2

Volvo Buses GTO Volvo CE

OTHER

A. 8%

B. 15%

C. 33%

YOU CAN FIND THE ANSWERS ON PAGE 5 - GOOD LUCK!

