



Delivered.

THE GLOBAL LOGISTICS MAGAZINE

ISSUE 05/2018

BUSINESS

BROWSING BOOM

Learn why Africa is experiencing growth in online shopping

SOLUTIONS

SMART THINKING

Discover the best way to sharpen your digital skills

VIEWPOINTS

HAVE A HEART

Why it pays to create a purposeful culture in the workplace



DRIVING DEMAND ONLINE

How e-commerce is fueling a revolution in the automotive sector



DEAR READER,

The global e-commerce market is expected to be worth \$4 trillion by 2020 and it's not just about B2C anymore – the B2B is also getting in on the game.

In the automotive sector e-commerce has had a slow start, with overall penetration in the sector's major markets at a mere 1.5 percent last year. The speed is however about to change. In **E-commerce accelerates** we explore how automotive players are now getting into the fast lane online.

Retailers in the West should be looking to e-tail in Africa for opportunities says Chris Folayan, CEO of MallforAfrica, who we interviewed for **Buying into the e-commerce boom**. Africa's growing middle class looks set to make the continent an increasingly important presence in e-commerce and maybe it could even bring salvation for global retail.

In Turkey meanwhile, e-commerce is on track to grow by over 35 percent by the end of this year. It is one of several strong industry sectors which the country is looking to support with significant spend on infrastructure and an open business environment. With a new mega airport and a project pipeline to the tune of \$200 billion, can the country boost new growth? Our country focus **Turkey: Charting a new course?** has more.

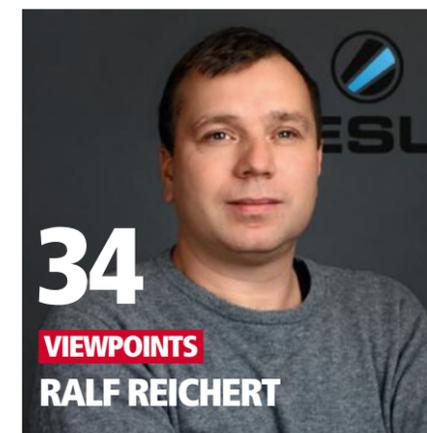
I hope you enjoy your read!

Sincerely,

Katja Busch
Chief Commercial Officer, DHL

Cover photos: jakkapan/Adobe Stock; thodonal/Adobe Stock

Photos on this page: DHL; Adobe Stock (2); ESL



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NEWS



DRIVING ELECTRIC

Ford is partnering with Deutsche Post DHL Group to begin production of a new model of electric van, the StreetScooter WORK XL, at its European headquarters in Cologne. DPDHL Group will be using the WORK XL in its urban delivery services across Germany as a part of the company's electric initiative. "Together, we are promoting electromobility in Germany and making inner-city delivery traffic quieter and more environmentally friendly," says Achim Kampker, CEO and founder of StreetScooter. WORK XL is the largest in the StreetScooter range, with room for more than 200 packages and a payload of up to 1,275 kilograms. Every year,

each WORK XL electric delivery van will produce 5 metric tons of carbon emissions less than an average diesel model, saving 1,900 liters of fuel. Ford will be providing an annual production capacity of 3,500 units. At the start, the WORK XL models will be distributed exclusively to Deutsche Post DHL Group. In the future, however, the largest of the StreetScooter vans will also be sold to third-party customers, as are its smaller siblings WORK and WORK L.

 bit.ly/ford-streetscooter-workxl

A FARE WAY TO RECYCLE

We all want to put that empty plastic bottle in the recycling bin and do our bit to help the planet, but what might actually persuade us to do it, every single time? Well, good intentions aside, one answer is to provide a financial incentive by way of so-called "reverse vending machines." Put your empty plastic bottle in and you get something in return. Now Istanbul is trying out a similar scheme, with a machine that trades recyclables for smartcard credits for the city's public transport network. Municipal chiefs intend to install at least 100 of the new machines in 25 locations across the Turkish city.



TRAM FINE IDEA

Picturesque winding streets in some European cities are heaven to wander down if you're a tourist. If you're a logistics company trying to deliver a parcel, they can be anything but. And that's before you consider the impact of pollution. Environmentally-friendly vehicles, e-bikes and city center hubs go some way to alleviating the problem, but what about making use of the existing infrastructure? A group in Frankfurt is running a trial to piggyback on the city's tram network to transport boxes of parcels to designated microhubs, from where e-bikes will make the final deliveries. A special non-passenger-carrying tram is being employed to deliver the boxes, traveling at off-peak times to minimize disruption, and if the pilot project is a success, modified tramcars similar to flatbed trucks will be brought into service.

Photos: DHL/Ford; dpa picture alliance (3); Adobe Stock (2); Reuters

WASTE NOT...

Consider this: A third of all food is wasted, costing producers \$1 trillion every year, yet millions of people go hungry. How can food suppliers, especially those of perishable products, help combat this contradiction? It can pose practical problems – testing foods such as fruit for ripeness or contamination can require physical samples to be taken. But what if you could get that information from a scan? Well, California-based ImpactVision has developed software that uses hyperspectral imaging to measure chemical information and rate a food item's freshness. Once the expensive preserve of bodies like NASA, this technology can now allow companies to assess how best to store and distribute a product according to its shelf life – and perhaps cut the waste mountain.



4 STARS FOR BRICKS-AND-MORTAR

It's a new twist to the e-tail versus retail story – Amazon is bringing its best sellers to the physical world. Its recently launched Amazon 4-star store in New York will only stock items rated four stars and over by customers. Walking through the aisles, customers can find products that are most added to Amazon.com wishlists as well as those from familiar online purchasing suggestions such as "Frequently Bought Together" and "Amazon Exclusives." The store launch marks the continuation of Amazon's move into the physical retail market, alongside its recent announcement to open 3,000 more of its cashierless grocery stores, Amazon Go, by 2021.



The number of electric vehicles produced by Chinese automotive companies in 2017 – more than anywhere else in the world



CLEAN TRAINS GO FULL STEAM AHEAD

The world's first hydrogen-powered service is now operating on a 100-kilometer (62-mile) route between the northern German towns and cities of Cuxhaven, Bremerhaven, Bremervorde and Buxtehude. The two trains, built by French TGV-maker Alstom, use hydrogen fuel cells that produce only steam and water as emissions, and store excess energy in lithium-ion batteries. The project's managers admit that hydrogen trains may be expensive to buy, but are cheaper to run. Alstom now plans to deliver a further 14 hydrogen trains to the state of Lower Saxony by 2021.



WIND IN THEIR SAILS

Aeronautics giant Airbus is setting sail to help cut the cost of shipping its aircraft parts by sea – and reduce its emissions at the same time. The company is equipping the big ocean-going cargo ships that run between its European and U.S. sites with automated towing kites, which will not only improve their fuel economy by about

20 percent, but will also see 8,000 fewer metric tons of carbon released into the atmosphere each year. The SeaWing kite, originally developed by engineers at Airbus startup AirSeas, uses a parafoil, which deploys automatically when the conditions are right and then refolds itself when the wind drops.

GIVING THE GIFT OF TIME

It's a decade since Deutsche Post DHL Group launched its Global Volunteer Day worldwide. Last year, more than 100,000 employees gave a total of 400,000 hours of their own time to local projects as part of this two-week initiative, which takes place each September.

 bit.ly/gvd-dpdhl

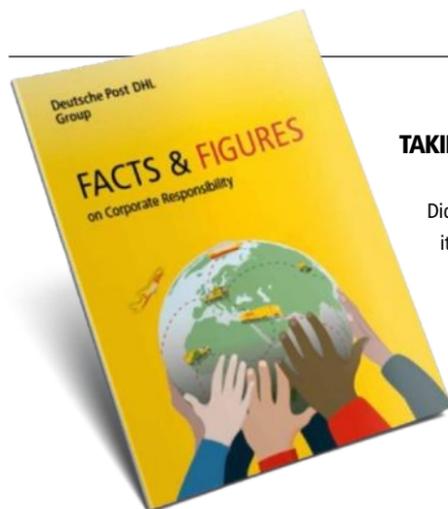


TAKING RESPONSIBILITY

Did you know that Deutsche Post DHL Group makes 1.9 billion climate-neutral shipments a year? Or that 63 percent of its energy requirements are met by renewable sources? These are some of the facts and figures contained in a new guide detailing Deutsche Post DHL Group's commitment to corporate responsibility. Through its group-wide Strategy 2020, the company aims to become a benchmark for responsible business. Find out more about the progress DPDHL Group has already made by ordering the new guide.

Download the booklet at:

 www.dpdhl.com/cr-report



REDUCING THE RISK

In a fast-moving world it's ever more vital that businesses can manage the risk to their operations as quickly as possible. DHL's Resilience360 platform already offers near real-time monitoring of shipments across the differing stages of the logistics journey, as well as assessments of the external risks that may affect them – from natural disasters, cyberattacks or simply changes in regulations. Now the power of that platform has been harnessed in a new app, providing businesses with anywhere, anytime access to information about their supply chain. Resilience360 uses the power of big data, predictive analytics and machine-learning algorithms to identify and manage risk, and the app puts that power at customers' fingertips.

 www.resilience360.dhl.com



SEEING THE BIGGER PICTURE

Digital technology allows us to visualize the world in new and ever more useful ways. DHL Freight and cloud-based IT solutions specialist Axit have developed a new method for depicting an entire supply chain in digital format. A central portal can show the status of orders, which are given a single reference number from beginning to end. Drivers can access the system via an app on their smartphones. All this allows customers to identify potential risks or emergency situations and counteract them with the help of DHL Freight, which has also established a control tower to monitor all streams of goods in Europe.

Photos: Airbus; DHL (3); Adobe Stock (2); Cultura/Getty Images; Colin Anderson/Stocksy United



ALL ABOARD FOR BLOCKCHAIN

Associated British Ports (ABP) is to launch one of Europe's first detailed pilot programs to examine the implementation of blockchain technology to improve port connectivity. With 21 ports around the U.K. and almost 100 million metric tons of freight every year – 25 percent of the U.K.'s seaborne cargo – ABP is a significant gateway for supply chains across all sectors. Technology from digital logistics enabler Marine Transport International (MTI) will be used in the pilot program and will help to move cargo swiftly to all of ABP's ports.

SUPPLY PROBLEMS FIXED

A new Fixed Delivery Day service is set to give customers greater control over their production and supply chain planning, allowing them to specify the day of their shipment up to five business days beyond the usual transit time. The new DHL Freight service, available for less-than-truckload (LTL) shipments throughout Europe within the DHL Freight EuroConnect network, can be booked online or over the phone. Shipments are then stored within the DHL Freight network until the chosen delivery day.

 bit.ly/fixed-day-delivery-dhl



**133
MILLION**

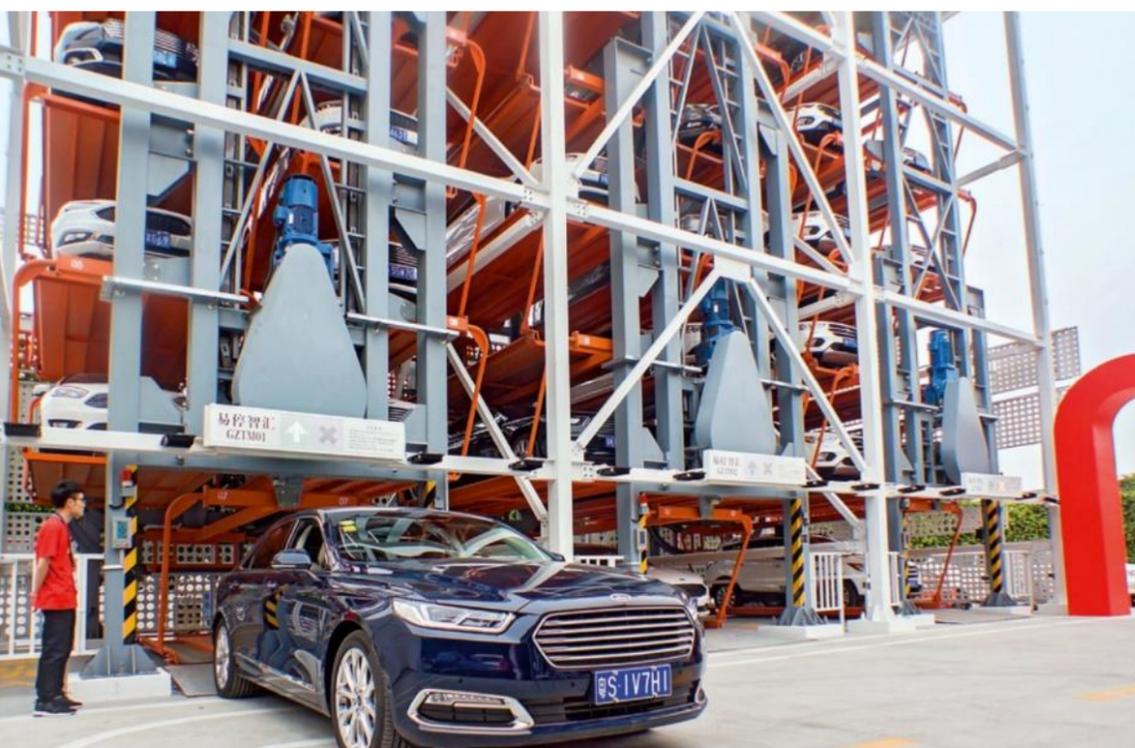
The number of jobs that could be created by the increasing use of robots in the workplace – double the 75 million jobs that new technology could displace, according to the World Economic Forum.





E-COMMERCE ACCELERATES

As industries migrate to online retail channels, the automotive sector has been stuck in the slow lane. Now some players are powering ahead.



MACHINE-DRIVEN: Alibaba's car vending machine in China, where customers can find a car and make an appointment for a test drive via an app.

Of all the technology-driven disruptions of the 21st century, few can rival the impact of e-commerce. Online sales channels have powered the growth of some of today's largest companies. They have transformed the way consumers and businesses select products and engage with brands. In the automotive industry, however, the e-commerce revolution has struggled to get out of first gear. In 2017, overall e-commerce penetration in the sector's major markets was a meager 1.5 percent. That's 10 times smaller than the equivalent rate in the technology sector, for example.

Things are going to change. Automotive companies understand that their customers, both end consumers and other players in the value chain, want to buy via online channels. They also recognize the advantages that e-commerce can bring to them, including improved understanding of customer preferences and buying habits, greater control over their brand and the opportunity to increase profits by cutting costs, boosting market share and removing intermediaries.

Part and parcel

The first key battleground is the aftermarket. The sale of parts, tires, accessories and associated services is a vital part of today's automotive business model, responsible for around 65 percent of the earnings generated by each vehicle. Parts sales, which account for 55 percent of the \$7 billion global automotive aftermarket, are an obvious

candidate for e-commerce. They exhibit many of the characteristics that e-commerce systems handle so well: complex portfolios, variable demand and, in some cases, a small, lightweight format that makes them easy to ship.

At just over 4 percent, e-commerce penetration in aftermarket parts sales already outstrips the overall e-commerce penetration in the sector by a factor of three. Market research consultancy Frost & Sullivan expects online parts sales to grow by more than 15 percent a year until at least 2022, becoming a \$50 billion industry. The fastest growth will come from emerging markets such as China, Mexico, Brazil and India, where vehicle ownership is increasing most rapidly and penetration is currently low.

The automotive aftermarket isn't exactly like other big e-commerce sectors, however. To succeed, the industry will have to recognize and overcome those differences. For a start, only a minority of vehicle end users have the skills or enthusiasm to conduct anything more than the most basic maintenance and repair tasks themselves. It's no coincidence that the largest-selling online car parts are the ones that are easiest to fit, such as light bulbs or windscreen wiper blades.

For other parts, customers are more likely to leave the fitting (and sometimes the choice) of parts up to a specialist. That adds complexity to the development of e-commerce offerings. Providers have to sell via business-to-business (B2B) platforms as well as business-to-consumer (B2C) ones, for example. In addition, new consumer-facing offerings are evolving, which

bundle products and associated services into an accessible package. In tire sales, for example, the single largest aftermarket category, this trend has helped the development of mobile tire delivery and fitting businesses that replace tires at the customer's home or workplace.

E-commerce technologies are also enabling new approaches to parts supply. Workshop, dealer and distributor networks can participate in peer-to-peer marketplaces, for example, in which they make details of their own inventories accessible to others on an online platform, allowing other participants to order components from them as required. That approach can dramatically improve the availability of components, helping participants to offer faster repairs to their customers while keeping inventory costs under control.

It isn't just the need to reach different customer groups that presents a challenge for aftermarket players. They also have to make decisions about the types of online platform they use. Owning and operating your own e-commerce platform provides a direct connection to customers, helping to keep them loyal, but participating in an open marketplace can aid access to new customers. As in other areas of retail, it is likely that many players will need to adopt multichannel strategies, with different on- and offline sales platforms for different product and customer segments.

Then there are logistics complexities. Service and repair logistics are often time-critical: A repairer won't know precisely which parts are required for a job until they start it, and the customer will often expect their vehicle to be back on the road the same day. That creates

"The automotive industry is gearing itself up for a period of radical change."

Fathi Tlatli, President, Global Auto-mobility Sector, DHL

2 PERCENT

The number of car purchases that are completed online

a need for fast, flexible logistics processes and careful disposition inventory to support same-day delivery.

Not all aftermarket parts are small, lightweight and easy to transport. Items such as major engine components or body panels are heavy and fragile, requiring specialist care in transportation and storage. And the automotive aftermarket is a two-way supply chain. End-of-life regulations in many markets are increasingly requiring manufacturers to assume responsibility for the safe recycling or disposal of used products. Worn parts taken from vehicles can be reconditioned or remanufactured and resold. Those aspects of the market require efficient reverse logistics processes, above and beyond the need to handle customer returns in a fuss-free manner – a key requirement in the eyes of most e-commerce customers.

The missing link

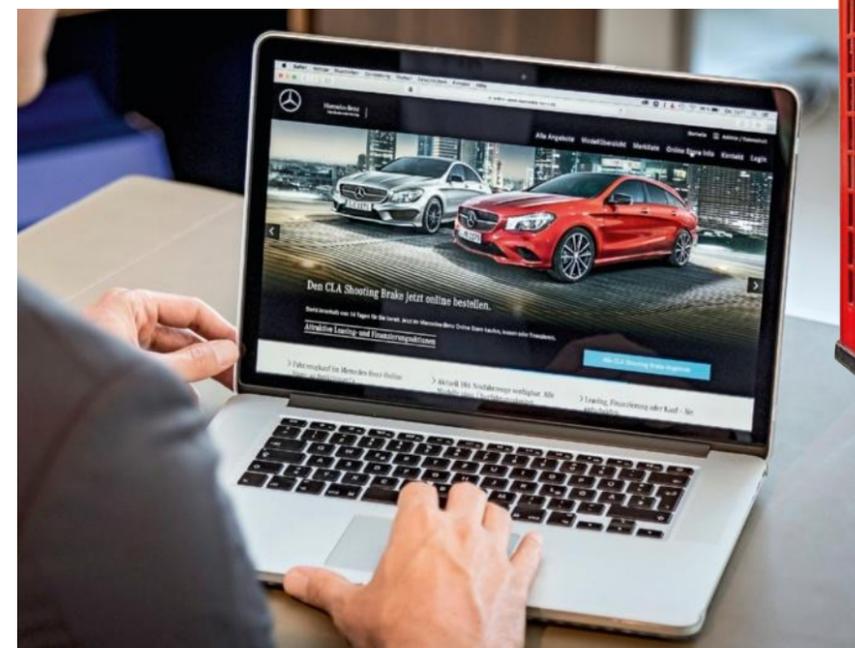
When it comes to the purchase of complete vehicles, the disconnect between today's reality and the online future is even more pronounced than it is for parts. 44 percent

97 PERCENT

The number of car purchases that begin with online research

\$50 BILLION

The value of the global online auto parts market by 2022



BOXING CLEVER: Peugeot has opened the world's smallest online car dealership in an iconic red London phone box.

CAR KEYS: Shopping for a vehicle at the Mercedes-Benz Online Store.

Photos: Adobe Stock (previous page); VCG/Getty Images; Peugeot/Ferrari Press/action press; Daimler AG

44 PERCENT

The proportion of customers who say they would be happy to buy a vehicle online

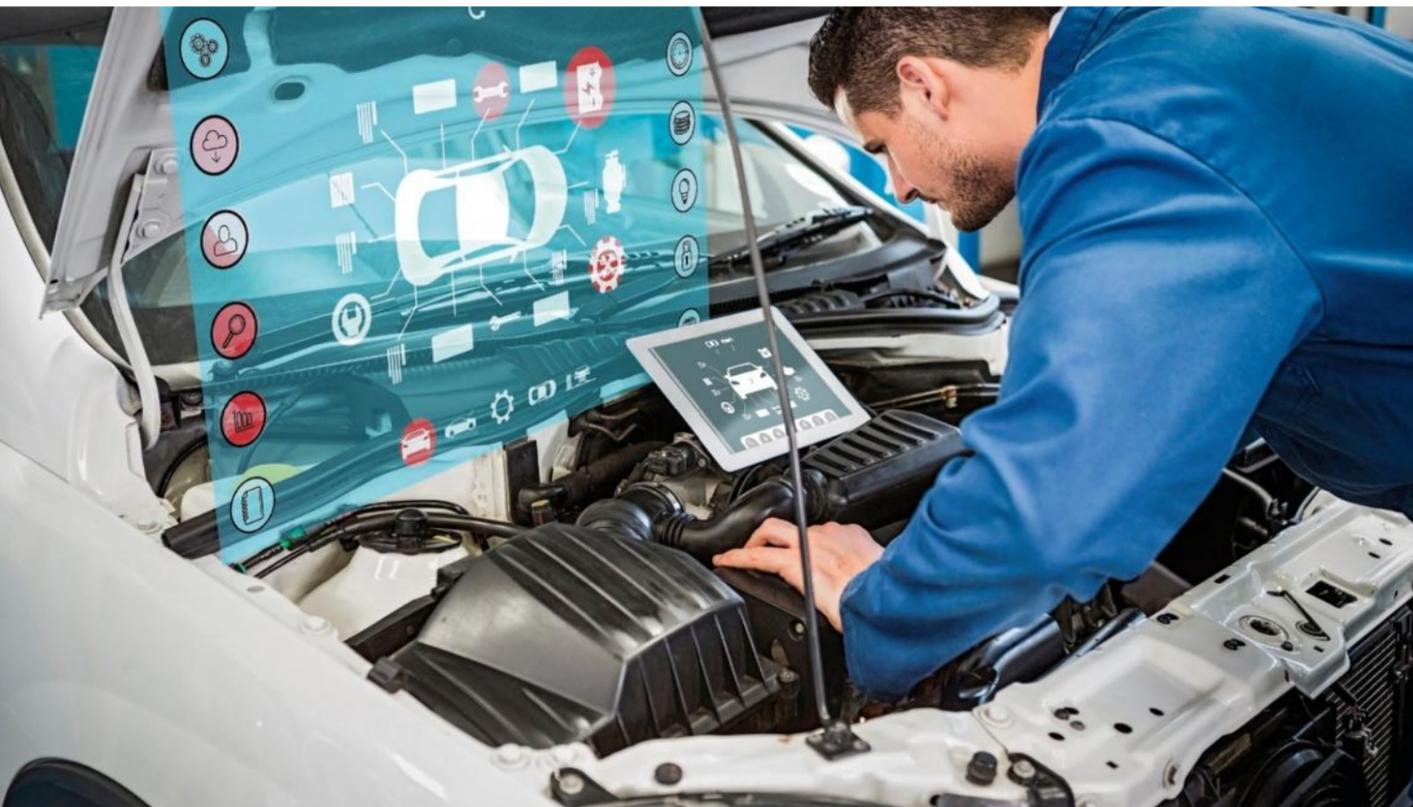
of customers say they would be happy to buy a vehicle, whether new or used, online. 97 percent of customers begin their purchasing journey that way, by researching vehicles on manufacturer websites, social media and independent review sites. Ultimately, however, only 2 percent of new cars are sold online.

There are many reasons for that gulf. Many manufacturers don't offer a seamless end-to-end process for online vehicle sales. To undertake key steps in the purchase process, such as test-driving a vehicle, signing paperwork or the final handover, the customer still needs to visit a physical dealership. In some markets, notably the U.S., regulations set up to support dealers make direct-to-consumer sales difficult for carmakers. And established carmakers don't want to compromise the role of their dealer networks.

There's growing evidence that customers will force a change in approach, however. In one survey of millennial car buyers, less than one percent of respondents said that current purchasing processes provided their ideal experience, and more than half claimed that negotiating face-to-face with a car salesperson was more painful than going to the dentist.

The industry is listening. Tesla, the arch automotive disruptor, has chosen not to develop a conventional network of dealerships. Instead, customers can view,

ENGINEERING CHANGE: E-commerce technologies are enabling new approaches to the supply of parts.



touch and test the product in a network of galleries, concessions and concept stores around the world before making their purchase online direct from the manufacturer. Lynk & Co is a new brand established by Chinese carmaker Geely, which bought Volvo in 2010. When the Chinese-Swedish joint venture launches its first models in Europe in 2020, all sales will be conducted online.

Meanwhile, a host of new players has sprung up to meet the growing appetite for online car retail. Companies operating in the sector adopt a range of different business models, with some acting as brokers between the carmaker (or previous owner) and the end customer, while others provide an online marketplace open to private sellers, independent dealerships or the manufacturers themselves.

That growth is helping to fill the gap for consumers, but carmakers worry that reliance on these new intermediaries risks disconnecting them from their end customers. And that relationship is something they want to strengthen, especially with the emergence of new vehicle ownership and use models, from car-sharing schemes to flexible hire contracts.

As a result, mainstream carmakers are hurrying to develop their own digital retail offerings. Speaking to an industry conference earlier this year, Britta Seeger,



STORE ROOM:

Some automotive components require specialist care in transportation and storage.

a board member at Daimler who is responsible for Mercedes Benz sales, said that her company expects a quarter of the brand's new and used car sales to happen online by 2022. The shift, she claimed, will be "a huge effort that we have to undertake together with our dealers." Carmakers are eyeing potentially lucrative future business opportunities too, with connected vehicles used as e-commerce portals or destinations for the delivery of customers' online shopping, for example.

Fathi Tlatli, President, Global Auto-mobility Sector, DHL, says that automotive players should not be frightened of that effort. "Across the value chain, companies in the sector have already invested significantly to improve the level of service they give their customers. Those investments mean that they already have much of the infrastructure they need to develop robust e-commerce offerings.

"The automotive industry is gearing itself up for a period of radical change," says Tlatli. "Senior figures in the industry have already said that they expect more change in the next 10 years than in the previous 100." While much of that change is around the design of the vehicles themselves, he notes, a similar revolution is underway in the way cars are bought, sold and supported. "Customers want end-to-end convenience and increasingly that means a seamless digital experience, with the real-world logistics and service expertise to back it up. The companies that can deliver that combination will see the benefits in terms of higher market share and improved customer loyalty." ■ Jonathan Ward

Photos: Adobe Stock; Klaus Polikäsener/Funke Foto Services; DHL

3 QUESTIONS FOR

Fathi Tlatli, President, Global Auto-mobility Sector, DHL



1. Does the rapid pace of change in the automotive business mean a significant increase in the complexity of logistics?

In the short term, it means exactly that. Carmakers and their suppliers are dealing with a larger number of models and model variants, a greater variety of technologies and rising customer expectations. That creates additional complexity in every part of the logistics chain. Over the long term, however, technological change could help to reduce complexity. Electric vehicles require fewer service parts, for example, and it is becoming possible to implement more features as software changes, reducing the need for different variants of physical parts. We may even see the use of additive manufacturing to produce parts on demand.

2. Will new technology have a significant effect on the automotive aftermarket and the logistics required to serve that sector?

We can foresee a time when connected vehicles may be able to predict the requirement for new parts and order them autonomously in advance. The commercial vehicle sector, where high levels of availability are critical, is already experimenting with that approach. Private car owners can look forward to greater levels of convenience, for example through an increase in the availability of service and repair activities conducted at their homes. For providers, those models are going to require parts logistics to be tightly coordinated with the movements of customers and technicians. Of course, new automotive technologies can also be used to enhance logistics capabilities. We are already seeing autonomous vehicles in the warehouse environment, and the self-driving truck or delivery van might not be that far away.

3. Is the industry ready for the challenges and opportunities presented by emerging technologies and new approaches to mobility?

The industry is doing its best to get ready! For example, that's why the automotive e-commerce space is seeing such a high level of activity at the moment. Automotive players know that customers want to interact with them online. They also understand that the organizations with the most effective online connections to their customers will be best positioned to deliver new offerings, whether that means selling vehicles outright, providing access to a range of mobility options or supplying value-added services to existing users. It's clear, however, that not one company can claim to have addressed all the challenges and opportunities presented by new mobility approaches, connectivity and the rise of e-commerce. Long-term success is likely to depend on closer partnerships between carmakers, technology providers and logistics partners.



PASCAL ZAMMIT:
Senior Vice President,
Global Supply Chain,
Michelin

SUPPLY CHAINS UNDER PRESSURE

For tire giant Michelin, the supply chain is a vital competitive weapon in an increasingly challenging global market.

In September 1891, Charles Terront won the first edition of the Paris-Brest-Paris bicycle race. At almost 1,200 kilometers, the event was more than twice as long as any attempted before. Competitors were required to ride unsupported, using a single bicycle and carrying their own food and equipment.

Terront's winning time of 71 hours and 21 minutes was a formidable physical achievement, but it was also a technological triumph. The rider's British Humber bicycle was equipped with prototype pneumatic tires produced by the Michelin company of Clermont-Ferrand. The Paris-Brest-Paris race demonstrated the decisive superiority of air-filled tires. Despite inevitable punctures on the poor roads of the time, the few riders equipped with pneumatic tires easily outpaced their rivals on solid rubber.

Today, Michelin manufactures around 190 million tires every year in 68 plants. Its products are still fitted to bicycles, as well as motorcycles, cars, trucks, buses, tractors, metro cars, construction machinery and aircraft. The company is active in 170 countries around the world and employs around 110,000 people. Its €21.9 billion (\$25.28 billion) annual sales in 2017 make it the largest tire manufacturer in Europe, and the second biggest in the world.

Since that first move into a radical and unproven technology, continual innovation has remained a core part of Michelin's ethos. The company pursues innovation across all parts of its business. Its restaurant guides were first produced as a promotional gift for drivers in 1900, for example. Their famous star rating system still has the power to make the career of an aspiring chef today. The company is the market leader in energy-efficient tires, an increasingly important category as owners and manufacturers seek to reduce fuel consumption and extend the range of electric vehicles. It employs 6,000 people in its internal R&D centers and runs innovation partnerships with numerous universities, external businesses and suppliers. Its aim is to generate or gather 100,000 innovative ideas every year.

Sending them around

Global transportation is wholly dependent on the availability of tires. Tires are a consumable product: wear or damage means every vehicle requires periodic tire

replacement during its lifecycle. And as a vehicle without tires can't go very far, tires must be available everywhere those vehicles are used. That means an efficient supply chain is fundamental to the commercial success of any manufacturer. And because tires are large, heavy items, those supply chains are significant operations.

Pascal Zammit is Senior Vice President, Global Supply Chain at Michelin. His organization is responsible for the company's global inbound and outbound supply chain and logistics operations. And those operations are significant. Alongside its plants, Michelin runs around 100 warehouses and stocks 200,000 finished product SKUs, along with thousands of spare parts and semi-finished products. The network handles an average of 40,000 orders every day, and Michelin is one of the world's top 50 buyers of maritime cargo space and one of Europe's Top 10 users of truck transportation. Overall, says Zammit, Michelin's logistics costs are equivalent to 6 to 10 percent of total revenues.

Running a supply chain of that scale and complexity might be considered challenging enough, but Michelin has also set itself demanding targets for performance improvement. Those targets, says Zammit, include "100 percent on time in full deliveries to our customers, a 40 percent reduction in material inventory, and a 30 percent reduction in controllable supply chain costs." Moreover, the supply function also has a central role to play in the organization's sustainability goals, which include a target reduction of 10 percent supply chain carbon emissions by 2020 against a 2013 baseline, and a transition to zero emissions during the second half of this century.

Achieving the impossible

Meeting all those goals requires the company to "achieve the impossible," says Zammit, especially given the inevitable tradeoffs involved, such as the need to increase service levels and product availability while pushing inventories down. To get closer to its goals, Michelin is addressing all areas of its value chain, from product design to last mile delivery. "We are working closely with our peers in different business units to improve forecast accuracy, and we have projects underway to standardize the components used in our tires, which will simplify the inbound supply chain."

Elsewhere, the company is placing great emphasis on the power of digital technologies. "We want to optimize

190
MILLION

The number of tires produced by Michelin every year

the internal flow of material throughout the supply chain,” says Zammit, “And that requires full visibility: Every component has to be managed individually.” Improving visibility to that level will help, he adds, because it enables smarter inventory management, for example allowing stock to be moved across the supply chain rather than just along it to match availability with demand.

Despite the scale of Michelin's own operations, Zammit notes that its supply chain improvement efforts are an intensely collaborative effort. “This is not something we can do alone. By value, most of our supply chain activity is outsourced to third-party logistics providers and other partners. We rely on our partners to achieve the level of speed and cost we need, but we also look to them for innovative ideas, and for a willingness to adapt their service to meet our needs.”

Michelin also collaborates closely with supply chain technology providers to develop and optimize new solutions that meet its requirements. And when it finds something that works, the company sees no reason to keep the benefits to itself. As an example, Zammit cites a new technology for real-time tracking of shipping containers, which Michelin developed in partnership with two external technology providers. “That product provides full visibility of containers throughout their journey, at half the cost of competitive offerings, and we are looking to make it available for other users,” he says.

Technology is progressing so rapidly and on so many fronts, however, says Zammit, that a collaborative approach is essential. “We have to prioritize our efforts, and we need to be honest and humble about what we can do. When we decide to invest in a new approach,

we make sure we are working with multiple partners.” Even then, he notes, not every investment pays off. “We test many new ideas on the market, sometimes they fail and we learn, then we try a new one.”

Tricky terrain ahead

The company's ambitious supply chain improvement plans aren't just about the pursuit of progress for its own sake, however. Michelin is acutely aware that its 120-year-old core business faces disruption from all sides. “Our traditional routes to market are being shaken by the growth of e-commerce and by the rise of new competitors who focus on low-cost products,” says Zammit. “That means we have to work hard to communicate the performance benefits of our innovative products, and we have to become more cost-competitive too.”

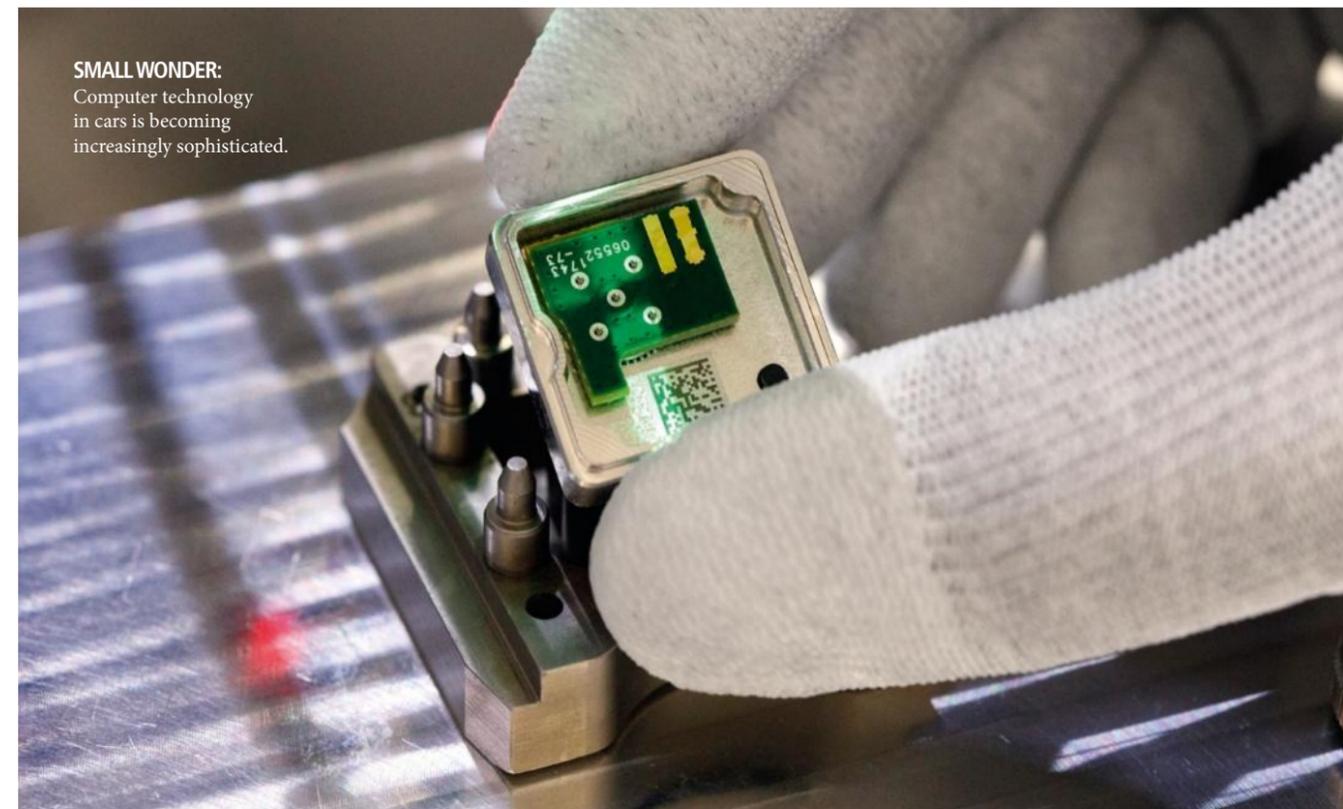
The company is also preparing for other supply chain challenges. “Europe is still one third of our total market,” notes Zammit. “And in Europe we have an aging population. Over the long term, that may mean we have fewer people who want to be truck drivers, for example, or who want to work manually with heavy tires in a warehouse environment.”

Michelin is already taking proactive steps to mitigate possible shortages of key supply personnel, he says. “We are working with our transport partners to find ways to reduce driver attrition. We recognize that it's not all about money, sometimes it's about changing the way we work so the driver has a better quality of life. Ensuring their schedules are easier to manage, for example, or they know there will be somewhere to rest and have a shower at the end of a trip.” In its warehouses, meanwhile, Michelin is exploring the potential of robotics or even powered exoskeletons to make jobs less physically demanding.

So what advice would Zammit give to a successor in his role? “That's easy, I'd advise them to develop their leadership, to ensure they know exactly where they want the organization to go, but to be flexible in the way they get there. We are living in chaotic times, but as long as you have your polestar you will always be clear about your destination, even if the route has to change along the way.” ■ Jonathan Ward

 www.michelin.com

RUBBER STAMPED: Michelin is the largest tire manufacturer in Europe and the second biggest in the world.



SMALL WONDER: Computer technology in cars is becoming increasingly sophisticated.

CAUTION, CONVERGENCE AHEAD

Tomorrow's vehicles may be as much computer as car. That's going to have profound implications for the whole automotive supply chain.

Everybody loves a car with a brain. Walt Disney's 1968 movie “The Love Bug” launched a decades-long film and television career for Herbie, the intelligent Volkswagen Beetle. For viewers of a certain age, singer and actor David Hasselhoff will always be associated with KITT, the unflappable, indestructible Pontiac Firebird that starred alongside him in the 1980s TV series “Knight Rider.”

In the real world, the decade between “The Love Bug” and “Knight Rider” was the start of an automotive electronics revolution that has been accelerating ever since. In the early 1970s, electronic controls began to replace the mechanical systems that once managed fuel flow and ignition timing within the internal combustion engine. By the 1980s, those early analog circuits were being replaced by microprocessors. The speed, accuracy and flexibility of computer control allowed engineers to pursue a host of innovations in automotive safety and efficiency, from lean-burn engines to electronic stability control.

In the 21st century, the sophistication and complexity of in-car computer systems has exploded. A state-of-

the-art vehicle from 2004 contained around 5 million lines of computer code. By 2013 that number was approaching 150 million. Today's luxury vehicles include around 100 individual computers. Software accounts for around 10 percent of the value of a large passenger car today, and is forecast to account for 30 percent by 2030.

New architectures required

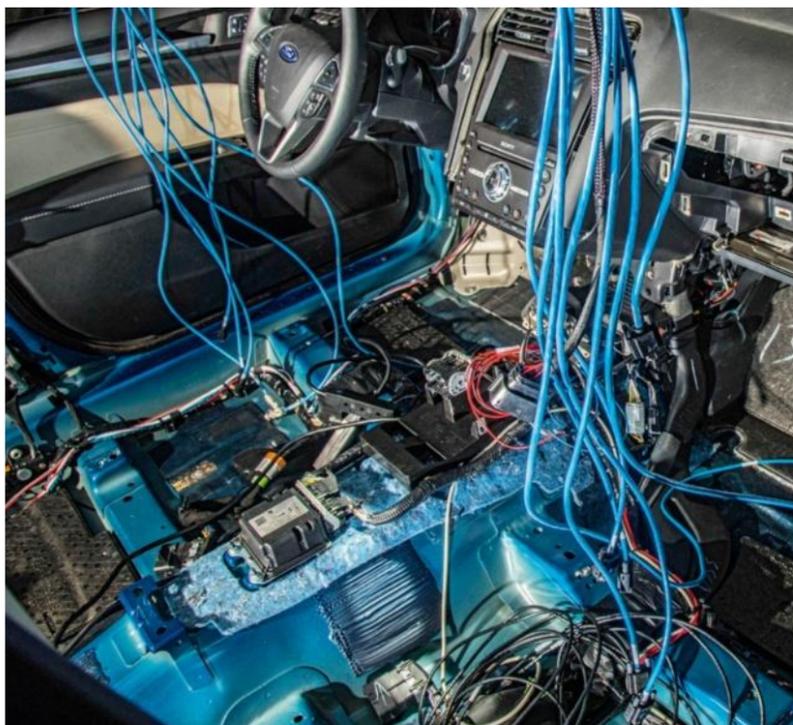
Car companies aren't just packing more computing power into their vehicles, however. Current and emerging trends in technology and car design are forcing them to rethink the way electronic systems are packaged and implemented.

On the one hand, there's a push for consolidation, simplifying the electronic architecture of the vehicle by replacing the dozens of separate microprocessors used on today's vehicles with fewer, more powerful “domain controllers,” each responsible for a large number of functions. On the other hand, advanced features like those required to deliver autonomous driving capabilities will require a range of new, dedicated hardware, including sophisticated sensors and specialized systems to interpret the data they produce.

150
MILLION

The approximate number of lines of computer code in a modern car

Photo: Sven Simon/ddp Images; Bloomberg/Getty Images



CABLE CAR:
The inner workings of an autonomous vehicle. Cars with self-driving capabilities will require a range of new, dedicated hardware.

Companies also need to manage the side effects of all that new technology. Prototype autonomous cars require several kilowatts of electricity just to power their onboard computer systems, for example. Combined with the weight of all the required hardware, that could erode vehicle efficiency, driving up fuel consumption and emissions in fossil fuel cars or reducing the useful range of electric variants. To overcome these challenges, the industry is exploring a range of strategies, from the use of new generations of energy-efficient high-performance semiconductors to cloud-based technologies that allow some processing functions to be conducted in remote data centers linked to the vehicle by high-speed 5G cellular networks.

\$32.3 BILLION

The value of the automotive semiconductor market in 2018

Two worlds collide

It isn't just vehicle architectures that are being redesigned to accommodate all this technology, however. The growing importance of in-car electronics is also reshaping the automotive value chain. In particular, it's driving a convergence between two giant industries that have traditionally adopted very different approaches to product development, manufacturing and supply chain management.

On one side of the divide are the carmakers. Their products evolve relatively slowly: models are produced for five to seven years, then supported in the market for another 15 or 20. On the other are the big semiconductor manufacturers. They work at a much faster cadence, with new product generations introduced every year or

18 months. In their factories, meanwhile, automakers strive for agility and responsiveness, with just-in-time supply chains and lean production systems that aim to maximize flexibility and minimize the lead time between order and delivery. Meanwhile, semiconductor players want to keep their hugely costly manufacturing plants running at full capacity, and that encourages them to favor large batch sizes and long lead times.

If they can't find ways to better align their operations, the two industries could create a host of problems for themselves: new vehicles that are designed using components that are already obsolete by the time production starts; big, costly inventories to accommodate mismatched planning and production cycles; and uncertainty over the future availability of spare parts.

Convergence in the value chain

But that is the pessimistic vision. There are strong commercial incentives for the automotive and semiconductor industries to find ways to resolve their differences. The automotive market is still a relatively small one for semiconductor players – around 9 percent of the global semiconductor market – but growth is forecast to outstrip the sector as a whole. Better still, automotive companies are buying more expensive, and profitable, product types. The automotive industry buys a tenth of the world's 32-bit microcontrollers, for example, but accounts for around a third of revenues in the category.

To better align their supply chains, the industry's players are pursuing a range of strategies. Suppliers are investing in new, more flexible production capacity with the automotive industry's needs in mind. An example is Bosch's new wafer fabrication plant currently under construction in Dresden, Germany. The €1 billion facility is the largest single investment in the company's history, and when production starts in 2021, many of its products will be destined for automotive applications. Automotive and semiconductor players are collaborating on strategies to standardize and simplify the implementation of new hardware and software.

The two industries are also finding ways to streamline their everyday supply chain interactions. Vendor Managed Inventory (VMI) and Collaborative Planning Forecasting and Replenishment (CPFR) are two such approaches, relying on the early exchange of consumption and production forecast data to improve supply chain performance and responsiveness.

"The two worlds of automotive and electronics are coming together," says Fathi Tlatli, President, Global Auto-mobility Sector, DHL. "The complexity and sophistication of today's – and tomorrow's – vehicles mean that no single player will be able to do it all. Companies know that they have to collaborate, whether that's in the co-creation of new products, the manufacturing supply chain or the provision of services to end customers." ■ Jonathan Ward

Photos: Mark Peterson/Redux/iaif; Bart Oerbakke/ESL

BUSINESS



\$24.6 MILLION

The largest prize pool in esports history – for the Dota 2 Championship in 2017

1 MINUTE

The time it took for tickets to the 2017 League of Legends World Championships to sell out, despite the Beijing National Stadium's 80,000-person capacity

427 MILLION

The estimated number of spectators that will watch tournaments in 2019

EXPLAINED: ESPORTS

Major companies such as Airbus, Audi, Coca-Cola and DHL are putting brand dollars into esports – here's why.

Video game tournaments have come a long way since they first appeared in arcades in the 1980s. Now, online spectatorship is booming and tournaments have become increasingly large-scale events. Gamers are considered professional athletes, and just like with major league basketball or football games, thousands of esports fans flock to sold-out arenas to watch teams compete.

\$905 MILLION

The projected global esports economy in 2018, with the majority generated through investments by brands

Tournaments are streamed to a huge global online audience – some 385 million people in 2017 alone. This massive reach has attracted the attention of major companies, including PepsiCo, Bud Light and Red Bull, who invest in sponsorships to target the sport's main demographic: young men between the ages of 21 and 25, a

group that traditional advertising struggles to reach.

The leading authority on the video gaming market, Newzoo, predicts a promising future for esports, calculating that the global esports economy – including advertising, sponsorships, merchandising and ticket sales – will reach \$1.4 billion by 2020.

In the longer term, esports will potentially reach a broader audience, as the International Olympic Committee is considering adding esports to the Games – meaning tournaments could be aired on television networks worldwide as early as 2024. ■ *Giorgia Rose*

Find out more about esports in our interview with ESL founder Ralf Reichert on page 35.



TURKEY: CHARTING A NEW COURSE?

Over the last five years, Turkey has been investing in a massive infrastructure program. Will the resulting connectivity – plus strong sectors and an open business environment – enable the country to overcome current economic woes and put it back on the right track?

On October 29, 2018 – which is, aptly, Turkish Independence Day – the headline-grabbing, ultra-futuristic new Istanbul Airport opened for business. Or, at least, its first phase did. When completed, this infrastructure colossus will be the largest airport in the world. Covering over 76.5 million square meters, it will have six runways, an annual passenger capacity of 200 million, an air cargo capacity of 2.5 million metric tons a year in the first phase, capable of increasing to 5.5 million metric tons a year in the second and third phases, and 100 airlines flying to some 300 destinations. The resulting strengthening of regional connectivity is expected to be a boon for Turkish exporters, increasing their reach to global markets and contributing an estimated 5 percent to GDP.

200 MILLION

The expected annual passenger capacity of Istanbul New Airport

Unfortunately, Turkey hasn't only been making headlines with its new airport recently. Since January, the Turkish lira has lost 40 percent of its value against the dollar. In early August, shockwaves were felt when the U.S. administration announced the doubling of tariffs on Turkish steel and aluminum; and later that same month, the credit ratings agencies Moody's and S&P Global Ratings downgraded Turkey. By September, the rate of inflation in the country had reached almost 25 percent; although, in October, Suma Chakrabarti, President of the European Bank for Reconstruction and Development (EBRD), called Turkey's troubles "a slowdown" rather than a crisis, predicting 3.9 percent growth in 2018 and around one percent in 2019. "The authorities are taking action to address the issues facing the econ-

THE SHIPPING LINE:

Around 90 percent of Turkey's foreign trade is transported by sea.

omy and investors will scrutinize the commitment to the implementation carefully," he said. "With the right policy response, the economy will recover more quickly."

Even so, the present current economic situation is undeniably a far cry from the country's recent heydays when it showed solid GDP growth year after year.

Ambitious infrastructure plan

Yet despite this turbulence, there is cause for optimism in Turkey – and Istanbul New Airport is a potent symbol of it. That's because in 2013 the Turkish government announced it would be pouring \$200 billion into infrastructure projects to support its ambitious plan to increase trade levels to \$1.1 trillion by 2023. The airport is part of this initiative – and thought to cost around \$7 billion – but there are numerous other projects that have either been completed or are underway. This means there's a real chance that this country of more than 80 million people could become a regional logistics hub. The potential is there, after all.

To begin with, Turkey's geography is unique – and, possibly, uniquely beneficial. It's located at the crossroads of Europe and the Middle East, close to the markets of the Balkans, Russia and Central Asia, and acts as a strategic stopover point between Africa and Europe. Its enviable global position should make it a major hub almost by default; but this hasn't happened – yet – largely because parts of the country's transport infrastructure have been historically limited.

Turkey's road network is robust enough, and responsible for delivering 85 percent of domestic freight. Yet the country's rail network has suffered from years of under-investment – largely because the European Union is Turkey's main export market, and easily served by road – so that just 5 percent of domestic freight is transported by train. Around 90 percent of the country's foreign trade is transported by sea, while just one percent of export freight goes by air.

Those statistics may be about to change, however. In 2015, Turkey's first transshipment container terminal opened at Asyaport, the country's largest container port with a capacity of 2.5 million 20-foot equivalent units (TEU). In 2016, work finished on the \$3 billion Yavuz Sultan Selim Bridge – said to be the world's widest suspension bridge – spanning the Bosphorus and creating an important link between Asia and Europe. Railways are another major investment component of the country's new 2023 vision. "In the next five years, Turkey will allocate over \$46 billion (€39 billion) to railway transport, either conventional or high speed," said Ahmet Arslan, Turkey's Minister of Transport, earlier this year. "Turkey is the second-largest country after China in rail-

way constructions. Our target is to complete 7,270 miles (11,700 kilometers) of high-speed railway lines [by] 2023 and to link 41 cities to each other."

Diverse economy

Admittedly, Turkey's location is also a concern, not least because it borders Syria and Iraq with all of those countries' geopolitical tensions. Yet despite this – and the recent disruption to the economy – Turkey's business sectors are thriving. "The Turkish economy is diversified," says Teoman Beyazit, CEO, DHL Global Forwarding, Turkey. "Engineering, manufacturing, consumer retail, life sciences, energy and renewables, and aerospace are all doing well – and none constitute more than 10 percent of the economy. Then there's automotive, which is a hugely important sector for Turkey as the fifth-biggest car producer in Europe and a major production hub in this part of the world." Major carmakers such as Toyota, Ford and Honda all have plants in Turkey, with Honda increasing investment in its facility in 2017 in order to make the new Civic sedan. In July, daily newspaper The Daily Sabah reported that Turkey's automotive exports had reached \$16.4 billion in the first half of 2018, "with sales to European countries making up 80 percent of the sector's total exports."

The e-commerce sector, meanwhile, is increasing exponentially. That's because the country's future is – literally – in the hands of young Turks, who make up 16.3 percent of the population and are increasingly tech savvy.

According to information from the Turkish Statistical Institute, the online market is expanding. Four out

\$200 BILLION

The amount being spent on Turkey's infrastructure projects between 2013-2023

READY FOR TAKEOFF:

New Istanbul Airport is now open for business.



Photos: canaran/Adobe Stock; ddp images

of five young people (aged 16-24) now use the internet, while, last year, the number of smartphone users in the country was estimated to reach 41.09 million. E-commerce giant Amazon launched in the Turkish market in September, initially offering products across 15 categories. “We are committed to building our business in Turkey in the coming months by expanding our selection and delivery options,” said Sam Nicols, country manager for Amazon.com.tr, in a written statement, according to Reuters. However, e-commerce is also highly attractive for Turkish businesses wanting to expand abroad. Especially the recent exchange difference fluctuations in Turkey are expected to motivate local producers to attach more importance to cross-border e-commerce, while governmental incentives for export will surely boost the area of e-commerce, says Ali Emre Arpacı, founder and managing partner of Istanbul-based design brand KAFT. “E-commerce is at the core of our business model. We have sold our items on the international platform since the first day we opened our online portal and we have managed to attract customers in 60 countries.”

“It’s an exciting industry from a growth point of view,” agrees Claus Lassen, CEO, DHL Express, Turkey. “Small and medium-sized businesses, which have traditionally been domestic players, are now going global thanks to opportunities afforded by e-commerce.”

Belt and Road gamechanger

In 2016, the Turkish Industry and Business Association estimated the e-commerce sector to be worth €7.95 billion (\$9.18 billion) – and it looks as though it’s on

course to grow at more than 35 percent by the end of this year. This hasn’t gone unnoticed by Chinese online retailer Alibaba. In July, it announced it was investing in Trendyol, Turkey’s top e-commerce fashion platform – at a reported \$750 million, was the largest internet business transaction in the country to date. Alibaba also recently partnered with B2B services provider E-Glober to expand cloud services across the country. “Cloud adoption in Turkey is gaining momentum, with a public cloud market valued at \$96.93 million in 2017, according to IDC (International Data Corporation),” noted Alibaba. “In addition, Turkey is considered a gateway between the East and West and is a key country within the Belt and Road Initiative. This enhanced connectivity, as well as increasing trade activities in the region, are bringing growth opportunities to Turkish companies equipped with cloud computing technology.”

China’s long-awaited Belt and Road Initiative could certainly be a growth gamechanger for Turkey. Beijing wants to re-establish trade corridors along many of the historic Silk Road’s original routes, passing overland from China through Central Asia to continental Europe (the “belt”) and via a sea route (the “road”) from China to Europe and Southeast Asia by way of ports in India and Africa. As a key player in the project, Turkey would be better connected to other countries along the route, offering increased opportunities for Turkish businesses to export abroad. Its infrastructure has also been designed to integrate with Turkey’s Middle Corridor initiative – a multi-transportation route that runs through Georgia and Azerbaijan over the Caspian Sea, Turkmenistan, Kazakhstan, Uzbekistan and ends in

\$1.1 TRILLION

The trade levels the Turkish government wants to achieve by 2023



BRIDGING THE GAP: The Turkish government is spending billions on infrastructure projects, including new railways.



BUY AND CELL: Young Turks are doing much of their online shopping by smartphone.

China. Indeed, last November, Abdulkadir Emin Önen, Turkey’s ambassador to China, told The Daily Sabah that developing Belt and Road infrastructure was a priority for the Turkish government.

“Turkey has been realizing tremendous infrastructure projects, which will connect China and Europe together,” he said. “For instance, the construction of the third Bosphorus bridge, which has a railroad, and the renewal of various railroads. The most important step in this field is the Baku-Tbilisi-Kars railroad, which was opened on October 30, 2017. With the realization of this project, a product produced in China will reach London through Turkey within 14 days. This will contribute to the increase of the trade volume between countries.”

Good for business

What’s more, Hüseyin Keskin, former CEO of İGA Airport Operation, believes that Istanbul New Airport will create an “aerial” Silk Road, enabling countries such as India and China to connect more easily with Istanbul. “Collaborating with global actors whose joint trade activities date back to centuries ago, we will generate new opportunities and bring fresh breath to competition not only in Turkey but across the world,” he says. And because Istanbul is aiming to become a center for global air freight, DHL Express is planning to open a 42,000-square-meter facility at the airport, complete with support units, by the end of 2019 or early 2020.

For countries wanting to tap into Turkey, opportunities are plentiful, says Claus Lassen. The domestic market is huge, for example, and the talent pool is deep. “The population is young and dynamic and the labor force is qualified and hardworking,” he notes. “It’s also a business-friendly environment. It’s easy to set up a com-

pany here – on average it takes five days – and corporate income taxes are relatively low. And, since the mid-1990s, Turkey has been in a customs union with the EU, which has helped lower barriers to trade between the two parties by eliminating tariffs on bilateral trade in most industrial goods. There are a lot of simplification initiatives, too, such as getting rid of paper customs procedures documents and moving toward digitalization.”

As this year has shown, no one would be wise to downplay the economic challenges Turkey faces. But Teoman Beyazit is at least optimistic about the country’s long-term fortunes. “Ease of doing business will continue, as will the immense scope of its infrastructure investments,” he says. “Make no mistake: There is a strategic target behind these plans and investments. Turkey aims – and wants – to become a regional logistics hub.” ■ *Tony Greenway*



TURKEY

- Population:** 80,845,215 (July 2017 est.)
- GDP:** \$849.5 billion (2017 est.)
- World Economic Forum’s Global Competitiveness Index 2017–2018:** 53rd out of 137
- World Bank Group’s Ease of Doing Business Index:** 60th out of 190
- DHL Global Connectedness Index 2016:** 54th out of 140

Photos: abaca press/ddp images; Alexandra Iakovleva/Getty Images; iStock/Getty Images



UNDERSTAND AND DELIVER

A new generation of online shoppers wants better, faster service. It's time for logistics to get creative with flexible networks, automation and big data.

Today's consumers are more urbanized, wealthier, and buy more than ever before. They are also more impatient – prioritizing speed and convenience – and yet they also prefer sustainable products, ethical production and eco-friendly deliveries. Balancing seamless experiences with lengthy lists of provisos is the monumental task facing e-tailers and their logistics partners all over the world.

Yet according to a new DHL report, prepared with the support of Euromonitor, both sectors are well placed to meet these requirements as long as they take a more creative approach to fulfillment – particularly to the last mile, the final leg of the journey from transport hub to final destination. The report identifies four key trends that are having a big impact on this famously difficult final stretch – localization, flexible delivery options, the

growing number of seasonal spikes and evolving technologies – and offers recommendations on how e-tailers and their logistics partners can address these trends via their supply chain.

Innovations and disruptions

The emergence of a generation that regards ease and spontaneity as birthrights certainly augurs well for the future of e-commerce: shoppers are expected to spend \$2.4 billion a year via mobile devices by 2022. However, this inevitably poses great logistical challenges. Innovation in this area has tended to focus on three core areas: localizing delivery networks enabled by enhanced consumption predictive capabilities; creating flexible delivery solutions to guarantee convenience and address cost concerns; and increasing elasticity to manage seasonal demands.

As the logistics industry evolves, delivery networks today are becoming far more localized, shifting their supply chain to focus more on regional fulfillment strategies with the aim of shortening the last mile. Many operations have implemented a system of micrologistics, where transport operators focus on smaller regional warehouses and increase the number of fulfillment centers. Amazon has almost 800 in the U.S. Yet other workarounds can be more inventive: In the U.S., for instance, DHL eCommerce works with the U.S. Postal Service to facilitate last-mile delivery. Delivery is not just about speed but also convenience through predictability – no one likes waiting in for a package.

To solve this problem, variations of lockers have been adopted in many countries. Amazon Locker, a flexi-solution offered by the e-commerce leader, has a network of 2,000 locations in more than 50 cities. There are also intelligent lockers that help facilitate two-way logistics through product returns via product codes. Then there's Citibox in Spain, which provides a smart mailbox that can be installed within apartment buildings and allows for dropoffs and pickups to be arranged via smartphone. In Germany, a pilot project between DHL and Volkswagen fitted 50 Polo vehicles to act as mobile parcel lockers and provide “in-car delivery” for select customers.

For same-day – or even within-the-hour – deliveries, fundamental shifts in the supply chain are even being explored. These include crowdsourced deliveries, or deliveries outsourced to third-party contractors such as Postmates and UberRUSH, who operate their own vehicles to deliver single parcels.

A more elastic framework will be critical to fulfilling consumer expectations and controlling costs

– particularly when orders spike at certain times. Increasingly, firms are turning to data and automation to stoke and determine their demand. German retailer Otto has implemented artificial intelligence systems that generate day-to-day forecasts on orders. This has reportedly led to a 40 percent increase in forecast accuracy and a 20 percent reduction in overstock.

As applications of real-time data and artificial intelligence are becoming more established throughout the supply chain, other technologies are being integrated throughout the entire e-commerce chain. Augmented reality, for example, is used to improve productivity in warehouses by providing data to personnel visually, while AR apps such as fashion retailer Gap's Dressing-Room and IKEA Place let customers “try” a product before purchasing, reducing the likelihood of goods being returned.

The future of e-commerce and logistics

According to Katja Busch, CCO and head of Customer Solutions and Innovations, DHL, the industry is moving toward a greater local presence, developing alternative delivery models, pushing for digitization in fulfillment and delivery, incorporating robotics to aid its workforce and more. For example, DHL is streamlining its last-mile process using geo-map reading, which plans routes using live data on the roads and is also agile in finding alternative routes if necessary. The company claims this technology, which incorporates AI, cloud computing and real-time data capabilities, has helped lift last-mile productivity by 20–40 percent.

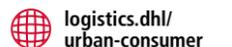
There are, of course, a growing number of shifting external factors – from pollution issues to social policies, – which means that transport companies need to apply a great deal of agility to their strategies. Inevitably, the four key trends DHL and Euromonitor identified as impacting the last delivery mile – localization, flexible delivery options, seasonal demand and evolving technologies – can pose a challenge with regard to overall costs and service. At the same time, they can also cause organizational strains.

The report stresses that, in the absence of a one-size-fits-all solution for all urban environments, logistics providers must be ready to apply flexible networks, automation and data prediction wherever appropriate.

In other words, aerial drones, self-driving vehicles and other headline-making last-mile solutions will only triumph if they truly help transport operators succeed in this approach to the urban consumer. ■

Boyd Farrow

The report will be available in December 2018. To download it, please visit:



€2.8
BILLION

The sum French retail giant Carrefour is planning to invest in e-commerce by 2022



DRESS SENSE:
Fashion is a popular category among Africa's e-commerce consumers.

BUYING INTO THE E-COMMERCE BOOM

While many challenges persist, Africa's swelling population could make the continent an increasingly important presence in e-commerce. Maybe it could even bring salvation for global retail.

Marvel's "Black Panther" film about an African prince with superpowers blindsided the movie industry in 2018 with its amazing run of success, proving the hitherto underappreciated appeal of the Africa brand. Now it appears the world of e-commerce could be similarly shaken up by Africa.

The old narrative of Africa on the margins, disconnected from the global economy, riven by conflict or corruption and heavily dependent on foreign intervention and donations, is fading fast. The internet is playing a big part in facilitating this change, hence the increasing

relevance of e-commerce on this still much misunderstood continent.

Africa's population is growing rapidly, especially its middle class, which is expected to make up 1.1 billion out of 2.5 billion Africans by 2050. And that mushrooming demographic, comprising professionals and business people with increasing disposable income, has a taste for Western goods: an obvious opportunity for e-commerce. McKinsey Global Institute projects e-commerce could be worth \$75 billion in Africa's leading economies by 2025.

"At the moment, 90 percent of U.S. and U.K. retailers don't sell in Africa – so many brands have simply nixed Africa," says Chris Folayan, CEO of MallforAfrica, an e-commerce platform that allows customers in 17 African countries to purchase directly from major international retailers that would otherwise be inaccessible.

"They have these amazing websites but can't be accessed by African countries; these businesses have dismissed the continent for reasons I have no clue of – they just don't see what the continent can do," Folayan says.

Saving retail?

He acknowledges that some foreign companies are put off by legitimate challenges such as language and

cultural barriers, the lack of universal payment systems such as Visa and MasterCard, and by concerns over the likes of fraud and ingrained corruption. But, he points out, this is where partnerships with local companies like MallforAfrica come in, to "take care of all of that."

Folayan also notes African e-commerce could help reverse the downward trajectory of retail in the U.S. and U.K., where online shopping is eating retail. In 2017 the \$12.7 billion revenue of U.S. department stores was \$7.2 billion lower than it was in 2001, according to the U.S. Census Bureau.

"I truly believe that Africa could save many [foreign] businesses," Folayan says. "Even though retail is having a hard time, it still isn't looking to Africa as a market where it could do business through online sales. Retail needs to look at Africa in a different light. Ninety percent of U.S. and U.K. retailers don't sell into Africa. There is a whole load of money to be made, while the risk can be taken out by going through the right local channels – like MallforAfrica. You just need to ship to our warehouse, after which we can open up the continent to your business."

Other African companies, like Nigeria-based Jumia and Konga, have also embraced the idea of overcoming the e-commerce challenge in Africa to offer solutions. Jumia became the continent's first unicorn when, in 2016, it achieved a \$1 billion valuation after a \$326 million funding round that included Goldman Sachs.

"The potential is large: Urbanization means it's getting easier to deliver, there are more mobile phones, more people are getting credit and debit cards, and using mobile money," says Aubrey Hruby, co-author of "The Next Africa: An Emerging Continent Becomes a Global Powerhouse." "All those trend lines are positive for e-commerce platforms," she argues.

But the billion-dollar question for investors remains whether the opportunity afforded by Africa's swelling population outweighs the structural challenges the continent presents. Fewer than a quarter of African roads are paved, and even the most developed countries struggle with access to electricity and frequent outages. Functioning address systems are typically absent, even in capital cities.

"There are some things you can't change, but what you can do is facilitate," says Hennie Heymans, CEO, DHL Express Sub-Saharan Africa. "Even if you don't have a physical address, you can establish central points of collection. This is why [local] partnerships are so important. For long-term planning you must have immense patience and persistence. The role of logistics is changing in this new era. Three to four years ago, the traditional way of getting hold of someone for shipping was to ring a call center, but that's all changed,

**\$75
BILLION**

The projected value of e-commerce in Africa's leading economies by 2025

and people want access via their mobiles. You have to up the ante and make things available via "digital."

Savvy customers who know what they want

The typical e-commerce consumer in Africa is young – with an average age of just over 19 – urban, tech savvy, well connected through a smartphone and keen for quality goods. The context, however, varies with each country. In Nigeria most e-commerce consumers are in the capital Lagos, the biggest city in Africa, while in Côte d'Ivoire the majority live in the countryside and are looking online for products not available in local stores.

Fashion, beauty products and groceries are all popular categories among Africa's e-commerce consumers, while internet services such as booking hotels and flights are increasingly popular.

Ultimately, observers note, African consumers want the same thing as any European or American customer: the largest array of good-quality products at a good price and the convenience of having it delivered to save time – a factor that plays a major role in e-commerce being viewed as having so much potential across the continent.

"Africa always takes longer to catch on to the next craze, but now there is a dramatic change in consumer behavior," says Heymans. "Nigerians used to be the highest-spending travelers in international airports, but now those travel attitudes are being channeled via e-commerce."

At the same time, he notes, retailers are discovering the benefits of e-commerce, such as accessing the international market without "having to pay another cent," and how, faced with having to pay a premium delivery fee when buying online, customers tend to buy more,

STREET LIFE:

Fewer than a quarter of African roads are paved, and functioning address systems are still not common, even in capital cities.



Photos: Per-Anders Pettersson/Getty Images; AFP/Getty Images

SURF'S UP:
The internet is facilitating a big change in Africa, ushering in a new era of e-commerce.



increasing the online basket value, in order to make that delivery fee more worthwhile.

The likelihood of widespread adoption of e-commerce is bolstered by the trend of leapfrogging already seen in Africa, whereby local innovation overcomes structural deficiencies – as seen with Kenyan mobile money service M-Pesa, which emerged in the absence of consumer banks to give millions of Africans access to digital finance – as well as by Africans' ability to combine old and new.

"If you are stuck in traffic in Lagos you could roll down your window and yell for peanuts, handing over cash, or you could get on your phone and go to an app for Chicken Republic and delivery to home," Hruby says. "In Africa there is fluidity: It's low and high tech, a 360-degree market."

The Africa you don't hear about

"The opportunities are mindboggling, more than you can conceive," Folayan says. "Africa is such a rich continent. People like dressing well, looking good and have money to spend. It's not a continent built on debt. People save money to buy the things they want – that's money to give companies willing to sell in Africa and see it in a different light."

Currently, Nigeria, Kenya and South Africa dominate e-commerce sales, but the opportunity is continent-wide, driven by the large structural gap between supply and demand.

"E-commerce is here, and those who move first to embrace it will benefit by being here from the start," Heymans says.

Hype versus reality

There are also, however, hurdles to the development of e-commerce in Africa, including logistical inefficiencies such as border and restrictive customs procedures, high import and export taxes, and the lack of air connections between the continent's cities.

"There are pockets of brilliance, but there are obstacles overall. Unless these sorts of factors change, cross-border trade will stay limited," Heymans says. "Problems cause delays in deliveries. The absolute lack of de minimis tax rules means import taxes for an item can exceed the value of a product. These taxes are meant to protect local industries, but in addition to potentially making an imported item prohibitively expensive, it also means that local industries don't have to evolve to compete."

But e-commerce is helping to change previously cautious and protective government mindsets.

"Traveling around Africa I've noticed a change in how governments view e-commerce's importance and how

they are becoming more comfortable about developing the necessary infrastructure for it," Heymans says. "Before they viewed it cautiously. It used to be really difficult to arrange a meeting with the head of customs – now they are keen to tap into external experience and thinking."

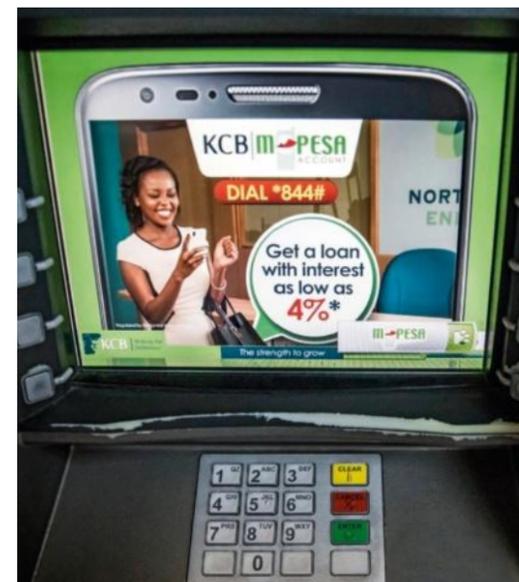
The overall lack of internet and banking penetration – about 35 percent of Africans have access to both the internet and a bank account – also hinder e-commerce. But the percentages are changing in the right direction all the time. In Nigeria, for example, the government is investing billions of dollars in its power generation and transportation systems, pursuing public-private partnerships to improve its technology infrastructure, and aims to introduce an effective address system in Lagos.

The future of e-commerce in Africa could prove even rosier if African leaders succeed in implementing the African Continental Free Trade Agreement (AfCFTA), which would galvanize trade between neighbors. Cross-border trade in Africa only accounts for 17 percent of commercial transactions, compared to 70 percent in Europe, 54 percent in America and 52 percent in South America.

"I think e-commerce will be one of those unifying things for Africa, like hosting the football World Cup was for bringing people from different African countries together in rooting for other Africans," Heymans says. "Once that comes into play, intra-African trade will definitely increase." ■ James Jeffrey

BANKING ON CHANGE:

Only around a third of Africans have a bank account – but that figure is beginning to change.



Photos: AFP/Getty Images; Parfait Tchakou/PICHA (Africa); Bloomberg/Getty Images; MallforAfrica



BRAND AWARE:
Western retailers can find a receptive audience in Africa.

3 QUESTIONS FOR



Chris Folayan,
CEO,
MallforAfrica

1. Does the West still have misconceptions about Africa and its people?

Too often people think it's the Africa of huts. They don't know there are skyscrapers, they think electricity is only for the wealthy. The stereotypes need to be broken: There so much wealth, Africans want to buy, but they can't access the retailers. People also don't realize how brand conscious Africans are, it seems to surprise them. I grew up reading GQ magazine. I went to boarding school and on the inside of my locker I had pictures of watches and shoes cut out of the magazine. The kid next to me had pictures of jeans and clothes. In Africa there are a lot of cultural influences from social media, pop stars and elites. People are heavily influenced by Western branding and marketing – when a James Bond film came out with him wearing Tom Ford sunglasses, everyone wanted them. Status symbols go a long way in Africa: People are very status conscious and are willing to pay for it.

2. You also launched MarketPlace Africa, selling African goods overseas. How is that doing?

Africa hasn't had a platform that those outside can trust and go to. So we presented the idea to DHL as a way to help African artisans expose themselves to the rest of the world and improve lives in the process. There's no better way if you want to improve things for generations to come. Imagine waking up in a tiny flat in a not-good part of an African city, where you are not making much more than \$100 a month, but you can also sell your product in New York. Having access to that market could be a huge help to a family where \$5 is worth a lot more than it is elsewhere. Until now people have never had this opportunity, but this platform can help African artisans sell their African-made products to the rest of the world. MarketPlaceAfrica.com enables artisans to sell the likes of fashion items and crafts to buyers in any of DHL's 220 delivery locations. We've got it running in seven African countries and hope to eventually cover the whole of Africa.

3. Who in the global market is interested in African products?

People who want to connect with the continent and appreciate its differences [compared to the rest of the world]. There are many African diasporas that want to come back home or want to have that linkage – they don't want to lose their heritage. Then there are non-Africans who traveled in Africa, and afterwards have an opportunity to buy and help businesses – there's an element of ethical buying to support the places they liked. And then there are people who have seen artistic things like Ethiopian paintings and realize how amazing and talented the artists are, and so really want one on their wall. But it can be many other sorts of people too as knowledge about Africa spreads and we get people to know these websites exist.

 www.mallforafrica.com

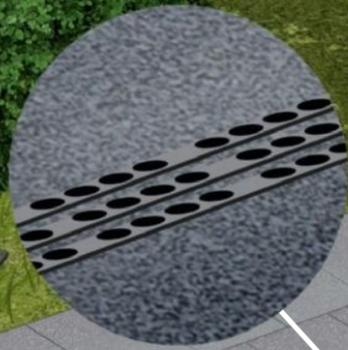
35

The percentage of Africans with internet access

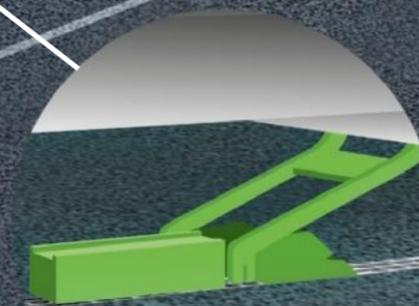
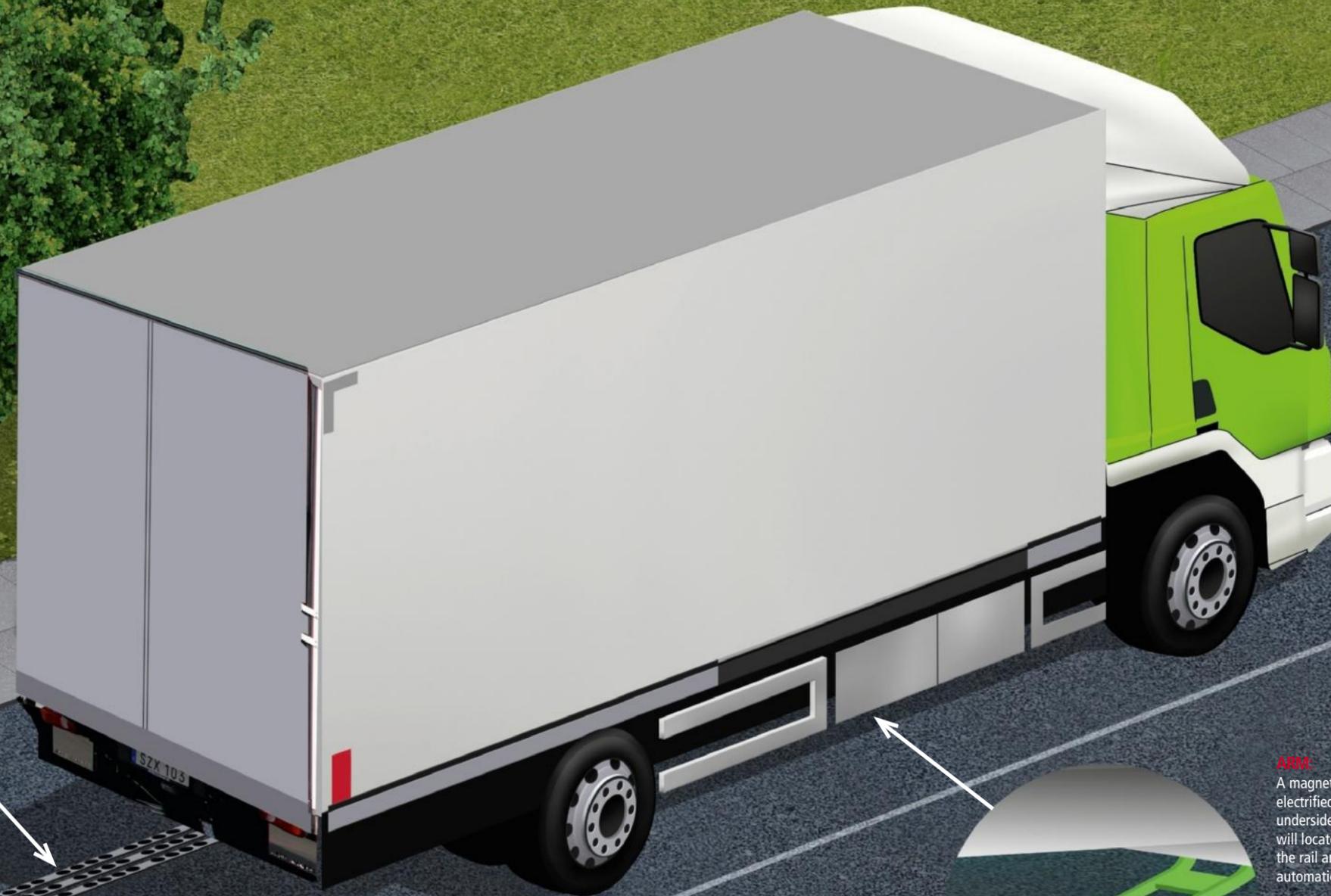
17

PERCENT

The proportion of commercial transactions in Africa that represent cross-border trade



RAIL:
Rails connected to an energy grid are nested inside the road.



ARM:
A magnetic arm designed for the electrified road is fixed to a vehicle's underside. If at all near the rail, the arm will locate and automatically lower to the rail and take in power. It disconnects automatically when exiting the lane.

ELECTRIC AVENUE

The world's first electrified road, a system capable of powering in-motion cars and trucks by means of conductive energy, is open in Sweden. The technology was developed by eRoadArlanda and is being tested in a two-year government trial to study carbon-neutral roadways. Connecting Stockholm Arlanda Airport to a logistics site, the road presently features 1.2 miles (2 kilometers) of embedded

electric rail, with plans already drawn up for potential national expansion in the future. Sweden's target of achieving independence from fossil fuel by 2030 requires a 70 percent reduction in the transport sector.

 www.eroadarlanda.com

Illustration: Nils Kasseke for Delivered.

BRIDGING THE DIGITAL DIVIDE

With the rapid pace of digitalization across industries, the need to maintain digital literacy skills is more vital than ever.

In the last century, technological advances primarily impacted low-skilled workers. When mechanized looms were introduced, artisan weavers found themselves without work, for example. Today, the entire global workforce is faced with the changes brought on by rapid increases in computer processing, powerful analytics and widespread connectivity, among other digital developments.

Things are moving so fast that about 65 percent of the children who began school in 2016 will end up doing jobs that didn't yet exist then, according to a report from the World Economic Forum released the same year.

What does this mean for people already in the workplace – including those who sometimes feel overwhelmed by the array of new digital tools and processes that confront them on a daily basis? And for those senior executives who are responsible for a company's direction and strategy, even though they are not digital specialists themselves?

Many experts say the most effective way to cope in a quickly changing environment is to embrace a so-called "growth mindset." That means being resilient and adaptable, as well as cultivating a love of learning that enables you to wrap your mind around new technologies and their implications for you and your organization. This is as true for lower- and mid-level managers as it is for senior managers and board members.

"It's like learning a new language," says David Timis, an expert on and advocate for digital literacy. "If I want to learn Chinese, I may be a bit confused about the whole approach for doing so. For those confronted with the digital transformation of their organization, it's just a new language you have to learn."

A learning attitude

Timis, an independent consultant with major companies, including Google, has trained tens of thousands of people in Romania and elsewhere to enhance their digital skills. He says that firms have recognized the skills gap and are accepting that not everyone in the workforce will be proficient in all skills, such as a programming language or a tool used in marketing or sales. "Companies are willing to help employees learn new skills, as long as they have a learning attitude," he says.

He defines digital literacy as an ability to function in the digital world and make the most of it by understanding its components. Other experts have categorized digital literacy into three parts: the ability to find and consume digital content, create digital content, and communicate and share digital content. Important skills include distinguishing false information from reliable information, and in some cases the ability to read and write basic coding languages.

According to a survey by the networking and jobs platform LinkedIn, the list of hard skills companies needed most in 2018 was topped by digital skills: cloud and distributed computing, statistical analysis and data mining, and mastering middleware and integration software. Yet members of senior management are now also expected to be digitally savvy. According to consulting company McKinsey, board members need enough knowledge of technology and the market to understand how digitalization can undermine a company's existing strategies and stimulate the need for new ones.

All this is not to say that soft skills don't matter anymore. LinkedIn's survey also showed that companies valued leadership, communication and collaboration.

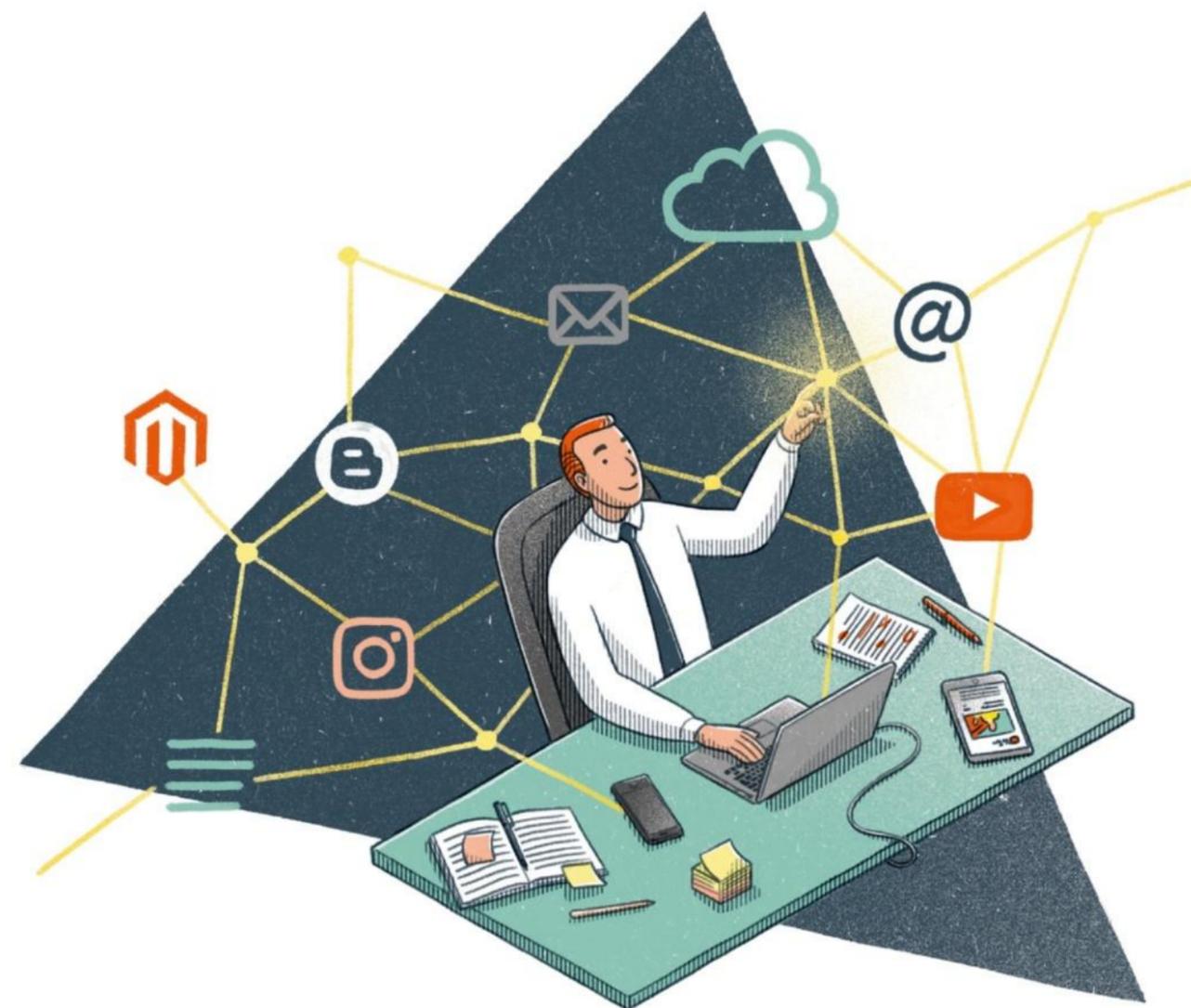
Invest the time

Kent Lewis, a digital marketing expert based in Oregon, says soft skills are sometimes harder to come by than hard ones. Lewis, an adjunct professor at Portland State University, teaches digital skills to business owners, those starting a business and people changing careers.

"Millennials coming out of school don't have any context," he says. "For example, you can read every book there is about Europe, but if you don't go to Europe, you lack essential experience and context. I think it's far easier to teach new 'digital' tricks to someone who has been in the workforce and had real work experience than it is to teach a young person business, marketing and a work ethic."

He adds: "I feel there are plenty of roles where people just need to know the digital basics. They can work with junior employees with sharper digital skills and help by bringing in industry experience and keeping their eye on things."

Besides taking classes, Lewis recommends setting aside a certain amount of time each and every day to



keep up with developments in your sector and market niches. Even though Lewis owns a digital agency and has broad experience of digital tools and strategy, he says he can still fall behind, given the quick pace of developments.

Learn from digital natives

Steve Plume is a 56-year-old Silicon Valley veteran and an executive fellow at the Center for Digital Strategies at the Tuck School of Business at Dartmouth. He says that staying digitally savvy is often a choice between being an expert or "bringing the grey-haired wisdom to the deal."

Meanwhile, older employees who are struggling may be better off reinventing themselves than trying to "keep up with the kids," he says, adding, "My conclusion is that you can't catch up with the kids. It's just not possible. So you have to pick something. What am I going to do?"

That's not to say that cooperating with youngsters cannot be fruitful. Through his work at Dartmouth, Plume has come across many companies that have implemented reverse mentoring programs in which a millennial is matched with a high-level manager or

CEO. The pair then swaps ideas and experiences, and sometimes CEOs are given lessons on things like how to use Twitter. "There's a whole lot of deliberate pairing of digital natives with digital tourists," he says. "Digital tourists are the ones who didn't grow up with digital but have come to visit."

Just do it

Gaining and maintaining digital skills is also a matter of just doing it, according to Plume. "A lot of people are acting out of fear. Nobody wants to have to go back to university." He recommends watching short videos to get the basics. "YouTube is probably the greatest learning platform ever invented," he says.

Plume cautions against falling into a trap of negative thinking. "Just because you don't know how to Snapchat, it doesn't mean that you're obsolete, worthless and have nothing to offer."

He continues: "Do not give up. Do not get discouraged. It's just new technology. Every generation has faced this. It's just moving faster." The best thing to do, he advises, is to just dig in. "All those decades of life experience just add value." ■ Rhea Wessel

65
PERCENT

The percentage of children starting school in 2016 whose future jobs did not exist at that time



DELIVERED. GETS IN THE GAME WITH...

RALF REICHERT

The founder and co-CEO of ESL on why esports is a growing global phenomenon – and how it might eclipse regular sports in future.

In 1980, aged six, Ralf Reichert was given his first video games console. It was the defining moment in his life. “I’m lucky,” he says. “I grew up playing video games so it’s a very normal entertainment medium for me. Generally, how deep you are into gaming depends on how early you had access to the technology.”

And Reichert is, it’s fair to say, very deep into it. As founder and co-CEO of ESL, he oversees the world’s largest and longest-running esports company, which operates high-profile live video games leagues and tournaments both online and in stadiums around the world.

Some commentators were skeptical about esports in the beginning and wondered aloud why anyone would want to watch other people play video games. Yet Forbes reported that 57 million people tuned in to watch a recent professional esports match – three times more than the 2018 NBA finals – while more than 205 million people watched ESL events live and online in 2017.

German-born economics graduate Reichert has always enjoyed technical innovation and, crucially, had the foresight to see that video games offered real business potential. “I would call myself an early adopter,” he admits. “I’m curious about things generally, and about technology and how it can help improve our lives specifically.” He founded ESL in the year 2000, a few years after co-founding and running professional esports organization SK Gaming in Cologne. “From the beginning, we had a social mission to turn world-class gamers/athletes into stars and give them a stage on which they could shine,” he recalls. “We also knew that if we had enough people who wanted to watch, we could make a business out of it.”

ESL started slowly in small venues with just a small number of fans; but, over time, its live stages became bigger and glitzier while audiences have now grown so large that tournaments are played in stadiums. There is plainly an enormous market for it, with the global esports economy estimated to reach \$905 million this year. “Now we can say: ‘We proved everyone wrong,’” says Reichert. “But it took a while.”

Why are so many people attracted to esports?

Compared to traditional media like TV, radio or books, gaming has a few distinct advantages. First, it’s interactive, so you decide what’s going on in the game you’re playing. Secondly, it can be an extremely social experience: Games can be played together and against other people. And third, it’s very accessible. Compare esports to traditional sports. To play in a regular football match you need around 20 or so people inhabiting the same physical space. That’s actually quite a logistical challenge whereas video games players can be anywhere in the world and just need an internet connection. Also, gaming is entertaining! And we all like to be entertained.

Photo: ESL

What has been your biggest success?

The best thing we ever did was to internationalize our company and go global. At the same time, of course, that made it so much harder to run! But I would say our biggest success is creating these big, social stadium events, which bring people together to celebrate their passion for video games. From a cultural perspective, that’s the most important thing we’ve done.

Do ESL’s live events create big logistical challenges?

Oh, huge. We take massive stages around the world, so it’s comparable to the largest sporting events on the planet. We have so many camera angles with an entire video editing team managing the in-game footage – which traditional sports don’t have. In broadcast terms, what we do is much more complex than, say, a Champions League football game.

Is there a risk that esports is growing too quickly?

Everything that grows quickly has a risk of creating expectations that are too high. That’s definitely true. So as an industry, we need to be careful not to overpromise and underdeliver. However, there are so many people playing esports and watching the competitions that literally nothing – apart from a power outage across the entire planet – can stop it.

Will it become an Olympic sport?

Absolutely. There’s no doubt about it. It’s not a question of if, but when.

Do you think there will be a place for regular sports in the future?

On the one hand, participating in regular sport is unbelievably important for our health, so I have no doubt it’s something that will always be around. On the other hand, a lot of traditional sports are not great to watch and only became popular because they were marketed well and because there wasn’t much other content to consume at the time. I think those ones will struggle. Major sports such as football will remain highly relevant for a long time; but I believe esports will start to rival them and become a driving force in overall sports entertainment. And in 40 or 50 years, watching esports will probably overtake watching traditional sports.

Are you also a fan of analog technology or do you think it’s outdated?

I don’t think analog or digital is either “right” or “wrong.” I take a very pragmatic approach and ask: What can deliver the best outcome for me in the most convenient way? For example, film photography is a fantastic hobby for some people. Now, I’m not the right guy for it because I love being able to edit images on a PC and then send them directly to my social media accounts. When new media is more convenient and more advantageous than “old” media, I’m not a traditionalist. Then again, sitting down with people, talking, having fun together and going out with them to see or play sport is something I believe in absolutely. It’s a basic human requirement for living well. ■ Tony Greenway

2.6 BILLION

The estimated global video games audience

380 MILLION

The number of estimated esports viewers on the planet in 2018

 www.eslgaming.com

The Power of Purpose

How activating and cultivating the purpose of your company can strengthen your organizational culture.



AN ESSAY BY REGINE BÜTTNER

Regine Büttner is a global HR leader with more than 30 years of experience. In her current role as EVP HR, Global & Europe, she is heading up the global HR organization of DHL Express and is a member of the Global Management Board. Regine Büttner leads the people strategy for more than 100,000 employees in over 220 countries.

What is the purpose of “purpose”? The answer to this question is more vital and relevant than you may think. Put simply, your purpose is the reason you exist, both as an individual and as a business. Purpose defines you, drives you and motivates you. It makes a company strive to be better and attain success that goes beyond mere money-making. It isn’t, however, the same as a corporate “vision” or “mission” because these things might change over time – but purpose never does.

Having a company’s purpose clear is of interest to its shareholders, customers and employees. To the latter, it provides identification potential and a sense of meaning, because knowing the

“why” behind what a company does creates transparency. In its article “Purpose with the Power to Transform Your Organization,” The Boston Consulting Group (BCG) states that “Purpose is also aspirational: It depicts what the organization can be and goes beyond brand positioning to take a stand. Rather than being only market driven, a purpose-based organization is also driven by values, culture, and ethos.” Also, according to the Global Leadership Forecast 2018, which is produced by Development Dimensions International (DDI), The Conference Board and EY, being a purposeful organization carries many benefits, such as better engagement, a stronger culture, higher levels of trust and loyalty and even the ability to better retain customers, employees and shareholders during transition periods.

Illustration: Nina Tiefenbach for Delivered.

Employee engagement

At DHL Express, our purpose is clear: We want to connect people and improve their lives. This dedication to delivering excellence and making a positive impact on people’s lives comes in many different forms. It can range from the simple delivery of a new online purchase to getting life-saving medication to a patient in need. As we’ve discovered, operating a business with a strong sense of purpose drives employee motivation and increases employee engagement. Even better, when your business purpose fits perfectly with the individual purpose of your employees, it’s possible to achieve great synergy.

Of course, it’s one thing to talk about “purpose” and quite another to put it into practice. To demonstrate purpose successfully, a company must make it live through its every day actions and decisions, as well as anchoring it in the company community. One great way to do this is through corporate volunteering and charitable giving programs. Building these around your purpose and ensuring they are a good fit with your company’s ethos will increase the commitment of your employees and allow them to establish a meaningful connection to their work. In addition, according to 2017 Deloitte Volunteer Impact Research, such programs can be an effective way to build skills, boost morale and improve workplace atmosphere, increase employee retention and increase your employer attractiveness.

Shared purpose

As a company, we wanted to find a way to give back to society while motivating our people and connecting their individual purpose to our shared purpose. While Deutsche Post DHL employees already have the opportunity to participate in the group-wide Global Volunteer Day – a corporate social responsibility program, now in its 10th year – we thought about doing something in addition to this; something closer to the DNA of DHL Express. That’s why we created our global initiative “DHL’s Got Heart,” which establishes a link between the DHL Express purpose of improving lives and the various charitable projects our employees are personally committed to. After all, it’s our employees who help make a difference in this world, day by day. By creating satisfaction for our customers and enabling the success of our business, they are an essential part of our life-improving process. Therefore our role is to support and encourage them, and most of all recognize them for their commitment and contributions. With “DHL’s Got Heart,”

we do exactly that by reinforcing their efforts with the means and resources we are able to provide as a company.

Charitable activities

Consequently, in October 2017, we asked our employees around the world to share personal stories of their charitable activities. The response was tremendous. We received more than 400 heartwarming submissions from employees in over 90 countries, and all displayed tremendous passion and strong commitment. Selecting our finalists was an amazing experience and, at the same time, an extremely tough exercise. Still, we managed to whittle them down to include Nicole Weng and Truc Thanh Tran Ngoc, who support disadvantaged kids in rural China and Vietnam; Dominika Fajkosova, who tirelessly raises funds for a children’s hospice in Slovakia; Diego Guisao Rodriguez in Costa Rica, who spends every weekend teaching and guiding vulnerable youngsters; Quinto Ogwal, one of our customs officials in Uganda, who set up an entire charity on his own (see page 38); and Farah Ramadan, who arranges seasonal camps for children with special needs in Lebanon.

Ultimately, these employees from our six regions had the opportunity to present their charitable projects in front of the company’s senior managers. Those who had made the shortlist also discovered they had each been chosen to receive a sizable amount of funding for their charity work – a memorable experience for everyone. The depth of commitment and engagement from each of our finalists had impressed everyone involved; so with full support from senior management we decided “DHL’s Got Heart” should become a regular event and put out another call to employees asking them to tell us about their charitable experiences. Inspirational tales such as those above indicate that “DHL’s Got Heart” has the potential to become an indispensable part of our corporate culture. More than that, it demonstrates what can happen when a company’s purpose and an individual’s purpose align with passion and motivation: Anything becomes possible. ■

For heartwarming stories from this year’s “DHL’s Got Heart” global winners, please follow the link:

 bit.ly/dhl-do-it-from-the-heart

WHAT'S THE STORY, MR. OGWAL? FOUNDATION FOR SUCCESS

For the past six years, Quinto Ogwal has run a foundation for vulnerable and traumatized children who have been affected by the conflict in Northern Uganda.

Growing up in Uganda I saw poverty all around me and knew that I wanted to do something to make a difference to the people in my community. So in 2012, my wife Phiona and I created the Hope Christian Foundation in the town of Dokolo, an organization dedicated to housing and educating individuals – mostly children – who have been traumatized or displaced by conflict in the north of the country. Over the last six years we've been able to reach out to more than 350 orphans and vulnerable children and give them a primary school education.

Seeing the way the kids' lives change in just a few days is humbling. Even simple things can make a big difference to them. They can be

so excited to receive their school uniforms, for instance, because it's the only piece of clothing they have that isn't torn. That always gives me chills. And seeing the happiness in their eyes because they are able to get three meals a day warms my heart.

I have a job, too – I work for DHL Express as a customs official. That keeps me busy five days a week and on weekends I work at the foundation. The foundation's major source of funding has been both my and Phiona's salaries, which isn't nearly enough to run things properly, so we rely on a team of volunteers.

Earlier this year, however, I was named regional winner of "DHL's Got Heart," an initiative that celebrates the work that DHL Express employees do for charitable causes. The prize money I won allowed

our foundation to build a new classroom block and a kitchen and have three classrooms completely plastered. It also meant we could buy more land to build on and use for sustainable farming, and it helped us acquire school materials and desks and hire qualified teachers, among other things. The kids are so excited and can't wait to get into the classroom to start studying. Winning the award has also given me new confidence.

I'll always remember the day we started construction on the classroom. Over 50 children who had already gone through the foundation returned for a ceremony, and seeing them again and their attitude toward life was incredible. They had big plans for their futures and all were doing well. That was one of the proudest moments of my life. ■

As told to Tony Greenway



FACT: Many of the children helped by the Hope Christian Foundation have been displaced by the Lord's Resistance Army insurgency, one of the longest running conflicts in Africa, which has caused a massive humanitarian crisis.

350+

The number of orphans and vulnerable children the Hope Christian Foundation has helped since 2012

400

The number of personal stories DHL received from employees in response to its first "DHL's Got Heart" award

1 MILLION

The number of trees Deutsche Post DHL and its partners plan to plant every year until 2025 as part of the GoGreen environmental protection program. This commitment to forest conservation is just one part of the company's plan to limit and avoid emissions of greenhouse gases and local air pollutants. By

the year 2050, DPDHL wants to reduce all logistics-related emissions to zero.

For more facts and figures, go to:

 www.dpdhl.com/cr-report



Photos: Maverick Advertising & Design Ltd (2); Tetra Images/Getty Images

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