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THE GLOBAL LOGISTICS MAGAZINE

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BUSINESS
STRATEGY 2025
Interview with DPDHL Group CEO Frank Appel

SOLUTIONS
LOOKING TO THE FUTURE
Discover DHL's new Americas Innovation Center

VIEWPOINTS
ROBOTIC REVOLUTION
Meet AI and robot expert Peter Haas

COSTING THE EARTH

Can we meet rising energy demand and battle climate change?

Dear Reader,

How can we square the climate change circle? The world urgently needs to decrease its carbon emissions – although efforts to do so are taking place amid continually rising energy demand. Yet as this issue's **Energy Focus** makes clear, behind the alarming global warming headlines there's evidence that the transition to a lower-carbon energy system really is underway, with wind, solar and biomass now an important part of the world's energy mix.

Commitment to sustainability can come from unexpected places. For instance, our **Country Focus** profiles the United Arab Emirates and highlights how Abu Dhabi is turning its attention to renewable energy – and solar power in particular. But then Abu Dhabi and its neighbor, Dubai, are constantly investing and innovating to stay ahead of the curve.

Speaking of innovation, don't miss the spotlight on our new **Americas Innovation Center**, which opened just last month close to Chicago O'Hare. Perhaps you'll be inspired to visit for a tour or a workshop.

Deutsche Post DHL Group has also just launched its **"Strategy 2025 – Delivering excellence in a digital world"**, aiming to lay the groundwork to continue its successful growth trajectory beyond 2020. In an interview, our Group CEO Frank Appel discusses the new strategy and the megatrends that are impacting both the business and the business of our customers.

Enjoy your read!

Sincerely,

Katja Busch
Chief Commercial Officer, DHL

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Photos: DHL; Ruben Earth/Getty Images; Aly Song/Reuters; Cat Laine

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NEWS

CHANGING FASHION

It's no secret that fashion moves fast: it's a business model that thrives on change. So much so that, by 2050, the industry will be churning out 160 million metric tons of garments every year. Add to that the alarming statistic that an estimated 140 million metric tons worth of used clothes go to landfill each year and, clearly, something has to change. The British Fashion Council, DHL, the Centre for Sustainable Fashion and low-carbon campaigners Julie's Bicycle have produced a paper on how fashion can lessen its environmental impact. From sustainable design and greener manufacturing to innovations in packaging and delivery, it sets out a new path for the industry.

Download or read the paper at:

https://inmotion.dhl/WhitePaper

SHAPING A BETTER FUTURE

"An excellent education should not be a privilege." So says Thomas Ogilvie, board member for Human Resources at DHL Deutsche Post Group and member of the board of directors at Teach For All, a global network of over 50 locally-led partner organizations with the shared mission to "develop collective leadership to ensure all children and young people have the opportunity to fulfill their potential." DHL has signed a new partnership with Enseña por Colombia, one of seven this year, bringing the number of countries in which it supports Teach For All partner organizations to 19. The other new partnerships are in Armenia, Mexico, Paraguay, Uruguay, Uganda and Cambodia. The partnerships focus on improving the students' employability skills and engaging them with the world of work in a meaningful way.

bit.ly/dhl-TeachForAll

Photos: DHL (4); Adobe Stock (3); Winnow Solutions; Terence Rushin

THAT'S A FACT

Did you know that Deutsche Post DHL Group delivers nearly 2 billion climate-neutral shipments a year? Or that 77% of its energy needs are met by renewables? These are just two of the facts in the updated Fact Book. Through its "Strategy 2020: Focus.Connect.Grow," the group aims to become the benchmark for responsible business… The Fact Book provides a compact presentation of the Group, its business units and its activities in the area of corporate responsibility, including employee engagement, corporate citizenship, and climate and environmental protection. To download the Fact Book, "Facts & Figures 2019 – Information about Deutsche Post DHL Group," go to:

dpdhl.com/cr-report

34,000 KILOMETERS

The length of roads in India that have been built using plastic reclaimed from the oceans. Under a new government-backed scheme, trawler operators have collected 25 metric tonnes of plastic caught in their nets, which has then been cleaned and shredded and used to surface roads in rural areas in the southern Indian region of Kerala

RESOURCEFUL ROBOT

Remember MacGyver? He was the ingenious hero of a 1980s U.S. TV series who always managed to get out of sticky situations by constructing useful devices out of whatever bits and pieces he could find around him. Now researchers at Georgia Tech college in Atlanta have developed a robot that can do its own "MacGyvering." Using machine learning, the robot can match form to function for objects around it and use them to construct simple tools, such as hammers, spatulas, scoops, squeegees and screwdrivers. For the latter, it recognized that pliers can be used to grip and a coin used to slot into the head of a screw, so combined the two to make a tool. The team says it's a step toward enabling robots to devise more advanced tools that could prove useful in hazardous and potentially life-threatening environments. So far, the robot can't distinguish between the properties of materials – for instance, their hardness or durability – but the Georgia Tech team is working to enable it to do so.

BIN SINS

Food waste is a big problem: U.K. hotels, restaurants and other businesses chuck an estimated 1.9 million metric tonnes of food away every year. But new technology could help cut that drastically. A smart bin being trialed by Ikea photographs and weighs everything that's thrown away, learning what types of food are being binned and how often.
The data it feeds back to the kitchen can be used by chefs to plan more accurately. The bin's makers, Winnow, reckon it can cut food waste by up to half – Ikea recorded a 32% reduction in its first year of use in its in-store restaurants.

HIVES ARE THE BEE'S KNEES

DHL's Beringe campus has taken on 80,000 new workers, but they're not there to handle packages and parcels. Instead they'll make honey – the new workforce consists of bees. Following a successful trial at DHL's Bornem campus in Belgium, three bee colonies were introduced at Beringe in the Dutch province of Limburg. Beekeeper Sterke Bij has already harvested the first 15 kilograms of honey, which will be shared with customers and visitors.

EYE ON THE STORMS

It's hurricane season again, and businesses in the path of tropical storms will be gearing up for potential disruption to their supply chains. To help its customers prepare for the problems wild weather can bring, DHL's risk management provider Resilience360 has released a new report looking at the 2019 storm season, with recommendations on how to mitigate their impact. Resilience360 has also launched an improved weather tracking algorithm, which analyses the projected path of a hurricane or cyclone and notifies users of possible impacts on their supply chains. Scientists can now predict a hurricane's path three to five days in advance, and DHL's risk experts have collected forecasts from leading weather agencies to predict the number of tropical storms likely to occur in the Americas, the North Indian Ocean and East Asia.

bit.ly/dhl-resilience360

DON'T PASS THE PARCEL, GUYS!

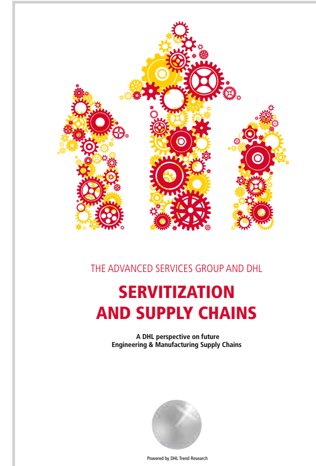
A group of Tura Sports colleagues living in Guangzhou, China, fancied having a "try" at being DHL couriers at this year's Hong Kong Rugby Sevens. Having attended the event for the past four years, the crew were casting about for inspiration for their next group costume idea when, by chance, a DHL delivery arrived at their office. Impressed by the full works of the courier's uniform – from the headpiece down to the DHL-branded socks – the team got to work piecing together their take. The crew was 28 people strong and got their fair share of attention, both in the stands and on social media.

SMART FIRST FOR CARTONS GIANT

Leading food processing and packaging solutions company Tetra Pak has scored a first with its smart warehouse in Singapore, which is pioneering the use of so-called "digital twin technology" in the Asia Pacific region. The technology uses digital models to better understand and manage physical assets. It combines internet of things technology with data analytics to create a virtual representation that monitors and simulates the physical state of a warehouse and its assets in real time. Warehouse supervisors can use the data to help cut congestion, improve planning and allocate workloads. Proximity sensors on equipment can help reduce potential collisions. And a DHL control tower monitors the flow of inbound and outbound goods, ensuring the former are correctly shelved within 30 minutes of receipt and the latter are ready for shipment within 95 minutes.

bit.ly/dhl-tetra-pak

Photos: DHL (3); Tura Sports; ZeroAvia; Michael Tewelde/AFP/Getty Images; Nova Innovation



THE ADVANCED SERVICES GROUP AND DHL

SERVITIZATION AND SUPPLY CHAINS

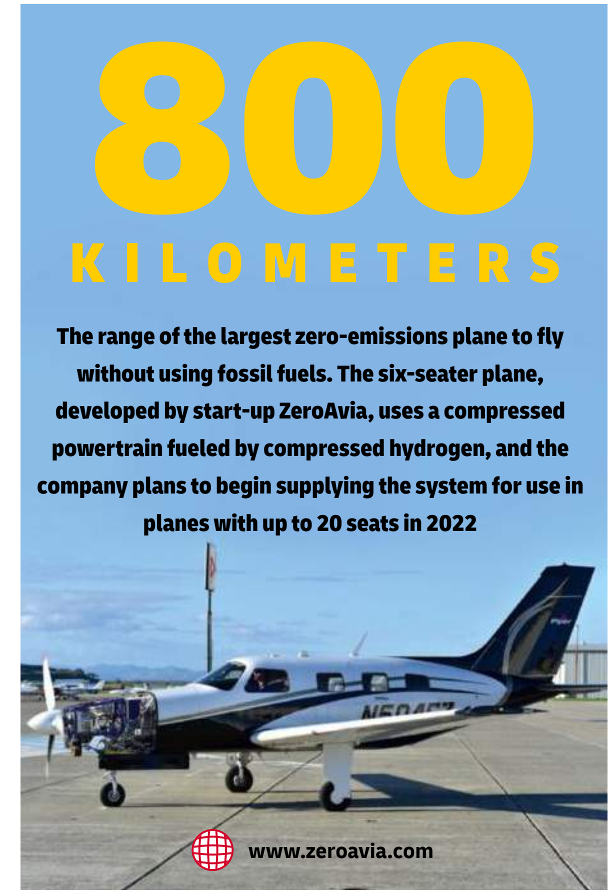
A DHL perspective on future Engineering & Manufacturing Supply Chains

NAVIGATING A NEW LANDSCAPE

The face of manufacturing is changing, with shifting markets bringing competition from low-cost economies, new technology introducing disruptive players and technological innovations producing more sophisticated products. A 2015 report by the World Economic Forum found that 73% of senior executives were convinced that industrial internet of things (IIoT) technology would prove disruptive to their businesses and industries by 2020. But how can they change to cope with this new landscape? One way of leveraging trends and technologies is offering advanced services – a process also referred to as "servitization." That's the subject of a new white paper produced by DHL in collaboration with the Advanced Services Group, part of the Aston Business School. Servitization combines aspects including new business models, a circular economy and IIoT innovations to enable a business to offer advanced services. The white paper also offers five key pointers to help businesses get started with servitization. These include getting to know your customers better, understanding the services business landscape and benchmarking what others are doing.

Download the white paper at:

bit.ly/supplychains-servitization



TIDE OF CHANGE

New technology could cut the cost of wave power by 30%, according to tidal power company Nova Innovation. The Scottish-based developer is working on a Tidal Turbine Power Take-Off Accelerator (TiPA PTO), a direct drive subsystem that turns wave energy into electricity more effectively than conventional systems that use a gearbox and generator. A European tidal energy consortium, led by Nova, secured €4.4 million (£3.97 million) funding from the European Commission for a three-year project to develop the new technology, and the two subsea test phases at Babcock's Rosyth Site in Scotland are now complete. The TiPA PTO is now undergoing inspection at Nova's Edinburgh facility so engineers can tweak the design based on their findings. Nova's bosses point out that the UK has one of the largest tidal resources in the world, with more than 50% of Europe's total, and the key to capturing this market is in reducing costs quickly.

www.novainnovation.com

FOREST FIGHTBACK

Landlocked Ethiopia is being hit hard by climate change. As much as 80% of the population depends on agriculture as a livelihood, but deforestation has brought land degradation, soil erosion and drought. In an effort to combat these devastating effects, the country's prime minister Abiy Ahmed spearheaded a mass tree-planting challenge as part of a wider reforestation campaign. Millions of Ethiopians were invited to take part on July 29, and a total of 353,633,660 tree seedlings were planted in the space of just 12 hours – a world record, officials believe.

BALANCING ACT

Can the world balance an ever-increasing demand for energy with efforts to combat climate change?

ENERGY LANDSCAPE: Wind power is now a significant part of the world's energy mix.

Last year, global energy consumption grew by 2.9%, its fastest annual increase since 2010 and more than double the average for the last decade. More worryingly, carbon dioxide emissions also rose at the most rapid rate seen in the last seven years. The burning of fossil fuels released 33,890 million metric tons of carbon into the atmosphere in 2018. That 2% increase on the previous year was twice the long-term growth rate.

2.9 PERCENT

The growth of global energy consumption in 2018

The sharp rise in demand surprised many forecasters, but is it a statistical blip or an indication that the world is failing in its efforts to combat climate change? According to the authors of the BP Statistical Review of World Energy, there are real reasons for concern. Last year's increases took place against a background of only moderate economic growth – and there's usually a strong correlation between GDP and energy use. And they happened despite a significant rise in fuel prices. Conventional wisdom suggests that higher energy bills should make consumers and businesses thriftier.

When BP's statisticians drilled deeper into the data, however, they found one factor that could explain a lot of the extra energy use last year. In 2018 there was an unusually high number of hot and cold days, especially in the two most energy-hungry parts of the world: the U.S. and China. Extremes of temperature in either direction drive up energy use: Cold weather creates extra heating demand, and fridges, freezers and air conditioners all work harder when the temperature rises.

Weather and climate are different things, and last year's conditions could simply be down to chance. But increasingly volatile weather is one of the predicted effects of global warming. If there is a link between 2018's weather and the rising levels of carbon in the atmosphere, BP says, "this would raise the possibility of a worrying vicious cycle: increasing levels of carbon leading to more extreme weather patterns, which in turn trigger stronger growth in energy (and carbon emissions) as households and businesses seek to offset their effects."

GREEN LANDMARK: The Eiffel Tower was illuminated green to celebrate the 2015 Paris Climate Change Agreement.

Paris can wait

Shouldn't greenhouse gas emissions be going down now? Many people think so. Inspired by 16-year-old Swedish activist Greta Thunberg, thousands of school students have abandoned their desks over recent months to call for swifter action on climate change by governments. Adult protesters have staged climate protests and sit-ins in major cities.

In truth, countries aren't breaking their emissions reduction promises – yet. The 2015 Paris Agreement on climate change, adopted by almost 200 countries, commits signatories to pursue efforts to limit the impact of global warming to 1.5 C. The agreement accepts that this goal will require an end to the growth of greenhouse gas emissions, and for countries to become carbon neutral by the second half of this century.

Decisions about the pace of decarbonization were left up to individual signatories, however, with the agreement recognizing that countries differ in their level of economic development and their energy needs. The nationally determined contributions (NDCs) submitted by most countries on joining the Paris Agreement include commitments to reduce carbon emissions relative to 2005 levels, with a deadline of 2025 or 2030.

Importantly, while some countries have signed up to absolute reductions, others have committed to carbon intensity improvements, measured in terms of greenhouse gas emissions per unit of GDP. Those terms mean countries still have between six and 11 years to get their reduction programs underway; and for some fast-developing economies, success in 2030 will still mean an absolute increase in carbon emissions.

Joules in demand

It is an inconvenient truth that the world's efforts to tackle climate change are taking place amid a continual increase in energy demand. That isn't always obvious to consumers in developed economies. Europe experienced no growth in energy consumption during 2018, and its carbon emissions actually fell thanks to a change in fuel mix and the continued rise of renewable power sources.

Worldwide, however, energy demand is expected to rise substantially, increasing by a third on today's levels by 2040. Some of that change will be driven by an increasing human population, which is likely to pass the 9 billion mark sometime in the 2030s. The bulk of it, however, will be down to rising standards of living. The global economy is expected to double in size over the next 20 years, and the overwhelming majority of that growth will take place in countries and regions that are currently poor.

According to the U.N., people in Europe each consume an average of 120 gigajoules of primary energy each year. Currently, 80% of the world's population get by with much less than 100 gigajoules per capita, the level at which the benefits of more energy to quality of life are considered to tail off. Bringing the number of people in energy poverty down significantly will require huge increases in output. BP estimates that production will have to rise by almost 70% just to cut that number by half.

Photos: Ruben Earth/Getty Images(previous page); Geoffroy Van Der Hasselt/Getty Images; Dong Wenjie/Getty Images; Xu congjun/Imaginechina/ddp

LIGHTING UP TIME: There have been an usually high number of hot and cold days in energy-hungry China.

EXPANDING HORIZONS: Liquified natural gas allows fuel to go beyond the reach of conventional pipelines.

The transition ramps up

Behind the discouraging headline figures, there is evidence that the transition to a lower-carbon energy system really is underway. One of the most significant shifts in recent years has been from oil to natural gas. Burning gas still produces carbon, albeit 20% to 30% less than oil, and half as much as coal. Gas is something that big energy companies understand very well – they've been dealing with it for years in their existing production operations. And technological advances have made gas more available and more accessible in recent years. In North America, hydraulic fracturing has produced large quantities of cheap gas, for example, while the development of liquefied natural gas (LNG) technologies allows the fuel to be transported from areas beyond the reach of conventional pipelines.

Gas integrates easily into modern energy networks too. Gas power stations are cheap to build and easy to control, for example. That's especially useful in a world where operators are looking for power sources to fill the gaps left by intermittent renewable sources like wind and solar power.

Gas now accounts for almost a quarter of global primary energy production, up from 15% in the 1980s. Last year, gas production increased by 5.3%, one of the fastest rates of growth since 1984. That trajectory looks set to continue. A number of major energy companies are adjusting their portfolios and investment plans to focus more on gas than oil. Oil's share of global primary energy production has dropped from half in 1990 to around a third today.

The really big transition story, however, is the rise of renewables. In just over a decade, wind, solar and biomass have grown from nothing to be a significant part of the world's energy mix. In 2018, renewable sources, including hydroelectric power, provided 40% of Germany's electricity, passing coal for the first time. Even in the U.S., which has adopted a pro-coal energy policy in recent years, the fuel's contribution to electricity production has fallen from 40% to a quarter in the last five years, while renewables' share of total electricity production reached 17% last year.

RENEWABLES RISE: In the U.S. renewables increased their contribution to electricity production.

17 PERCENT

Renewables' share of total energy production in the US in 2018

From big oil to big energy

The major energy players are keen not to be caught out by the energy transition. After a few false starts in the past, most are now taking steps to position themselves for a lower-carbon future. They are investing in renewable energy technologies and buying up the developers of solar and wind power plants. And tellingly, oil companies are looking for ways of connecting with consumers as roadside filling stations become less relevant. BP, Shell and Total have all bought electric car charging networks; Shell and Total have also purchased retail electricity and gas suppliers.

These moves are significant, but relatively small. Oil companies are still spending 10 times more on fossil fuel exploration and production than on clean technologies. Pressure to do more is ramping up, however, not least from big investors. Norway's $1 trillion sovereign wealth fund, which manages the proceeds of the country's oil and gas industry, has announced plans to move away from oil and gas investments. This summer, Legal & General Investment Management, one of the largest shareholders in Exxon Mobil, announced that it would begin to sell off its holdings, saying the oil giant wasn't doing enough on climate change and sustainability issues. For its part, Exxon argues that it has invested more than $9 billion in research on biofuels, carbon capture and other clean energy technologies.

Demand side response

It won't just be the energy companies that have to do more. Impressive as the progress in clean energy production has been, the change isn't yet happening fast enough to stop and ultimately reverse the growth of carbon emissions. Turning the tide may require concerted effort – and cash – from governments and individuals alike. India, for example, estimates that it needs to spend $330 billion on renewable energy over the next decade. That's a bill the country will struggle to cover. But for other nations and corporations facing high costs to take the next step along the carbon reduction curve, investing in proven renewable technologies in India could be an appealing alternative.

An appreciable acceleration of the transition will require big changes on the demand side of the energy equation too, says Steve Harley, President, DHL Energy Sector. "Consumers and businesses will have their own vital role to play, reducing their energy use through efficiency improvements and ensuring the energy they do use comes from cleaner sources."

That will require a combination of technological and behavioral change, Harley notes. "There are plenty of solutions available today, including energy-efficient buildings and the adoption of electric or hydrogen-fueled vehicles. And companies can often make big improvements through changes to their operations." These are all areas where DHL is currently working to support its customers, helping them find lower-carbon approaches to meet their logistics needs – from zero-emission transport solutions to the sharing of assets to maximize utilization.

There's still plenty of work to do, however, and the world faces some tough technical and social challenges if it is to break its dependence on fossil fuel energy. There are few viable alternatives to coal and oil in heavy industrial processes such as steel and concrete production, for example. And in the logistics sector, zero-emission sea and air transport are still a long way over the horizon. The task ahead looks daunting, but the progress so far suggests reasons for cautious optimism. Clean energy technologies have grown further and faster than anyone expected. They may continue to surprise us in the years to come. ■ *Jonathan Ward*

> ***"Consumers and businesses will have their own vital role to play, reducing their energy use through efficiency improvements and ensuring the energy they do use comes from cleaner sources."***
>
> **Steve Harley, President, DHL Energy Sector**

TOWERING ACHIEVEMENT: More energy-efficient buildings will be needed to turn the carbon emission tide.

PLUGGED IN: The world needs an increased adoption of electric vehicles.

Photos: Rick Wilking/Reuters; DHL; A. Tamboly/dpa; Stefan Papp/ddp

3 QUESTIONS FOR

Steve Harley, President, DHL Energy Sector

1. Are your oil and gas industry customers really committed to the transition to a low carbon energy system?

Absolutely. Energy companies know the transition is underway, and it's informing every part of their decision-making. You can see that in changes to the way these companies run their own operations, in the way they're adjusting their portfolios to emphasize more efficient reserves, and in the investments they're making in clean technologies and new energy businesses.

2. Does that mean the age of Big Oil is over?

Not yet. Nobody knows exactly how the transition will play out, but the consensus view is that demand for oil and gas will keep rising for the next 10 years or more, driven largely by demand from emerging economies. Even after that, fossil fuels will be an important part of the energy mix for much of this century.

Moreover, many of the technologies, skills and capabilities developed in oil and gas will still be extremely relevant in future energy systems. The ability to manage complex offshore engineering projects has already been instrumental in the success of the wind energy sector, for example.

3. How can DHL help energy companies meet their transition goals?

I think we're already playing an important role. Many of our customers have ambitious plans to reduce the emissions associated with their direct operations, and logistics has a big part to play there. We're also collaborating with energy companies as they enter new industry sectors and develop new types of business, whether that's electric mobility or the delivery of new services and solutions directly to businesses and end consumers.

RINGING THE CHANGES:
Jason Klein,
Vice President U.S. Energy
Transition Strategy, Shell.

Photo: Nathan Lindstrom for *Delivered.*

A NEW WORLD IN TRANSITION

What does it take to guide one of the biggest energy companies in the world through the most significant period of change for generations, in the world's largest energy market?

It sounds like a daunting task, but as one of the people helping lead this shift points out, it isn't a new one. "The world has been through energy transitions before," says Jason Klein, Vice President U.S. Energy Transition Strategy at Shell. "In the 19th and 20th centuries, we saw significant growth in the use of fossil fuels, and as there was more global prosperity, there was increased use of energy around the world."

The current transition, driven by the need to substantially reduce carbon dioxide emissions over the next century, only seems exceptional because energy consumption patterns have remained remarkably stable since the 1970s, after oil consolidated its position ahead of coal as the most important primary energy source. Since then, says Klein, "The mix of fuels used globally hasn't changed much, even though we've seen a lot of further growth in the amount of energy used as global prosperity has reached more people around the world."

That means that the transition underway today is, for most people, their first experience of significant changes in the way energy is produced, purchased and consumed. And importantly, adds Klein, the energy transition won't be a simple, uniform process of change. "All of us around the world are experiencing some transition from our current energy system to one that's lower carbon. But every country's transition is different," he says. "And, somewhat uniquely, here in the U.S. each region, state and city is undergoing a different transition."

Scale and diversity

That complexity stems from a number of causes. In a country the size of the U.S., there is always going to be significant regional diversity in lifestyles and economic activity. People and companies in Texas, California or New York will each use energy in different ways. But while most countries are setting their carbon reduction targets at national or even supranational levels, the transition in the U.S. is being driven by a combination of economic opportunity, consumer choice and – currently – by policy decisions at state or city level.

In the U.S., however, even state-level decisions can have global significance. The U.S. is the largest economy globally, but California, Texas and New York are ranked 5th, 11th and 13th respectively for GDP. Their actions set examples that other economies can and will follow.

The U.S. is the world's second-largest energy consumer, after China. It is also the biggest oil market on Earth, consuming a fifth of global production, and the No. 1 consumer of natural gas. A ranking of individual U.S. states against other countries by their annual carbon emissions puts Texas between Germany and South Korea in the global top 10. California, on the same list, would sit just inside the top 20, between Australia and Italy.

The U.S. has global significance for Shell, too. While the company is headquartered in Europe, it employs around 17,000 people in the U.S., more than in any other single country – representing 20% of its total workforce.

"We have every single Shell line of business represented in the U.S. and we operate in all 50 states," says Klein. His role, he explains, is to pull together the company's outlook on how the energy transition will play out across the country; to understand what that means for all Shell's lines of business; and to determine a strategy across the portfolio that will enable the company to thrive through the changes.

From today to net-zero

It is a role that spans a broad time horizon. Shell is already planning on the basis of scenarios stretching out to 2050 and beyond, but Klein notes that an important part of his job involves the organization's response to regulatory and customer preference changes that are taking place today.

How does Shell plan to change over that time? First, says Klein, it expects to remain in the oil and gas business. "There are certain sectors that will continue to need dense liquid energy carriers for a significant time to come," he says. "Commercial aviation, long-distance shipping or cement and steel are all long-cycle businesses that are very difficult to power with electricity." Managing the emissions from those sectors in the near term will most likely require nature-based solutions (such as planting new forests) and carbon capture and storage technologies, he notes. "The goal of the Paris Climate agreement is not zero carbon, it's net-zero carbon, and we embrace that," says Klein, adding that Shell's latest work modeling global energy scenarios – the Sky scenario, a technically possible, but challenging pathway for society to achieve the goals of the Paris Agreement – suggests that net-zero emissions could be achieved without eliminating fossil fuels from the energy mix.

TAKING CHARGE: Shell has been investing in electric vehicle charging points.

Less, and more

Nevertheless, there's still plenty of change coming. In broad terms, says Klein, there are two things Shell can do to meet its energy transition goals. "We can reduce the carbon intensity of the products we sell, and we can alter the mix of the products we sell."

The company is active on both fronts. "We are continuing to grow our natural gas business, because gas is the lowest-emission fossil fuel, significantly better than coal when used for electricity generation. By the number, Shell is now more prominently a gas than an oil company. The second major action we're taking is reducing emissions from our own operation and offsetting customers' emissions when they use our products," says Klein. "In addition, we're increasing the proportion of renewable power in our portfolio and working with our customers to meet their demand for lower-carbon solutions."

Right now, says Klein, Shell is investing up to $1 billion to $2 billion a year in new energy technologies across power and fuel spectrums. Those investments have included electric vehicle charging companies, solar generation, wind generation, energy storage, hydrogen and other low-carbon technologies. The company has plans to ramp up these activities significantly in the next five years. "We are currently spending up to $1 billion to $2 billion across our New Energies portfolio of businesses. We announced earlier this year that from 2021–2025 we could see ourselves investing on average of up to $2 billion to $3 billion dollars across our newly formed Emerging Power business," says Klein.

While Shell hasn't set revenue targets for these emerging business portfolios, it has established targets for overall carbon reduction. "We have a stated ambition to reduce our global net carbon footprint by 20% by 2035, and by around 50% by 2050, in step with society," says Klein. "That's looking at both our own emissions, which are around 15% of the total, and at the emissions our customers generate using our products, which are the other 85%." Shell has also tied executive compensation to short-term carbon reduction targets. The most recent of these is an unconditional three-year target beginning in 2019 to reduce the company's net carbon footprint by 2% to 3% compared to 2016.

The opportunity of complexity

Achieving such energy transition goals across a market as large and diverse as the U.S. is challenging, says Klein, but it also presents important opportunities. "The U.S. is home to an enormous amount of innovation, entrepreneurship and investment in renewables and new energies," he says. "Look at all the venture capital and the academic research and the collaboration that is going on in this space." Even the regulatory complexity of the U.S. market could be a strength, he suggests. "Because every state is exploring different ways to find solutions, the U.S. gives you a menu of regulatory options. That helps you to understand the approaches that work best in unique environments."

The U.S. also gives Shell the opportunity to experiment with new products and new offerings to customers. Here, it hopes the strength of its brand will give it a head start. The energy transition, says Klein, will drive an evolution in the way the company interacts with its customers. "This is going to require an even more customer-facing approach than traditional investor-owned energy companies are used to," he says.

In the U.K., Shell recently bought a retail electricity business, giving it a new way to reach consumers directly. It already has significant electricity interests in the U.S. through its power and gas trading arm, although that unit only deals directly with business customers today.

Ultimately, says Klein, the complexity of the energy transition will favor companies like Shell with the scale and financial strength to make big investments and solve difficult technical and business problems. "The energy transition is going to require enormous investment globally; it's essentially a rewiring of the entire global energy system," he concludes. "There are enormous possibilities to generate new commercial frameworks and offer new solutions to customers. And we really see the opportunity to offer integrated solutions to customers as being something Shell is uniquely positioned to do." ■ *Jonathan Ward*

www.shell.com

Photos: Gpix/Alamy/mauritius images; Max Lautenschlaeger/TOTAL

A SHARED ENDEAVOR FOR TOTAL AND DHL

A new collaboration agreement between DHL and Total aims to unlock innovative approaches to the challenge of delivering cleaner, safer energy to the world.

With a long history of shared company relationships in over 100 countries worldwide, Total and DHL know each other well. Total provides DHL with a variety of energy solutions and services for its fleet and operations, while DHL provides a wide range of logistics and supply chain solutions to Total businesses. The new strategic cooperation agreement between Total and DHL is intended to do much more than cement an existing worldwide relationship.

Total is a major energy operator, producing and marketing fuels, natural gas and low-carbon electricity. Its 100,000 employees are committed to better energy that is safer, more affordable, cleaner and accessible to as many people as possible. Active in 130 countries worldwide, Total's ambition is to become the responsible energy major, putting climate challenges at the heart of its strategy and integrating the IEA's 2°C Sustainable Development Scenario.

Becoming the responsible energy major means meeting the growing demand for energy and fulfilling the expectations of its customers. To do this, Total operates throughout the energy chain, from production to distribution and processing. Its oil and gas production was up 8% in 2018, a record that helps meet the world's growing demand for energy. Yet Total is committed to reducing the carbon intensity of the energy it produces by increasing the share of natural gas in its production. With more than 40 years of experience in the production and marketing of natural gas, Total is now the second-largest private global LNG player with the ambition of representing 10% of the world market by 2020.

130
The number of countries Total is active in

The changing energy landscape

Becoming the responsible energy major also means taking climate challenges into account and committing to cleaner energy. One example of this initiative is through a reduction in the carbon intensity of the Group's products. Thanks to its integrated model, Total operates throughout the energy chain to offer its customers an energy mix that is increasingly less carbon-intensive, such as electricity produced from natural gas or renewable energies (solar, wind, hydropower) through the Quadran Group and Total Solar Group affiliates. The development of new storage solutions, in particular through Saft, the world leader in high-tech batteries, also helps Total to reduce its carbon offset. In addition to this, Total aims to improve energy efficiency to CO2 dioxide emissions at the Group's industrial, commercial (gas stations) and tertiary sites, as well as among its customers, who are offered a range of services and solutions to reduce their overall energy consumption.

Another instance of Total committing to cleaner energy is through the development of solutions for supporting more sustainable mobility. Examples include offering natural gas for vehicles through a partnership with Clean Energy in North America, LNG bunkers for maritime shipping, and electromobility through G2mobility, now Total EV Charge, a French leading provider of electric vehicle charging solutions and market leader in B2G and B2B. Total's acquisition of G2mobility is accelerating its growth in EV charging by offering charging stations at Total retail outlets, at businesses and in municipalities. Currently, 100 Total service stations in Europe have EV charging facilities. Lastly, Total has been a producer of sustainable biofuels for

TOTAL COMMITMENT: Total has put climate challenges at the heart of its strategy, including fitting gas stations with solar panels.

the last 20 years, and helps to promote these through starting up the La Mède biorefinery, one of the biggest in Europe.

Safety is a core value

Total is a major energy player that places safety at the heart of its priorities, particularly in regard to the road transport of its products. Hans-Christian Guetzkow is Senior Vice President of Health, Safety, Security and Environment (HSSE) in Total's Marketing and Services branch. "In our part of the business, it's fair to say that road transport presents one of the biggest safety risks," he says. "Every day we have more than 10,000 trucks delivering our products to customers and partners in 130 countries around the world. Many of those products are dangerous goods: LPG, gasoline, and other petroleum products."

"Reducing road accidents is particularly challenging," says Guetzkow, because responsibility for safety ultimately comes down to the actions of a single individual: the truck driver. "Driver behavior is one of the root causes in more than 70% of accidents," he notes. "It's vital that we have proper training, and that drivers follow proper standards."

Total is continually working on a range of fronts to improve the safety of road transport operations. The company tracks the safety records of its transport partners and conducts regular audits to check compliance with agreed operating procedures, which cover everything from driver hours and speed limits to the choice of routes and delivery timings during periods of bad weather or public holidays. Vehicles dedicated to Total operations are often equipped with onboard computers (in accordance with national rules and laws) to track routes and driver behavior, which significantly has reduced accidents.

Working with partners such as DHL, actions are needed to enhance safety standards on both sides. "Logistics and supply-chain activities are very important to Total – from an operational perspective, as part of our efficiency improvement efforts, and from the point of view of health and safety," states Guetzkow.

Delivered together

Beyond principle safety measures, the strategic cooperation agreement in particular brings together concrete projects centered around the low-carbon ambitions expressed by each group, preparing the future through innovation under consideration of the transformational technical and environmental challenges involved. DPDHL's climate protection target through the GoGreen program is to reduce all logistics-related emissions to zero by the year 2050, with a number of interim goals to be achieved by the year 2025. This is entirely coherent with Total's ambition to become the responsible energy major, where focus on climate concerns is integral to its strategy and includes reducing the carbon intensity of its products as well as providing solutions for more sustainable transportation, from electric vehicles and trucks to air transportation.

The creation of this agreement evolves and further consolidates the ambition between the two companies to deepen their cross-branch strategic business and technical relationship in shared geographies, in order to maximize the respective business opportunities. For Total, that will involve support from DHL in developing integrated supply chain solutions for upstream, midstream and downstream projects, including the selection of transportation modes, warehousing and customs clearance.

DHL will benefit from Total's position in sustainable mobility, moving away from a single source of energy to an array of solutions. These include the use of biofuels, high-performance lubricants and mobility services such as TOTAL FLEET, providing solutions for B2B professionals to simplify the lives of fleet managers and optimize the management of their fleets through a network of nearly 17,000 service stations in Europe.

Total also offers EV Charge solutions for businesses, public authorities and individuals which are integrated in the TOTAL FLEET multi-Energies Card, as well as leasing and financing options and renewable energy. In the coming years one of the Group's objectives is to become the operator of reference, with up to 150,000 charging points operated in 2025 by Total.

The two companies will also work together on health-, safety- and environment-related projects, covering transport safety, driver-training initiatives and response to oil spills and other incidents, as well as exploring shared solutions to common challenges, with the development of best practices and standards. ■

www.total.com

SMART VALVE: Total is using digital technology to enhance its operations.

Photos: TOTAL; Andreas Kühlken

BUSINESS

DELIVERING EXCELLENCE IN A DIGITAL WORLD

Deutsche Post DHL Group has launched its Strategy 2025. DPDHL Group CEO Frank Appel discusses its core elements and the megatrends that are impacting both the logistics business and the business of its customers.

Deutsche Post DHL Group has made significant progress with its Strategy 2020. Due to its geographical spread and wide range of logistics offerings, the Group is now better positioned than ever before. With "Strategy 2025 – Delivering excellence in a digital world", the company is laying the groundwork to continue its successful growth trajectory beyond 2020.

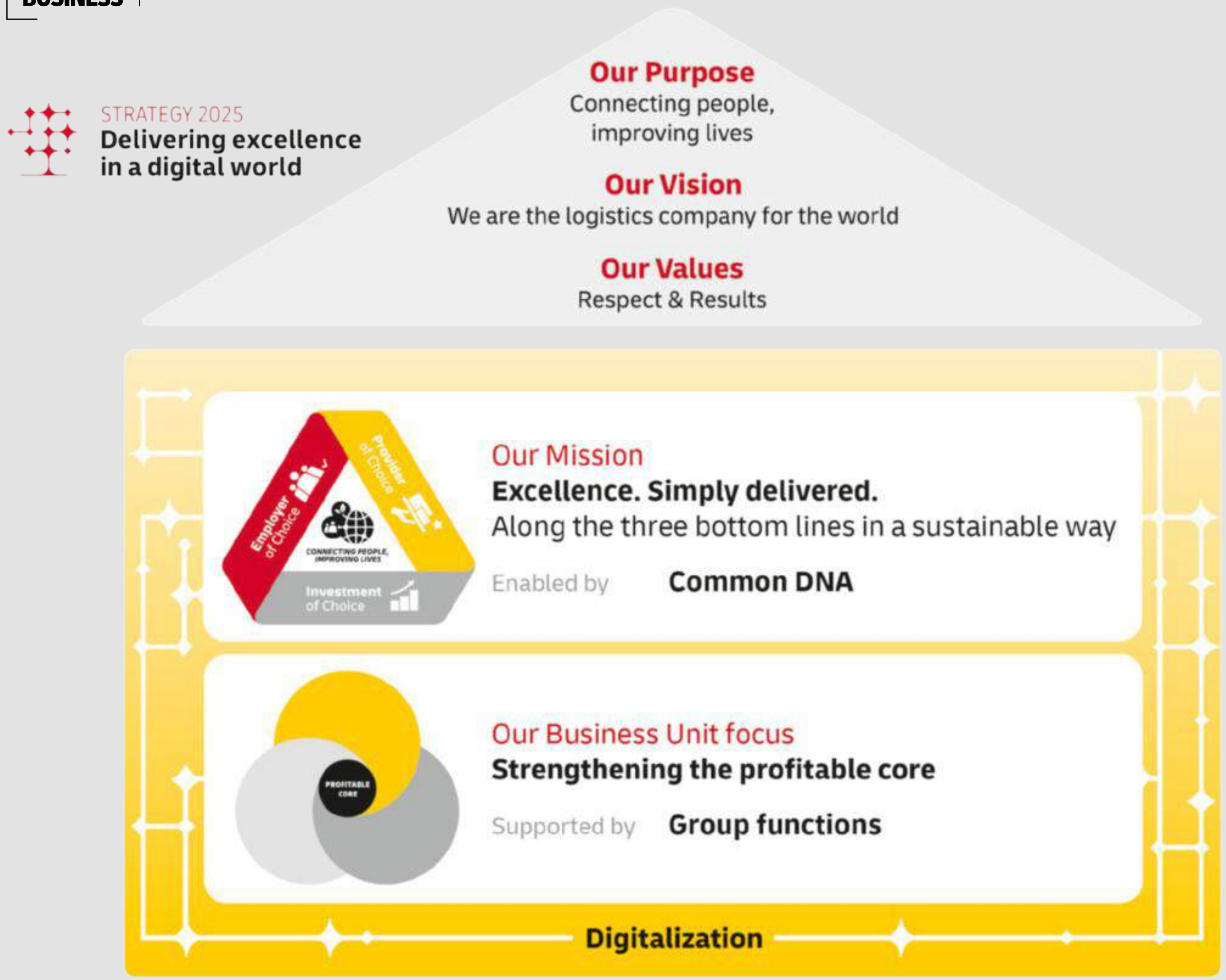
The four most important trends that have been impacting logistics in recent years will also shape the industry going forward and shape the framework for the Group's future development: globalization, digitalization, e-commerce and sustainability. The company will build on these trends to harness the potential for profitable long-term growth within its core logistics businesses, at the same time stepping up the digital transformation that is already underway across the entire Group. All efforts are focused on the established three bottom lines of Strategy 2020, which continue to provide the foundation for Strategy 2025. Accordingly, Deutsche Post DHL Group aims to be regarded as Employer, Provider, and Investment of choice in all its activities.

A new strategy usually demands that a company first takes a closer look at the one it replaces. So was Strategy 2020 a success?

Yes, it was. As we approach the year 2020, Deutsche Post DHL Group is really well positioned for the future. We're the global leader in Time Definite International, the core product of our Express division. We're No. 1 in air freight and in global contract logistics. And of course we're the market leader in mail and parcel in Germany. I could mention many other examples: Our EBIT was at €2.4 billion in 2015; it's forecast to be above €4 billion this year. We were the first logistics company to commit to zero carbon emissions by 2050. Employee engagement is at an all-time high. Customer satisfaction has also increased in nearly all our DHL divisions. I think this shows that we're in a very good position today.

You mention customer satisfaction. How have customers profited from Strategy 2020?

That's a very broad field, but let me reduce it to just two important areas: quality and innovation. If there are two things customers seek, the first is that you get the work done, and done correctly. We have invested a lot of time and energy in improving our quality. Sometimes these are larger programs, like we're currently conducting at DHL Supply Chain to ensure greater standardization across our sites; and sometimes they might just be seemingly small, like daily Performance Dialogs, during which teams track, discuss and improve quality. In the end, we've really been creating a culture for quality with Strategy 2020. That said, customers don't just want the same, only better. They want new ideas and we've worked a lot on this too: from new cold chain solutions, to robotics and automation, to new delivery vehicles like the StreetScooter, we're constantly re-examining our business. Can we do it cheaper, better, different? Strategy 2020 helped us – and our customers – in that respect, too.



If the last strategy has been such a success, does DPDHL Group really need a new one?
I think any business leader would agree with me that you always need to adjust and readjust your strategy. Customer needs change over time, so any new company strategy is an opportunity to reflect those developments. A new strategy is also an opportunity to rejuvenate the spirit in your company, to reassess the environment we're living in, and also to readdress areas that weren't developing as we might have thought five years ago. For example, in 2014 when we were developing Strategy 2020, it was common knowledge that growth in emerging markets would be significantly higher than in the rest of the world. It turned out that, with the exception of China in particular, that growth wasn't as high as first thought. On the other hand, advances in digitalization have happened even faster than one could have forecast back then. Our new strategy, any new strategy, provides the opportunity to conduct a reality check, to see if the trends you saw in the past are still the same.

And are the trends of some five years ago the same ones we see today?
Yes and also no. As part of our new strategic development, we identified four megatrends that are not only relevant for our industry, but which we could also act on. I've touched on two already, globalization and digitalization. The other two are e-commerce and sustainability. Now, none of these trends is new, but what *is* new is how quickly they are developing and how much impact they can have on our business and the business of our customers. This has been more noticeable in some areas, less so in others.

And how will these trends affect your business?
I guess it's pretty much a no-brainer that, as the world's biggest global logistics company, we continue to see globalization as an important trend. What we see today, though, is that logistics as a whole is likely to grow in line with global GDP. A few years ago it tended to grow above the global rate. At least in the near future, logistics demand will be driven more strongly by three economic centers: North America/Mexico, Europe and China. That's actually excellent news for us, as we're quite strong in all those markets – and between those markets.
I suspect it's also clear that a logistics company sees e-commerce as a real growth opportunity. Parcel deliveries continue to grow and grow. Even if we look at quite mature markets for online shopping, such as the U.S., we see that retail sales for online are still only about 10% of all retail sales. That means there's still a lot of upward potential in markets everywhere. And today, most of that growth is still happening within countries. But we definitely see cross-border e-commerce as a strong growth market too, and one which will expand more than twice as fast as domestic e-commerce. There are also many developments driven by customers that will change the face of e-commerce as we know it today. For example, brands establishing themselves more strongly online and selling directly to consumers, the entrance into e-commerce of an ever-growing number of smaller companies as technological and financial barriers continue to fall, as well as the rise of more and more B2B business. The list could go on and on.

Illustration: DHL

Globalization and e-commerce are trends that are traditionally clearly associated with logistics. But what about the other two: digitalization and sustainability?
Well, I'd certainly hope that customers and consumers already associate us with sustainability. We've been setting the benchmark for our industry for a few years now, I'd say. Our GoGreen program is over 10 years old. Just recently we presented our 10,000th StreetScooter, our electric delivery van. But of course sustainability isn't only about climate-friendly operations or green solutions. It's also about ethical business practices and social awareness. If you want to be taken seriously as a company nowadays, you need to see sustainability more holistically, and your approach must reflect that.

And digitalization?
A huge opportunity for us, a massive opportunity. It's also quite a challenge for our industry, which is somewhat of a latecomer to digitalization. There were good reasons for that, but I believe the coming years will definitely see huge advances in logistics, including at Deutsche Post DHL Group, as we use digital technology to optimize operations or improve the customer experience. We've been driving automation forward in all our business units, be that in sorting centers, mechanized parcel centers or warehouses. Automation is as much a topic on the shop floor as it is in the back office, and we're seeing huge efficiency gains because of it.

What specifically does the new strategy plan in regard to digitalization?
First – and this is something we started before Strategy 2025 was launched – we are modernizing the IT backbone in all our divisions. This is the prerequisite if you really want to reap the other benefits of digitalization. A lot of what we are doing here can be understood as creating more standardization, which is what you need in order to scale up other digitalization plans easily. We are also working hard on creating a good API landscape at our company, which should make it easier, for example, to integrate our solutions into web shops and other logistics solutions. We're looking at cloud solutions that make it easier to scale capacity up or down, for example during the peak season. Data, be it a data lake or data analytics, is another area that could potentially radically improve our processes. Just imagine what we could do with improved route planning: quicker deliveries, lower emissions, novel delivery solutions. We have achieved quite a lot in the area of innovative solutions in the past few years, but I believe that the really massive improvements will come in this next wave of digitalization.

We've taken a look at the trends and how they could affect logistics. In what way will your customers benefit from them?
Of course, all these trends are the result of a customer need in one way or another, so our strategy is naturally based on fulfilling customer requirements. Just one example: As part of our Strategy 2025, each of our business units is developing an e-commerce strategy that will help unlock the potential of e-commerce even more for our customers, like the brands or the SMEs I mentioned earlier. We've built up a lot of expertise, and with our broad portfolio we can offer our customers solutions that are unique to our industry. Just recently, for instance, we created a B2B solution for a Canadian spare parts distributor in the E&M sector. This solution actually uses our Packstation (parcel locker) technology, which was originally conceived for last-mile delivery to consumers in Germany.

You speak about the opportunities of digitalization, and e-commerce and sustainability, but in DPDHL Group's new strategy I see that one key element is that your business units will "strengthen their profitable core." That actually sounds like focusing on less rather than more.
Not at all. In fact, exactly for the reasons I just outlined, we see great potential for growth in our core business. This isn't just about us growing our top and bottom lines. It's not just "business as usual." It's about being exceptionally good partners to our customers. Where would a customer want you to focus your attention, your resources, your investments? Not in a sideshow, but in those services you provide to them regularly. Focusing on the core means that you also focus your innovative drive on improving that core. You make your business easier to use, you provide new ways of doing things, you improve your quality. Our customer promise is "Excellence. Simply delivered." – and that goes for our new strategy as well. And a clear focus on your core business is the prerequisite for that. It's how we'll deliver excellence in a digital world. ■ *Eske Wright*

DIVERSITY DELIVERS IN THE WORKPLACE

Internet of things supply chain expert Ninette Vaz explains Intel's commitment to global diversity and inclusion, and how a closely woven, inclusive community not only enriches the work environment but makes smart business sense as well.

Think of diversity as a tapestry. Taken separately, you've got a mass of fibers. But put together, explains Intel's Ninette Vaz, each thread enriches the total pattern. These individual units bond into something wholly new. Something special.

$1 BILLION

Annual spending with diverse-owned suppliers on track to be achieved in 2020

"I think that tapestry shows the interesting complexity of people," says Vaz, Global Supply Chain Internet of Things Senior Manager at Intel. "If you have various threads that make up the fabric, the more threads and the more layers, the stronger the fabric."

Diversity is deeply woven into Vaz's identity, history and experiences. She was born in the Middle East to parents of Indian heritage who hailed from Goa, a part of India that was formerly a Portuguese colony for 400 years – Portuguese was in fact her parents' first language. She then attended high school and university in the U.S. – earning an MBA with a focus on finance and supply chain – before settling with her German husband in Phoenix, Arizona, where Intel has 10,000 employees across two campuses. She's also co-chair of Intel's Arizona site committee, a group composed of senior members that advises on community, diversity and other issues in their workplace.

Tech giant Intel, founded in 1968, today boasts a diverse workforce of approximately 107,000 regular employees in more than 50 countries. And it's become a pioneer for diversity, not just in the tech field but in corporate culture in general. In 2015, Intel set out ambitious plans to achieve full representation of underrepresented minorities and women in its U.S. workforce by 2020, and seamlessly managed to accomplish its goals a full two years before the deadline.

But when Vaz first started at Intel in 1989, the landscape was rather different. In its early years, high tech wasn't known for being gender diverse, nor was her chosen specialty, supply chain logistics, a field that united her analytical brain and emotional intelligence.

"I was definitely one of the younger people in various staffs, as well as often the only female," Vaz remembers. "But I think the combination of how I behaved, shared openly and built up relationships helped – they welcomed me in."

Vaz also points to Intel pioneer Andy Grove, born András István Gróf in Hungary, a refugee to the U.S. who joined the company in its infancy as its third employee, eventually becoming an important leader and manager. Global ambitions led to open minds and the early planting of the seeds of diversity, she notes.

The mix matters

For companies finding their feet in this area, Vaz offers pointed advice. "I encourage everyone to not consider diversity and inclusion a program or a current trend, but rather a value that they believe in," says Vaz. "And I think it's a value that can not only enrich the work environment, but can also enrich people's personal experiences and lives."

Increasingly, organizations are implementing diversity and inclusion initiatives – but with varying degrees of effectiveness. A PricewaterhouseCoopers study from 2017 shows that 87% of the companies who responded considered diversity and inclusion a value or priority. Yet nearly half of the respondents agreed that diversity remained a barrier to employee progression at their organizations.

Photos: Aly Song/Reuters; Intel

According to Boston Consulting Group's study "Getting the Most from Your Diversity Dollars," 91% of the companies surveyed on gender diversity had a program in place, yet only one in four women told researchers they actually benefited from these schemes.

To help counter challenges such as low worker morale and employee retention figures, Intel has introduced what it calls the "Warmline": a friendly, confidential employee hotline to call for answers and advice from – and for – employees of various diverse backgrounds.

The Warmline initiative was introduced at Intel's U.S. locations in 2015. In the following three years, more than 20,000 cases were processed, resulting in an employee retention rate of 82%. Overall, between 2015 and 2018, the exit rate of underrepresented minorities at Intel decreased by 28.4%. Due to its tremendous success, Warmline will be rolled out globally to all Intel locations.

Another project, Awesome (Achieving Women's Excellence in Supply Chain Operations, Management and Education), has earned Vaz accolades. "I think it's important for diverse employees to have 'a tribe' where they feel fully understood and get support," says Vaz. "This support can come from within your group or company or outside." As an example of external support, Awesome encourages women's leadership in the supply chain by providing opportunities for collaboration, learning and recognition. As an enthusiastic advocate of their network, Vaz finds their stories and speaker events to be "valuable, authentic and inspiring."

Making connections

Intel has also initiated a program to increase global supplier diversity in the international communities where it does business. In 2018, it spent $777 million on diverse suppliers, a figure on track to hit $1 billion in 2020 – alongside the planned $100 million in annual spending on women-owned businesses internationally, also scheduled for 2020.

"Supply chain logistics is the profession that connects people," she says. And through the connections, Intel wants to set an example that others can follow.

"This is one of the areas where we don't want diversity and inclusion to be a competitive advantage," she explains. "We want the opposite. We want diversity and inclusion to be so common that everyone has that as a capability. So we're trying to spread the word. And not only just do it as a role model, but really help others as they're trying to establish this culture within their organizations. We have the ability to influence our suppliers, and we are taking an active, responsible role to make that happen."

As of January 2019, the company reached its goal of global gender pay equity. Such leadership has contributed to Intel's consistent rise to the high end of the charts of Gartner's Top 25 supply chain ranking. "When you get to the real depth of what you can do in supply chain, it's oftentimes through creative thinking, it's through diverse thought, and it's through building deeper relationships with people over time," Vaz says.

Dollars and sense

Diversity can also be profitable when it comes to the bottom line. A 2017 study from Boston Consulting Group strongly suggests that companies with diverse management teams have higher innovation revenues. It states that companies reporting above-average diversity in their management teams also showed innovation revenue that was 19 percentage points higher than that of companies with below-average leadership diversity.

28.4 PERCENT

The decrease in Intel's exit rate for underrepresented minorities between 2015-2018

Additionally, according to the Global Leadership Forecast 2018, compiled by consulting firm Development Dimensions International, companies where women hold at least 30% of leadership roles are 1.4 times more likely to have sustained, profitable growth. These firms are also 1.7 times more likely to have "greater leadership strength."

Gartner's research strengthens the case for the value of diversity even further, stating, "Through 2022, 75% of organizations with frontline decision-making teams reflecting a diverse and inclusive culture will exceed their financial targets," in its report "Top Strategic Predictions for 2019 and Beyond."

"If you think about it," Vaz says, "our customer base – and the world – is so diverse that, if you don't do this, you're actually creating your business in a silo and you're going to miss out on business opportunities," she says. "It's not only the right thing to do, it's good for people and adds value to business." ■ *Susanne Stein*

www.intel.com

ADDING VALUE: Ninette Vaz, Global Supply Chain Internet of Things Senior Manager at Intel.

GOOD SIGNS FOR THE EMIRATES

Abu Dhabi and its neighbor Dubai are both known for constantly investing and innovating to stay ahead of the curve. From industrial manufacturing to e-commerce, what's next for the two most prominent emirates of the UAE?

From the Saudi border down to the port town of Al Jeer on the border with Oman, the E11 highway stretches through the United Arab Emirates (UAE) parallel to the Arabian Gulf coastline. First opened in 1980, the almost 560-kilometer-long road connects six of the seven emirates of the UAE federation – from Abu Dhabi in the east to Ras Al Khaimah in the west. Along the way, the scenery ranges from emerging industrial zones to stretches of beach and the towering heights of Dubai's skyscrapers – occasionally there's even a 3D artwork from Abu Dhabi's Louvre museum on display.

It's hard to imagine that, just a few decades ago, the journey between these emirates used to take days. Cars and camels had to navigate sandy terrain, and a trip from Abu Dhabi to neighboring Dubai involved carrying one's passport and waiting for customs inspections at the border between the two emirates.

Today, as the UAE is emerging as one of the world's global logistics hubs, not only have the physical borders been removed, but boundaries on all levels are being eliminated as well. A recently launched virtual Ministry of Possibilities, for example, aims to use design thinking and experimentation to come up with disruptive innovative solutions while bringing federal and local government teams and the private sector together. Innovation is the order of the day, and perhaps one day it will be the Hyperloop that takes over from the cars and trucks on the E11. A prototype Virgin Hyperloop One is already under development and will be unveiled when Dubai hosts Expo 2020. Meanwhile, the UAE has also become a key part of China's global Belt and Road Initiative, with deals worth $3.4 billion agreed between the two countries at a summit in Beijing in May 2019 and key investments being made by Chinese companies in several strategic locations and industries. As they aim to forge ahead in the fourth industrial revolution, *Delivered.* explores key developments in Abu Dhabi and Dubai.

Photos: Ben Harris/Alamy; philipus/Alamy; Xinhua/Avalon/Prisma

Rise and shine

Abu Dhabi harnesses the power of the sun while ramping up its industrial strength

"We must move with the times," said "the man who turned the desert green": HH Sheikh Zayed Bin Sultan Al Nahyan, the late ruler of Abu Dhabi and founder of the UAE federation. A visionary who valued both modernity and tradition, Zayed's influence can still be seen in the way the emirate blends respect for nature and conservation with moving forward in a strategic manner. Abu Dhabi is a desert emirate, and yet there is a lot of greenery, with some 242,000 hectares of forest, around 20 million trees and a number of wildlife sanctuaries. The commitment to sustainability also extends to energy sources, with Abu Dhabi turning its focus to renewables and harnessing the power of the sun in a big way. Energy has long been a mainstay of the emirate's wealth. With 97.8 billion barrels of proven oil reserves – not to mention 209.7 trillion cubic feet of gas at the end of 2017, and a recent additional find of 15 trillion cubic feet of gas and a billion barrels of oil – there is an abundance of fossil fuels. Nevertheless, solar energy is coming to the fore: Abu Dhabi started operating the world's largest single solar project, the one-gigawatt Al Noor, in June 2019. Al Noor alone will reduce the emirate's carbon dioxide emissions by 1 million metric tons – the equivalent of taking 200,000 cars off the roads. Meanwhile, the creation of a two-gigawatt solar project has already been announced.

Abu Dhabi is also keen on shaping itself into a manufacturing base. The world's largest offshore oil platforms, weighing in at 32,000 metric tons and measuring 77.7 by 83.5 meters, were made in the emirate by its National Petroleum Construction Company. Meanwhile, many of the world's leading aircraft manufacturers, among them Airbus and Boeing, rely on Strata Manufacturing, a composite aero-structures manufacturing company, as one of their tier-one suppliers. Strata is part of the Aerospace, Renewables & ICT platform of the government investment arm Mubadala, which aims to develop Abu Dhabi into a leading aerospace hub. Its research and development is focused on breakthrough technologies such as robotic assembly of aircraft structures and advance manufacturing and assembly techniques.

Then there is the Khalifa Industrial Trade Zone Abu Dhabi (KIZAD), an Abu Dhabi Ports subsidiary: a port- and trade-zone ecosystem with the capacity to grow to around two-thirds the size of Singapore, or 410 square km by 2050. The trade zone works in tandem with the adjacent Khalifa Port, which is expected to grow from 2.5 million TEUs to 9.1 million TEUs by 2022. KIZAD features a number of clusters, including an auto city for automotive logistics, trade, distribution and assembly. Other clusters specialize in sectors such as food and beverages, metals, polymers, oil and gas, logistics and energy.

KIZAD's anchor investor is Emirates Aluminium, which aims to be one of the largest single-site aluminum smelters globally. The company currently produces 800,000 metric tons of aluminum and is set to reach 1.3 metric million tons with the inauguration of its second phase. Other investors with operations in KIZAD include 16 Chinese companies, such as tire manufacturer Roadbot.

Meanwhile, Etihad Rail, the developer and operator of the UAE's national railway, signed an agreement in February 2019 to connect Khalifa Port to the national railway network, which is due to launch its second construction phase soon and intends ultimately to connect all of the seven emirates.

PUTTING DOWN ROOTS: Hectares of forest have been planted in Abu Dhabi.

SHIPSHAPE: Abu Dhabi's Khalifa Port is expected to grow in size.

Amadou Diallo, CEO Middle East & Africa, DHL Global Forwarding, welcomes Abu Dhabi's focus on infrastructure: "The emphasis on infrastructural investment by the government is also set to rejuvenate the logistics sector, and we in turn are committed to enabling more trade flows to and from this part of the world," he commented. "DHL Global Forwarding is poised to provide end-to-end logistics and supply chain services to customers in the region. We have just launched Saloodo in the UAE, our fully integrated digital platform that gives shippers and transport a single interface for tracking, documentation and payment processes. With more industries establishing themselves in Abu Dhabi, we are also investing in physical space, such as warehousing in KIZAD for storage and consolidation of all shipments – equipped with high-volume racking as well as fully-managed kitting, packing and dispatching process to support customers' growing capacity requirements. Beyond the immediate needs of our customers who currently operate out of KIZAD, we are also looking to invest more resources on expanding our presence here, so we can serve more customers."

JETSETTERS: Strata Manufacturing is turning Abu Dhabi into a leading aerospace hub.

PANEL SHOW: Abu Dhabi is operating the world's largest single solar project.

3 QUESTIONS FOR

Samir Chaturvedi,
CEO, KIZAD

1. What is the vision for KIZAD?

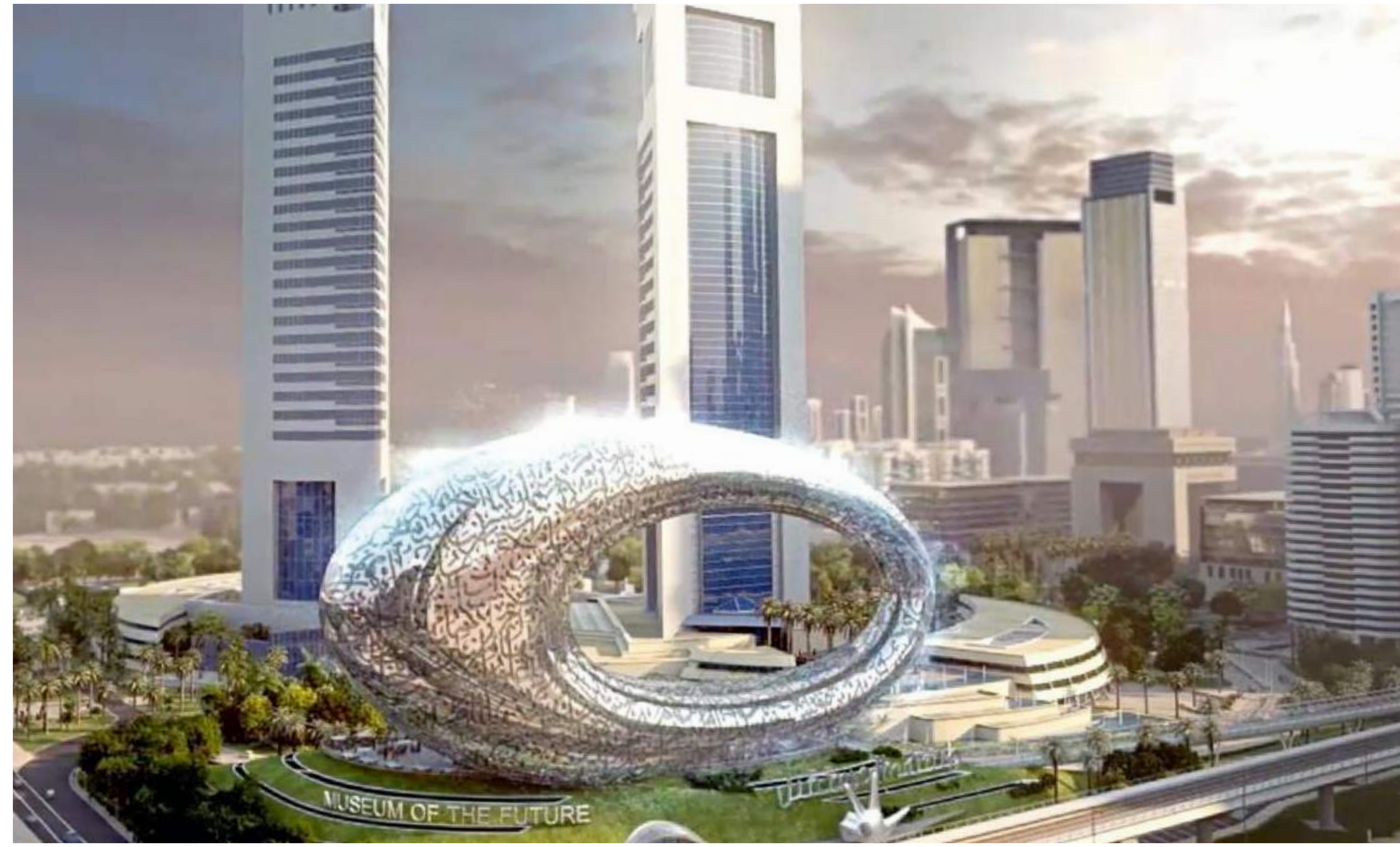
KIZAD is one of the drivers of Abu Dhabi's diversification away from oil and gas. As industrialization ramps up both here and in the region, we foresee a significant increase in demand for port and logistics services. KIZAD offers a full range of facilities and solutions for industrial and logistics activities – from manufacturing plants to a center for entrepreneurship and incubation that will foster entrepreneurship and innovation. Our focus is to provide an ecosystem where the customers are able to have advantages of best cost, speed and scale for their operations. Within the next two years, we expect to lease out 50 square kilometers of land and complete the first phase of our development. The master plan for phase two comprises 182 square kilometers, for which we envisage $100 billion of investment by 2050.

2. Do you see KIZAD emerging as a competitor to Dubai's Jebel Ali Freezone (JAFZA)?

Our strategy is forward-thinking and long-term, driven by an even larger, shared vision of building trade, logistics and industry across the UAE as a whole. The rise in industrial development across the region provides an opportunity to collaborate with and complement regional partners in boosting the industrial sector, while solidifying the UAE's position as a prime location for those seeking to tap this growth.

3. Abu Dhabi is known for putting an emphasis on sustainability. How does KIZAD fit in?

Sustainability is built into our masterplan. There are strict requirements for environmentally efficient facilities for desalination, energy usage and waste disposal. Khalifa Port itself was constructed offshore in order to protect Abu Dhabi's coral reef environment. We have received several awards for our efforts, including the Environment Protection Award at the Seatrade Middle East and Indian Subcontinent Awards for our efforts to protect the Ras Ghanada corals and marine ecosystem.



VISION OF THE FUTURE: The 10X initiative aims to put Dubai 10 years ahead of other global cities.

Photos: DHL; Jumana El Heloueh/Reuters; Martial Colomb/Getty Images; Dubai Government/Ferrari Press/action press; Getty Images

A Perfect 10

Dubai forges ahead with e-commerce and disruptive innovation

"The success of governments is determined by their ability and flexibility to reinvent themselves," says HH Sheikh Hamdan Bin Mohammad Bin Rashid Al Maktoum, Crown Prince of Dubai. Like his father, HH Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, whose vision put the emirate on the global map, Sheikh Hamdan is a firm believer in staying ahead of the game.

An initiative he spearheads, 10X, aims to see Dubai 10 years ahead of other global cities. The program's second phase, 10X 2.0, which was launched at the World Government Summit 2018, engages 37 government entities to work together to shape various projects in key sectors, such as health and education, security and energy.

It will come as no surprise, then, that Dubai has ministers for youth, happiness and artificial intelligence, and that the emirate keeps coming up with firsts – from the first autonomous air taxi to the world's first rotating skyscraper, both scheduled to launch in 2020.

Disruptive innovation is the order of the day, aimed at using technologies to deliver services in radically different ways to create new operating and business models. One example is the Digital Silk Road project, an outcome of Dubai 10X and an initiative of Dubai Future Foundation, currently being developed by the Dubai Chamber of Commerce and Industry. Through the use of blockchain, the platform aims to facilitate a seamless global trading system with transparent supply chains.

UAE

Population: 9.54 million (January 2019 est.)

GDP: $382.6 billion (2017)

World Economic Forum's Global Competitiveness Report 2018: 27th out of 140

World Bank Group's Ease of Doing Business Index 2019: 11th out of 190

DHL Global Connectedness Index 2018: 5th out of 169

$545 MILLION

Investment in EZDubai trade zone

The blockchain and supply chain are also part of another project in the Dubai Future Foundation. The Foundation, in collaboration with the World Economic Forum (WEF), opened the UAE Centre for the Fourth Industrial Revolution in Dubai. The Centre is mandated to develop governance frameworks and policy recommendations for new technologies. The UAE kicked off the initiative at the January 2019 WEF summit in Davos, and its initial project works with WEF to develop global frameworks for the deployment of blockchain. Driven through pilots of the framework, the UAE hopes to present a solution in 2020 that will accelerate business transactions, increase security and transparency and provide reliable information for entities looking to utilize blockchain in the supply chain.

Back in Dubai, this means owning a platform that will allow faster, safer and more cost-efficient trading – an important next step in enhancing its logistics infrastructure.

In addition to digital projects, the emirate earmarked up to $2.5 billion in 2019 for infrastructure projects aimed at boosting Dubai's facilities as it prepares to host Expo 2020. E-commerce is one of the fastest-growing sectors in the region, prompting investment of $545 million to set up an e-commerce free trade zone at Dubai South, the aerotropolis development around the new Al Maktoum airport. EZDubai, the new 920,000-square-meter trade zone, aims to consolidate the business operations of this emerging sector for retail, logistics and other related industries.

This investment comes at a time when Amazon has launched Amazon.ae, replacing Souq.com, the regional player and popular marketplace it had taken over in 2017. The new website features more than 30 million products and offers the Arabic language for the first time, both in the company's mobile app and on its website. Amazon.ae includes a much larger selection of books, listing 15 million titles that are available for shipping to the UAE within three to five days – with shipping either free or at very low rates. Operations in the UAE, Saudi Arabia and Egypt are localized, and a 40,000-square-metre fulfillment center in Dubai South has just increased its workforce by some 650 employees.

LAPTOP SHOP: E-commerce is one of Dubai's fastest-growing sectors.

SOUTH SIDE: Dubai South, the emirate's flagship urban project around the new Al Maktoum International airport.

Another locally-grown market player is Noon, the $1 billion e-commerce platform created by UAE billionaire businessman Mohammed Alabbar. The company continues to forge new partnerships and make acquisitions in the region in order to boost its operational strength and customer offering. "We are building a lot more infrastructure – both digital and physical – to service the region," Alabbar told UAE daily The National.

The e-commerce market in the Gulf States is rapidly expanding. Consultancy firm AT Kearny predicts it will reach $20 billion by 2020 – and there is significant room to grow, with e-commerce currently accounting for less than 3% of all Middle East retail sales, compared with more than 10% of retails sales in the U.S. A report by Fitch Solutions Macro Research highlights that e-commerce spending in the UAE alone could increase by 170%, growing from $9.7 billion in 2017 to $27.1 billion in 2022.

Geoff Walsh, Country Manager UAE, DHL Express, believes e-commerce is the way forward. "The Middle East e-commerce market is growing rapidly, and we are poised to capture this market. We are expanding our operations into EZDubai, with a 3,200-square-meter facility and 13 pickup and delivery routes. This will allow us to provide an even better service for existing and new customers in the B2C e-commerce market, which is one of our current growth areas." ■ *Michelle Bach*

Photos: xavierarnau/Getty Images; Oliver Jackson; DHL

3 QUESTIONS FOR

Mohsen Ahmed,
CEO Logistics District,
Dubai South

1. What prompted Dubai South to invest in a dedicated zone for e-commerce?

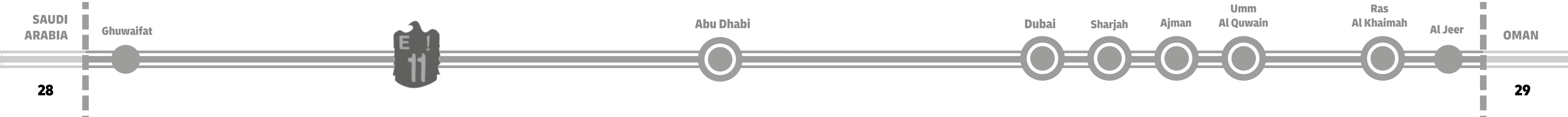
The sector's reach is spreading fast across the Arab Gulf region. But more importantly, we're witnessing in our midst the rapid growth of e-commerce in the UAE, as we have seen the presence of leading global and regional market movers as well as new and emerging ones in Dubai. Creating a dedicated hub for the sector to support its growth through state-of-the-art facilities and infrastructures was the most logical step for Dubai South.

2. What benefits does EZDubai offer?

EZDubai is a purpose-built e-commerce ecosystem that allows B2C and B2B fulfillment coupled with seamless, multimodal logistics facilities, along with the benefits of a free trade zone operation that offers foreign firms 100% ownership. We have a streamlined customs and licensing process, one of the world's largest air carriers, world-class logistics providers and the right combination of both physical and digital infrastructure. From e-fulfillment centers to return and repair centers, time and cost are critically important. And I believe EZDubai is a great partner in enabling businesses to win on both counts.

3. Dubai South has a wide range of target geographies, beyond the UAE. Do you see the same for EZDubai?

Absolutely. Even though the UAE is an attractive market, the Middle East, Africa and South Asia are well within reach. We already see robust trading activity happening and moving in this direction. EZDubai is set to leverage Dubai South's strategic advantages, being an integrated airport city that spans 145 square kilometers, with unparalleled access to cross-continental distribution networks and proximity to international ports, including the Jebel Ali Port and Al Maktoum International Airport (DWC).



INNOVATION FOR THE AMERICAS

DHL has opened its new Americas Innovation Center (AMIC), reinforcing its global presence as the innovation leader in logistics. The Americas Innovation Center provides immersive experiences showcasing the future of supply chain and logistics, mirroring similar offerings at the company's Innovation Centers in Germany and Singapore.

Located close to Chicago O'Hare airport, the 28,000-square-foot. state-of-the-art facility is purpose-built to serve as a hub for DHL's innovation eco-system of customers, partners and thought leaders to inspire change and generate real-world business impacts.

Visitors receive facilitated tours, workshops and sessions custom-designed to accomplish the individual objectives of each group. A range of innovative methodologies is used to guide participants on a journey of creativity, discovery, imagination and out-of-the-box thinking, bolstered by insightful explorations into the trends and technologies shaping the future of the supply chain at large. To visit AMIC and experience a tour or workshop, please contact amic@dhl.com ■

www.logistics.dhl/innovationcenter

The self-driving Vecna Pallet Jack can autonomously navigate a warehouse setting to pick up and move pallets at the floor-level from one location to another.

Locus, an assisted picking robot helps warehouse pickers fulfill orders.

A virtual reality program can teach workers at a hub how to best load units into an aircraft.

DPDHL's own pioneering electric car, the StreetScooter, is used specifically for mail and parcel deliveries in Europe and support DHL's Zero Emissions 2020 initiative.

The Covariant Cell contains an advanced picking arm that is able to accurately pick and place orders in the warehouse.

Photos: Fox and Harrison Creative/DHL (6); Dmitry/Adobe Stock

DOWNSHIFTING PERCEPTIONS

Many workers – and their employers – are coming to recognize that, where office time is concerned, maybe less is more.

Five years ago Max Schireson stepped down as CEO of MongoDB, a successful U.S. software firm that had raised $220 million in funding and had assembled an impressive client roster – including the British government and German multinational SAP. Schireson's reason for "leaving the best job I ever had" was "to be a more involved father."

"MongoDB deserves a leader who can be 'all-in' and make the most of the opportunity," he informed his stunned staff. "Unfortunately, I cannot be that leader given the geography of the majority of the company in New York and my family in California."

Many baby boomers (the generation born roughly between 1945 and 1960) are now choosing to "downshift" and quitting well-paid, stressful jobs in order to achieve greater fulfillment – whether this entails working part-time, remotely or as self-employed consultants.

Schireson agreed to create a new role at MongoDB, which would see him working full-time – but "normal full-time" and not "crazy full-time" – in whatever areas the company needed help. But he was adamant that he would swap flying 300,000 miles a year for "more time with the kids, whether making dinner or talking to them or helping with homework."

These changing attitudes are reflected by the popularity of TED Talks, such as management guru Nigel Marsh's rallying cry to take control and responsibility of our lives. "If you don't design your life," he asserts, "someone else will design it for you, and you may just not like their idea of balance."

23
PERCENT
The share of millennials who say paid vacation time is their top priority, compared to14% of Generation X and 12% of baby boomers

Work smarter, play harder

One person committed to helping companies and individuals get this work-life balance right is Josh Levs, a business consultant, former journalist and author of *All In: How Our Work-First Culture Fails Dads, Families and Businesses – And How We Can Fix It Together*.

"Downshifting is happening more but it depends on just how progressive companies are," explains Levs, a leading global expert on fathers in the workplace who quit his own full-time job at CNN following his paternity leave experience at Time Warner. "Too few employers are heeding data that reveals it's in their own interest to help staff find the right work-life balance. People make mistakes or become stale when they work longer hours."

Nevertheless, although many bosses still think that workers are more committed if they're in the office early and leave late – and this applies to small startups as much as to huge multinationals – Levs notes that conventional wisdom is slowly changing.

Some companies – including Virgin Management, LinkedIn, Netflix and Dropbox – now allow staff to take as much time off work as they like. Netflix's "Reference Guide on our Freedom and Responsibility Culture" explains: "We should focus on what people get done, not on how many hours or days worked. Just as we don't have a nine-to-five policy, we don't need a vacation policy."

While not exactly letting staff drop by whenever they like, PricewaterhouseCoopers is making moves to appeal to the emerging, more nomadic generation and potential older downshifters by focusing on employee autonomy and encouraging them to design a career path around their "interests, goals, and personal situations." The company also supports telecommuting, job sharing, compressed workweeks and fully paid sabbaticals for older workers.

Similarly, SAP offers its employees flexible working options, generous overseas relocation packages and volunteer opportunities. The company that recruitment sites LinkedIn and Glassdoor this year named the best company to work for in Germany is reacting to the lifestyle choices of a new generation hooked on travel and social activism – and suspicious of the old nine-to-five, five-days-a-week mindset.

This type of holistic thinking, claims Levs, will lead to an improved bottom line. He cites the example of two of his clients, "a couple of top executives" who both downshifted to four-day working weeks when they became grandfathers. One even managed to retain his full salary. "This kind of downshifting can benefit the entire workplace," says Levs. "Firstly, these guys are demonstrating trust in their colleagues, which will mean their colleagues are less likely to leave. Secondly, it showed that they were prepared to get their feet wet again, far from the C-suite, spreading confidence throughout the whole workforce."

Illustration: Napal Illustration for *Delivered*.

Time off and flexibility – the new priorities

Societal shifts are already having far-reaching implications for workplace culture. According to research by the IT trade association CompTIA, 63% of millennials are more likely to join a company that lets them work remotely, compared with 57% of Generation X (those born between 1965 and 1980) and 41% of baby boomers.

With millennials now already outnumbering baby boomers, savvy companies are constantly experimenting with ways to adapt to employees' changing needs and aspirations. As well as offering unlimited, paid time off, Dropbox, for example, lets its employees set their own schedules, initiating "No-Meeting Wednesdays" so that staff can have that whole day, uninterrupted, to work from home. The U.S. product review website The Slumber Yard keeps staff motivated by frequently allowing them to work at home, in coffee shops and sometimes even bars for a change of scenery.

Sabine Mueller, CEO of DHL Consulting, believes that within two decades most people will work from anywhere and choose their own hours to do so.

"In general, I'm positive that fewer hours of work will be required," she says. "Transactional, repetitive tasks will be done by intelligent machines such as robots. Teams will be formed in agile ways to solve problems based on capabilities and interest."

By the same token, nobody wants to spend all their time at the kitchen counter. A year after downshifting from MongoDB, Schireson started a new job as "executive in residence" at the global, tech-focused investment firm Battery Ventures, a role which lets him continue to have quality time for family, friends, bridge and skiing.

"Some use this type of role as a springboard to start a company or join a startup," Schireson explains. "Not me. I hope to use my role at Battery as a platform to contribute to interesting startups while maintaining a balanced life." ■ *Boyd Farrow*

63
PERCENT
The share of millennials who are more likely to join a company that lets them work remotely

DELIVERED. TAKES ON THE ROBOTS WITH…

PETER HAAS

Photo: Cat Laine

We are on the cusp of a robotic revolution, says Peter Haas, Associate Director of the Brown University Humanity Centered Robotics Initiative. He explains why that's nothing to fear.

Recently, Peter Haas found himself sitting on a panel with Sophia, the striking AI humanoid robot that made headlines around the world when she was activated in 2016. It was a fascinating experience, he says, particularly when 60 or 70 fans formed a line to take selfies with "her" after the event.

"I do take Sophia with a grain of salt," admits Haas, Associate Director of the Brown University Humanity Centered Robotics Initiative in the U.S. state of Rhode Island. "She's essentially a very complex piece of puppetry. She had make-up on and was wearing a dress, and the goal was to genderize her. What's interesting is that the more humanoid the robot, the more advanced people think it is. It was amazing to see something that has no consciousness, no intellect and no capability to interact with anyone in any deep or meaningful way have such star power."

Humanoid robots like Sophia aren't coming to take your job, insists Haas. That's a dystopian, Hollywood, sci-fi vision of the future. But some robots are, and will. "They won't look like Sophia," he says. "They'll look more like vending machines or carts." It's partly Haas's job to study this phenomenon, because the aim of the Humanity Centered Robotics Initiative is to explore how robots can improve the problems the world is facing today, and how they might impact on society.

Of course, robots have long been used in industries such as car manufacturing, but what's different is that they're coming out from behind the scenes. "We're at the cusp of robots entering the general workplace," says Haas. "You can compare where we are with robotics right now to where we were in the 1980s just before the computer revolution." This makes some people nervous, reasons Haas, but there's much to be excited about. "About half the world's population goes without proper services, such as housing, sanitation and electricity. I think AI, robotics and automation will help get goods and services to those markets, which will be a great boon for humanity."

The challenges come if robots are deployed purely for economic reasons, with little or no concern for their social impact. That's why we need better corporate governance, testing and vetting procedures, says Haas. "When we can give AI systems contextual awareness, creativity and emotional intelligence, then we can be concerned about the pace of change. But that's a long way off."

Do people trust robots?
Yes, and in some very unusual and even emergency situations. Georgia Tech College of Computing in the U.S. did some studies on this, getting a robot to lead people through a simulation of a smoke-filled hallway. It took them past the emergency exit signs to a dead end – but they continued to follow it.

1956

The founding year of Unimation, the world's first robot company, which invented the first industrial robot

2040

A milestone year for robotics, estimates Hans Moravec, founder of the Robotics Institute at Carnegie Mellon University. By this time, robots will be moving freely and have the intellectual capabilities of a human

Why do you think that is?
Partly it's down to the intelligent image of robots that people have from films and stories. But it also comes down to our own intellectual laziness. We want to follow an authority figure and defer decision-making.

You've said we'll start to see robots in areas where we wouldn't normally expect to see them. Such as?
We'll see robot cooks and sous chefs, for instance. That will have dramatic labor impacts, because fast food is an area where people from limited educational backgrounds can easily get a job. We'll see more sidewalk delivery robots – trials are already happening. Robots will increasingly be found in customer service roles and in construction.

If workers are replaced by robots, what will happen to them?
Humans and robots will work side by side in some areas. In house construction, for instance, a robot might sit there all day, bricklaying; but all the detailed, complex, perceptual tasks will still be done by humans.

What impact will robots have on the logistics industry?
I think we're heading toward the creation of a system that moves and routes physical items with similar efficiency to the way we can currently route data. I was at a DHL Robotics Day last year where companies demonstrated technology that can automatically sort objects into bins and from conveyor belts without human intervention. Drone deliveries leapfrog the need for physical road infrastructure, which is pretty exciting – although these are currently limited to high-value, low-weight items such as vaccines or medicines. But I could see drones being used for more standard items, particularly when battery technology improves. Current couriers and drivers could act as controllers of robotic technologies.

Do you see problems when robots become more ubiquitous?
There will be some difficulty in the transition. Look at the Industrial Revolution, which was a period of great upheaval and depression. If we ever have to go through a time like that again, we'll need to examine what the robot phenomenon could do to our capital and labor markets, and think about how we can build social safety nets to help people get jobs.

How optimistic are you that AI and robotics will be a force for good?
Personally, I think robotics is going to have a positive impact on the world. I wouldn't be doing this job if I didn't. ■ *Tony Greenway*

GREAT LEADERS PLAY TO THEIR STRENGTHS – AND KNOW THEIR WEAKNESSES

We can all look back and think of people who have had a positive impact on our lives. It may be a relative, a teacher, a mentor or perhaps a great boss who inspired us to achieve more than we ever thought we could. They took an interest in us, made us feel special and gave us the confidence to believe that the impossible was possible.

GORDON BEATTIE
Gordon Beattie is chairman of Beattie Communications in the U.K., Beattie Tartan in North America, international student recruitment consultancy 11tenGroup and the Only boutiques, whose brands include Only Marketing, Only Retail, Only Travel and Only Health.

I well remember my uncle who gave me the gift of self-assurance, my teacher who encouraged me to come out tops in chemistry and my gym master who kept telling me to dig deep. I did, and won a clutch of 100-meter gold medals. His voice still echoes in my head to this very day and I think that's the stamp of a great leader.

Great leaders are just great people. We never forget the lessons they taught us. We may not remember their exact words but we can still remember how they made us feel. It's the feeling that never goes away, no matter how long we live or how much we achieve.

We can still touch our memories, like it was yesterday.

As the founder and chairman of a group of PR and marketing consultancies, I've had the privilege of working with many effective leaders in the world of business. They were, and many still are, my clients. I've got to know them intimately. I've seen them under enormous pressure and I've shared in the celebrations of their towering success.

I've rubbed shoulders with people like Lord John Browne of BP, Sir Stuart Rose of M&S, Sir Tom Farmer of Kwik-Fit, Sir Brian Souter of Stagecoach, Archie Bethel of Babcock International, Doug and Dame Mary Perkins of Specsavers and many others.

Illustrations: Nina Tiefenbach for *Delivered.*

So what have I learned?

First and foremost – great leaders are nice people. They're never boastful, conceited, petty or haughty. They use words like fortunate, blessed and lucky.

Poor leaders, on the other hand, need to brag about what they've achieved. They have a sense of entitlement, whereas great leaders have a sense of gratitude.

Great leaders also have an inner confidence, a feeling of self-assurance that they pass on to everyone around them. They make their people feel safe, safe enough to make mistakes. When they walk into a room, their presence lifts heads, shoulders and spirits.

In other words, they are inspirational. Some, but not all, are peacocks. Many of the best leaders I know are shy, retiring and positively humble.

It all starts with vision

They give center stage to others and support from the wings. They don't grab the glory, they deflect the applause to others but they take the brickbats. They accept that taking the blame is part of the job. If their team fails – they, as the leader, called it wrong. They chose the wrong strategy or they played their people in the wrong positions.

Great leaders know that if you're going to build a great company, it all starts with a vision of what you're going to achieve. You then need a team to achieve it. That means getting the wrong people off the team, the right people in the team and playing them in the right positions.

It takes guts to take out the wrong people and it requires charisma to get the right people into the team. It takes vision to swap people around so that everyone plays to their strengths and is free to focus on continual improvement.

With the right team in place, effective leaders turn their attention to building a powerful culture that encourages everyone to come together as a team. Culture is what distinguishes great companies from good businesses.

In my book, it's much better to be a good manager than a hopeless leader. Great companies need gifted leaders AND talented managers.

In companies with a great culture, winning teams support each other. When someone has an off day, the rest of the team rallies round and carries them until they are back at the top of their game.

The creation of a potent culture comes from the top and that means the leader and the leadership team have to walk the walk, not just talk the talk. Influential bosses lead by example. There's no point in expecting the team to burn the midnight oil if the boss goes home at five. The best leaders put in more hours than anyone else.

Having said that, they are also good at delegating. They know it's the best way to develop the next generation of leaders.

Hire slow – get the best fit

At Beattie Communications Group, we have a powerful culture and we're blatant about promoting it – especially to talented individuals who would like to work with us. We ask those who are coming for interviews to read our Culture Handbook from start to finish.

It's over 100 slides long, but understanding our culture helps to weed out those who admire our values from those who are uncomfortable with them – and that's a win-win for all parties.

It reduces the number of times we have to part company with people who don't fit in and, of course, it helps ensure we hire the best people possible and the right people for us. Hire slow and fire fast is a tenet we live by.

The right people will make a poor business plan work, the wrong people will fail in the implementation of the very best corporate strategy. Great people deliver great outcomes. It's as simple as that.

We know we've hired the right people when they stay around. In an industry where talent flits from job to job, I'm proud of the fact that over 20% of our people have been with us for 10 years or more. Indeed, our CEO, Laurna Woods, has been with us for 23 years. She started at the bottom and rose all the way to the top.

She's a great leader and an able manager. What's more, she inspires others to follow in her energetic footsteps. I suppose that's what leadership is all about – inspiring others to be all that they can be.

Know your strengths and weaknesses

As a leader you've got to know your strengths and weaknesses, and that brings me to my final point - ALL leaders are flawed. No leader is perfect.

Even Winston Churchill had his faults. Indeed, some would say he had more defects than most.

So don't beat yourself up if you don't quite measure up to the perfect you.

It's in our striving to become better than we are that everyone around us becomes better than they are. ■

www.gordonbeattie.com

WHAT'S THE STORY, MR. SHRYOCK?

REACHING HIS PEAK

After surviving cancer, DHL employee Patrick Shryock was looking for challenge and adventure – and found both on a high-altitude, 12-day trek through Nepal to the base camp of Mount Everest.

I've just returned from a trip to reach the base camp of Everest – the world's highest mountain – with 13 of my DHL colleagues. It's been an incredible experience, made even more symbolic for me because, four years ago, I nearly died from cancer. I was diagnosed with leukemia in 2014, aged 37. At my lowest point I was on a breathing machine, but I finished treatment in 2015 and went into remission. Then I had to learn to walk again. That turned into running, which turned into finding new ways to push myself to my limits.

I first read about the challenge in a DHL-wide email, which invited a team of employees on a 12-day trek from Lukla in Nepal to Everest's base camp. There were 1,700 applicants but only 14 places, so I was really happy to be chosen even though I'd never done anything like it before. None of us on the team knew each other, but we chatted on social media beforehand and were like old friends by the time we met in Nepal.

The trek wasn't easy. For instance, we spent a couple of days walking straight up a mountain range, which wore us down, but I never got to the point where I felt I needed to quit and we did a good job of supporting each other. In the evenings we'd sit in the mountain tea rooms and talk, which helped us develop as a group. On my second-to-last day I got altitude sickness – I had a terrible, pounding headache and I was sick to my stomach – but I felt the strength of the team around me, coming together as one. At DHL, everyone thrives in team environments. It's part of the culture.

One of the most enjoyable things about my job is that I get to interact with people from all over the globe, finding out more about them and their customs, so I loved experiencing the culture of Nepal and gaining lots of new friends. And, fitness-wise, I'm in better shape now than I was before my diagnosis.

The best part of the trip? Well, reaching base camp and looking at the peak of Everest exceeded all my expectations. It was an awesome sight. I'd go back and do it all again tomorrow if you asked me to. ■

As told to Tony Greenway

www.directrelief.org

FACT:
By taking part in the challenge, Patrick and the DHL team raised money for humanitarian aid organization Direct Relief

$100,000+
The amount the Base Camp Quest has raised for Direct Relief to date

17,650
The altitude (in feet) of Everest base camp (equivalent to 5,380 meters)

Photos: P.L. Rogers (2); Szymon Brzoska/DHL

300

The number of specially designed pairs of sneakers, inspired by DHL, offered exclusively by luxury brand mybudapester.com. To celebrate DHL's 50th anniversary, mybudapester.com and DHL collaborated with cult Berlin-based sneaker designer Hikmet Sugoer, whose customers include the likes of Justin Timberlake and Bruno Mars. With demand very high, to get their hands on a pair of the limited edition "must-haves," fashion-conscious shoppers entered an online raffle and 300 lucky customers had their sneakers stylishly delivered by DHL Express in a specially designed box. With decades of experience in fashion logistics, DHL supports designers and the fashion industry across the world, providing solutions for everyone from fashion start-ups to big brands and online boutiques.

www.mybudapester.com/dhl1sneaker


BRINGING THE WORLD FACE-TO-FACE WITH BEETHOVEN
DHL are proud to deliver 'BTVHN on Tour', in cooperation with Beethoven-Haus Bonn, to celebrate Beethoven's 250th birthday. His music remains as inspiring and revolutionary today as it was when it was written. Discover more about the musical genius, see priceless exhibits and perhaps wish the maestro a Happy Birthday yourself.
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