



BUSINESS MAGAZINE FOR INTERNATIONAL ENTERPRISES - ONE HUNDRED AND THIRD EDITION 2021



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Eric van der Heijden,
Vice President of
Sales EMEA at Lattice
Semiconductor PAGE 47

BUSINESS

trends

103 BUSINESS MAGAZINE
FOR INTERNATIONAL
ENTERPRISES



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 **Univar Solutions**

Growing Together

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On the right track

A wholly-owned subsidiary of Bihrl Applied Research Inc., Ardenna Inc. is the leader in image processing and machine learning software that automatically generates results from industrial inspection imagery. The company's flagship product, Ardenna Rail-Inspector[®], recently became available in the Microsoft Azure Marketplace. Ardenna customers can now take advantage of the productive and trusted Azure cloud platform, with streamlined deployment and management. Customers will also be able to benefit from Rail-Inspector's reduction in maintenance downtime, increased operational efficiency and improved worker and railroad safety – all while providing a comprehensive visual and digital record of the track condition, as David M. Patterson, business development director, sales and marketing for Ardenna, explains.

Ardenna has over the past four years built a reputation in the automated inspection of rail infrastructures in the US. “In the US, conventionally it’s humans who do inspections, but their focus tends to be the identification of problems,” Mr. Patterson explains. “Our technology finds issues before they even become a problem, both for mainline rail inspections and railyards. We are focused on identifying a wide range of track components, and assessing the health and status of these components. One of our customers has told us that thanks to our technology, they are now identifying 90 percent of causes of derailment in railyards.” He adds: “But what has real got everyone’s attention in the rail industry is how quickly we produce results. When using other automated track condition tools, customers often have to wait weeks for results. So people are astounded when we can provide next day delivery. We’re also unique in that we use drones to catch images, reducing the risk of human beings getting hurt on the tracks and keeping commerce flowing.”

The availability of their technology on Microsoft Azure widens Ardenna’s scope and market, he adds. “Our

applications. “Many other industries can also benefit from Ardenna’s technologies. Automated inspection of assets such as electric utilities, wind turbines, cell towers, roads, bridges and dams are all possibilities.”

But, he emphasises, for now they will continue to focus on rail, which in itself is a big market. “When people think of rail, they rarely think about all those industrial companies with railyards at their facilities. Ports, refineries, automotive manufacturing, food and grain, they all have railyards that must be inspected regularly. That’s a huge opportunity for us, around the globe.”

customers can now upload imagery to the Microsoft cloud; inspection results are also given back to them in the cloud. As Microsoft is engaged with major rail companies around the globe, we expect it will open doors for us. Microsoft sales teams are aware of our tech so that becomes a second channel now.”

While growing their rail customer base, Ardenna is also looking at how they can leverage their technology for new



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business trends

103 BUSINESS MAGAZINE FOR INTERNATIONAL ENTERPRISES

Business Trends is an international business magazine

Publisher:	Business Trends Kuipersdijk 20-73, 7512 CH Enschede The Netherlands Tel: + 31 (0)53 574 55 47 Fax: +31 (0)84 877 01 15 e-mail: ellen@business-trends.nl internet: business-trends.nl
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Dear readers,

Nations are more reliant than ever on natural gas amid efforts to quit coal and increase the use of cleaner energy sources. But as winter is coming in the northern hemisphere, gas prices are soaring as a result of the economy's post-pandemic recovery while organisations such as the International Energy Agency (IEA) warn that we need legislation to ensure gas-related emissions growth does not become a problem. On the plus side, these developments grow awareness and encourage accelerated investment in green technologies and renewable energy. In this issue of Business Trends, you can read about the inspiring companies that help fuel the green revolution.

Furniture retailer IKEA is branching out to become a renewable energy supplier with its STRÖMMA subscription service. IKEA says it aims to roll out its clean energy services globally and create the world's "biggest renewable energy movement", in a bid to cut down the 10 billion tonnes of carbon dioxide equivalent (CO₂e) that are generated by lighting, heating and cooling our buildings every year.

Still heavily disrupted by the pandemic, the travel and logistics industry is also investing to pave the way towards a green and more resilient future. California-based Joby Aviation is developing the all-electric eVTOL aircraft which it plans to bring to the market in 2024. The company is collaborating with policymakers to bring home the benefits of zero-emissions aviation and to support community-based planning grants for aerial ridesharing as well as the development of electric aviation charging infrastructure.

Meanwhile as nuclear is increasingly included in the clean energy conversation, as it is the second largest source of low-carbon electricity in the world behind hydropower, France-based Orano group engages in the recycling of nuclear materials. The company points out that over 50 years ago, the nuclear industry was one of the first sectors to introduce recycling in order to reduce the volume of waste generated and save on materials. As a result, in France 10% of nuclear electricity is generated using recycled materials.

Coupled with the stimulus programmes that governments have initiated to ease the economic impact of the pandemic, the fuel crisis actually inspires both the private and public sector to embrace the structural benefits of increasingly competitive renewables. We hope these stories help to inspire you and your business to seize the green opportunities that are on offer.

Ellen Groen

Editor in Chief

World-class partnership in basketball

Wilson has a rich history in basketball. The brand made basketballs for the USA's National Basketball Association (NBA) from 1946-1983, and last year was announced as the official basketball maker of the NBA yet again, starting with the 2021-22 season. The re-introduction of Wilson basketballs coincides with the league's 75th anniversary season. The NBA and its players worked with Wilson to develop and approve the new basketball. Amanda Lamb, Director of Team Sports Marketing at Wilson, believes the partnership with the NBA opens up the door to Wilson becoming a truly, dominant global brand.

Chicago, USA-based Wilson Sporting Goods Co., a subsidiary of Amer Sports Corporation, is the world's leading manufacturer of high-performance sports equipment, sportswear and accessories. The company makes equipment for many sports, which in

addition to basketball include badminton, American football, fastpitch softball, golf, racquetball, soccer, squash, tennis, pickleball and volleyball. It uses player insights to develop products that push equipment innovation into new territories and empower athletes at every level to perform at their best.

In Basketball, Wilson is the supplier of Official Game Basketballs not just for the NBA's men's league but also for the women (WNBA), and a host of other leagues. Today, the brand holds over 37 patents in basketball. "We've been a key contributor to the game for over a century," says Amanda. "We made our first basketball in 1916. Our achievements range from being the original official game ball of the NBA for the first 37 years of the league, to reclaiming that spot again for the 2021-2022 season. In 2003 we became the official basketball of the NCAA March Madness and Final Four and in 2016 we signed on to be the official basketball of FIBA 3x3."

For this summer's Olympics, a Wilson basketball will be Wilson's first game ball in the games, she adds. "We have produced some of the most advanced

Wilson Advisory Staff member Trae Young (Atlanta Hawks)

and accepted game ball technology in the game today – laid in channels, cushion core technology and a superior moisture absorbing composite leather. We have also launched some of the most beloved game balls on the court – The Jet in 1958, the Evolution basketball, a cult classic with players describing the feel like no other was launched in 1996. And in 2019 we launched our most advanced innovation yet with the Evo NXT."

The Evo NXT's revolutionary extended Range Tech redistributes the weight of the ball with advanced internal construction, making the ball easier to shoot from long range, according to Wilson. With a Micro-Touch cover that provides an extra layer of grip and moisture management and a Super Soft Core that provides exceptional control and a softer feel, the Evo NXT is the basketball shooters having been dreaming about, the brand claims.

Along with the news that Wilson is now the official game ball of the NBA, as well as the WNBA, NBA 2K League, NBA G League, Jr. NBA, BAL, NCAA and FIBA 3x3, the brand launched a new campaign called "Bonded By Ball" that features J. Cole's Dreamville holding down the sound direction. The 60-second spot drills down the brand's focus on the family bonds that basketball sparks locally and globally, and features a number of familiar faces who are also Wilson Advisory Staff members. They include star hoopers from the WNBA—Liz Cambage (Las Vegas Aces) and Kysre Gondrezick (Indiana Fever)—and the NBA—Jamal Murray (Denver Nuggets) and Trae Young (Atlanta Hawks). Also seen in the spot is renowned basketball skills

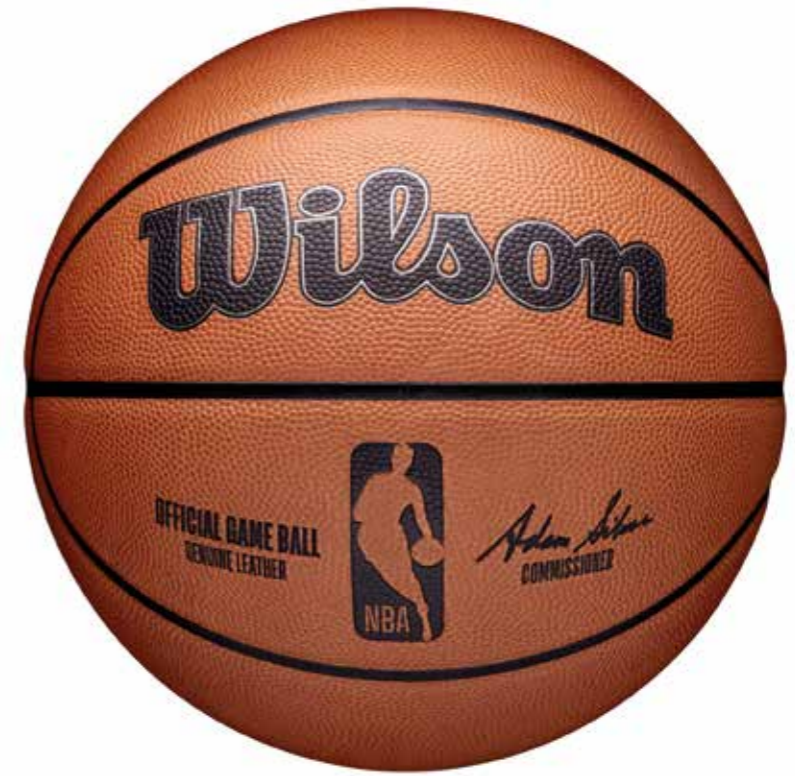
coach Chris Brickley while other fellow Wilson Advisory Staff members include 3x3 ball stars Dusan Bulut and Migna Toure.

"It's a campaign built on inclusivity and the notion that anyone who has ever picked up a Wilson ball, is part of our global Wilson family," Amanda adds. "It's built on the strategic pillars of celebrating the game, elevating the family and participating in the culture."

She believes Wilson and the NBA are a good fit: "Our aligned values underscore every action we take to do what's best for the player and for the growth of the game. Additionally, we tell a youth to pro story across many of our categories – Tennis, Golf, Baseball, Football and Beach Volleyball. It only makes sense given our reputation for designing product for the game's highest performing athletes that we take our innovation and quality chops to the league with the highest level of players in the world – NBA and WNBA."

The Wilson NBA official game ball is comprised of the same materials, eight-panel configuration and performance specifications as the league's current game balls and sources the same leather currently used in the NBA. Over the past year, the NBA and the National Basketball Players Association (NBPA) worked jointly with Wilson to develop and approve the new game ball through team evaluation sessions. The game ball features the iconic NBA and Wilson logos in full grain pebbling, with the Wilson logo also including an anthracite inline.

According to Amanda, the NBA opens up the door to Wilson becoming a truly, dominant global brand. "In partnership



with the NBA and their franchise leagues we hope to combine our efforts to grow the game globally through inspiring more opportunity for play and working with the league and its partners to improve access for young players at all levels around the world."

Wilson Advisory Staff member Jamal Murray (Denver Nuggets)



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A sustainable tomorrow with aluminium

In early August, Vedanta announced that its aluminium business became the largest green power procurer in the Indian Energy Exchange (IEX) platform in the first quarter of FY22, sourcing 354 million units of renewable energy (RE)-based electricity for its aluminium production facility at Jharsuguda, in Odisha. The news underscores a trend in India with corporates increasingly trying to reduce their carbon footprint. Speaking about Vedanta's approach towards carbon mitigation, Mr. Rahul Sharma, CEO – Vedanta Aluminium Business said, "Our sustainability imperatives are designed to fulfil our climate impact reduction targets, which are in complete alignment with Nationally Determined Contributions (NDC) submitted by the Government of India."

Vedanta Aluminium Business, a division of Vedanta Limited, produces nearly half of India's aluminium i.e., 1.96 million tonnes in FY21. It is a leader in value-added aluminium products that find critical applications in core industries. With its world-class Aluminium Smelters, Alumina Refinery and Power Plants in India, the company is spurring emerging applications of aluminium as the 'Metal of the Future' for a greener tomorrow. Aluminium is the second most important metal in the world today. It is a strategic metal, with critical applications in core industries such as aerospace, space exploration, national defence,

automotive, building and construction, and electrical distribution. It owes its 'Metal of the Future' reputation to its high strength to weight ratio, corrosion resistance, exceptional design flexibility and infinite recyclability.

Mr. Sharma joined the Vedanta Group in 1998, and today he is at the helm of affairs of Vedanta's Aluminium Business, India's largest producer of aluminium and value-added aluminium products, as CEO, driving the business' aspiration to become the world's best and most sustainable producer of aluminium.

As India's largest producer of 'green metal' aluminium and its value-added

products, Vedanta Aluminium is on a mission to create value for customers and communities, in a manner that is sustainable and responsible. "Our vision is to become the leader in all aspects of business, and sustainability is no different," Mr. Sharma stated. "And therefore, we have made it our priority to meet global best sustainability standards."

Vedanta has developed and implemented a robust Sustainability Framework, which is based on International Finance Corporation (IFC) sustainability standards and covers all the aspects of Environment, Social and Governance. "Our business operations are underpinned by the ethos of Zero Harm, Zero Waste and Zero Discharge and guide our business operations," Mr. Sharma elaborated. "Our sustainable development agenda has been established in line with our core values, internal and external sustainability imperatives, UNGC's 10 principles, United Nation's SDGs, International Council on Mining and Metals, and Organization for

Economic Cooperation and Development (OECD) in addition to the standards set by IFC."

In FY21, Vedanta significantly reduced its GHG emission intensity by 21% for its Aluminium Business with 2012 as baseline. The company further aims on reducing GHG emission intensity by 25% over 2012 baseline by 2025. The Group overall has pledged to move towards carbon neutrality, and the Aluminium Business is making rapid strides to significantly contribute towards it.

"For us at Vedanta, staying competitive in the market and being sustainable are two sides of the same coin," said Mr. Sharma. "We are obsessed with making our business more sustainable through a robust approach that leverages best-in-industry practices and next-gen technology, consistent improvements in efficiency of resource-intensive processes, exploration of circular initiatives, and incorporation of 'Design for Sustainability' principles in the way we work."

The recently announced purchase of 354 Million Units of green power from GTAM has resulted in GHG emission reduction by nearly 0.28 million metric tonnes of CO₂ equivalent, in line with Vedanta's 2025 target of reducing GHG emission intensity by 25% over 2012 baseline. This consumption of green energy in its operations is slated to grow significantly. "Increasing the share of renewable energy mix is a business imperative, so we have been purchasing green power for all of our operations," said Mr. Sharma.

He pointed out that while production of primary aluminium is an energy intensive process, aluminium recycling uses barely 5% of the energy. "Aluminium is 100% recyclable and is the most sustainable commercial metal.



It is imperative for aluminium producers to focus on a two-pronged strategy – a sharp focus on attaining highest efficiency of assets and processes for excellent energy management, and a roadmap towards carbon neutrality that includes adopting the right mix of feasible avenues for increasing consumption share of green energy. As a second step, besides manufacturing aluminium products, aluminium producers must work towards developing circular economy value-chains in recycling and gainful waste management, which will provide their own share of climate benefits."

Mr. Sharma again emphasised that as India's largest aluminium producer, Vedanta Aluminium sees its role as that of a climate action steward, leading the

Indian Aluminium Industry towards a greener and more sustainable future. "In fact, we are also evolving our product portfolio to cater to the emerging sustainability needs, like high-quality crash resistant alloys for electric vehicles, special alloys for improving efficiency of internal combustion engines for significantly lower emissions, billets and other products for usage in solar energy infrastructure and many more."



Vedanta Ltd.

Website: www.vedantaaluminium.com



Animal Health, Global Innovation

Based in Ingelheim, Germany, Boehringer Ingelheim International GmbH is one of the world's largest pharmaceutical groups and also is a leader in animal health. In this field, the company announced in July 2021, that its FreVAX™ intramuscular needle free device can now be managed via an entirely new version of the FreVAX™ smartphone app – the 2.0 version. A company spokesperson states that FreVAX is the first and only smart needle-free device for Intramuscular (IM) vaccination in pigs. “With the release of the FreVAX App 2.0, our piglet vaccine portfolio gets further connected with FreVAX via the new vaccination management tool, which opens up efficient vaccination reporting options for our customers.”

Boehringer Ingelheim is working on breakthrough therapies that improve the lives of humans and animals. As a leading research-driven biopharmaceutical company, the company creates value through innovation in areas of high unmet medical need. Founded in 1885 and family-owned ever since, Boehringer Ingelheim takes a long-term perspective. Around 52,000 employees

serve more than 130 markets in the three business areas, Human Pharma, Animal Health, and Biopharmaceutical Contract Manufacturing.

The Boehringer Ingelheim Animal Health business' global innovation team pioneers the science that helps veterinarians, pet and livestock owners, and public health officials around the world, improve animal

health today and in the future. The company works collaboratively with internal colleagues in human health and with many external partners to deliver breakthrough animal health therapies, thus maximizing its ability to enhance the wellbeing of animals by focusing on areas that will impact the greatest number of animals. Its broad portfolio of veterinary therapeutics, parasiticides and vaccines reflects Boehringer Ingelheim's strong commitment to delivering value through innovation.

Boehringer Ingelheim Animal Health is a global leader in the animal health industry and the second largest animal health business in the world, with net sales of 4.1 billion euros in 2020 and presence in more than 150 countries. The company is convinced that the lives of animals and humans are interconnected in deep and complex ways and that when animals are healthy, humans are healthier, too. By delivering value through innovation, the company is aiming to enhance the well-being of both.

For Boehringer Ingelheim it is clear that no good decision-making occurs without reliable data. As connected barns and services are increasing new data streams across the swine production chain, it becomes easier for producers to better manage farm resources, and increase efficiency in both costs and quality. Not only are farms becoming larger and driven to reduce costs and improve competitiveness, but also societal concerns are playing a bigger role in shaping the future of precision livestock farming. Together with an increasing demand for animal protein, there are equally growing concerns on the environmental footprint left behind



– and vocal pleas for more transparency about animal welfare.

At the end of 2020 Boehringer Ingelheim partnered with Henke-Sass, Wolf to develop an innovative intramuscular needle free vaccine injection tool for pigs around weaning until the end of nursery. This novel device has been available since December 2020 to swine producers in most countries globally under the brand of FreVAX™. Boehringer Ingelheim's spokesperson explains: “FreVAX fulfils the desire of swine producers to ensure safety of pigs and people, as well as efficacy of vaccine application by avoiding broken needles and reducing pathogen transmission while increasing vaccination compliance, animal well-being and data availability and management. Our customers will truly benefit from this innovation.”

The device was very well received since its launch at the end of 2020. Several hundred units have already been delivered to customers around the globe and veterinarians, as well as producers, appreciate the possibility to continue working with IM vaccines and at the same time using advanced and animal-friendly technology for their application.

The newly released FreVAX App further enhances the FreVAX experience with useful features. It offers the possibility to do firmware updates of the device remotely. Boehringer Ingelheim's spokesperson says: “This feature is important for biosecurity as the device doesn't have to leave the farm for service. It also provides all relevant information in multiple languages as well as answers to FAQs. On top of this, our customers have the possibility to properly plan for vaccinations and subsequently vaccination reports with

the all new “Vaccination Management” feature, including indication of vaccination compliance. Hence, the FreVAX App enables users to get the best out of FreVAX and achieve optimal benefits for their day-to-day business.” This combination of advanced hardware and intelligent software is so far unique in the sector of IM pig vaccination.

Boehringer Ingelheim's spokesperson ends by saying that besides their proven vaccines it also requires a compliant method they are delivered. “We like to further roll out the FreVAX experience to our customers worldwide for optimal support in the administration of our vaccines and the documentation thereof via app. In addition, we will be expanding our precision livestock farming portfolio and will be coming up with more exciting new products in the near

future. Our aim is to enable all levels of farm decision makers to be in control and sustainably manage pig health & performance by providing predictive real time decision-ready information and transparency throughout the value chain.”



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How to rapidly deploy an ATM in Europe

EVO Payments, a leading global payments technology and services provider, has partnered with KAL to launch a new ATM service which is now available across Europe. The solution combines KAL's Kalignite software suite with EVO's best-in-class payments infrastructure. It enables banks and IADs (independent ATM deployers) to rapidly deploy ATMs to any European location. Combining EVO's deep expertise and innovative approach as a global payments specialist with KAL's world-class ATM software has created a highly efficient method of ATM deployment that is set to transform ATM networks across Europe, according to Gerd Laufens, the Head of EVO's European ATM business who holds responsibility for the business of EVO's ATM clients in 15 European countries. "The customer receives a complete solution from this partnership."

EVO Payments International is part of the EVO Group, which is headquartered in Atlanta, USA, and a Principal Member of Visa and Mastercard. Its international presence spans North and Latin America as well as Europe. Founded in 1989, EVO International serves all of Europe with a range of services covering all aspects of cashless payment transactions in stationary retail and eCommerce – from acquiring (card acceptance), network operation and POS terminals to payment service providing and card acceptance at

ATMs. It serves a wide range of ATM customers, large and small, and including some high-profile names. The company holds a pan-European license for card acceptance at the ATM. In addition to pure cash dispensing, it offers services such as Dynamic Currency Conversion (DCC), Split Settlement, Surcharge, PIN change and account balance query are possible.

"Besides ATM-services, bringing together proven technologies and an unprecedented level of flexibility and

efficiency, when responding to local market needs in Europe, EVO Payments also covers the whole range of common payment systems, which make payment transactions as easy as possible for both the customer and the merchant – whether a transaction happens online (in the merchant's online store on social networks, or in a mobile app) or offline, in a physical store via innovative card terminal technology," Mr. Laufens elaborates.

EVO has a strong focus on the ATM business and has built specific functionalities, which differentiates EVO from offerings with standard clearing/settlement and reconciliation procedures in the market. "EVO competes with other payment institutions with Visa and Mastercard licences, but where we are unique is with our product offering, combining card acceptance, scheme processing and DCC services in one offering, while not competing with EVO's clients, and



About EVO Payments, Inc.

EVO Payments, Inc. (NASDAQ: EVOP) is a leading payment technology and services provider. EVO offers an array of innovative, reliable, and secure payment solutions to merchants, ranging from small and mid-size enterprises to multinational companies and organizations across the globe. As a fully integrated merchant acquirer and payment processor in over 50 markets and 150 currencies worldwide, EVO provides competitive solutions that promote business growth, increase customer loyalty, and enhance data security in the international markets it serves.

staying independent," Mr. Laufens explains. "EVO's main competitors in the market operate ATMs themselves and are therefore not independent."

EVO's best-in-class payments infrastructure is now combined with KAL's Kalignite software suite. KAL is a world-leading ATM software company and preferred supplier to banks across the globe, including Citibank, UniCredit, Erste Česká, ING, OTP, HSBC and Westpac. KAL's multivendor software gives banks full control of their ATM network, reducing costs, meeting security needs and improving competitiveness. It is installed and supported in more than 80 countries.

KAL's multivendor software allows ATM deployers to select machines from over 40 vendors, while EVO's infrastructure delivers the resilience and card scheme compliance expected from a world-class ATM solution. The service allows a bank or IAD to choose any ATM type they want and any location across the EEA, Switzerland and the UK and deploy it with Visa/Mastercard acceptance at short notice. The solution includes the ATM software, the ATM host, the Visa/Mastercard acceptance and the clearing and settlement services. The bank or IAD



He adds that setting up an ATM network is very difficult and requires a lot of knowledge and skills in many different areas, such as ATM software, ATM management system, transaction processing and settlement. "Usually these services are rendered by multiple partners and service providers. The partnership between KAL and EVO addresses that and provides a solution as a one stop shop service."

The service is available in all EEA countries as well as in Switzerland and UK.



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Digitising the used car market

Dutch-based CarNext provides a B2C marketplace across Europe and an integrated online platform that enables retail customers to buy high-quality used cars online. CarNext has a Long-Term Service Agreement with LeasePlan, guaranteeing a supply of close to 300,000 high-quality used cars annually to the CarNext marketplace across Europe, which means they have a great selection to offer their customers. Upon the news of having raised €400M in a fresh round of funding to accelerate its next phase of growth, Maarten van Neerven, Managing Director and CFO of CarNext, comments: “CarNext has rebuilt the experience of buying a used car entirely online with complete peace of mind, mobilising the latest technology to put customers in the driving seat and make buying a car fun, easy and transparent. With the support of our investors, CarNext is now in an even stronger position to accelerate its growth strategy across Europe, boost retail sales and achieve network effects. The timing could not be better. Post-Covid, more people than ever want to buy their next used car online, and we have the cars and technology to deliver.”



CarNext launched in February 2018 as one of the first companies to digitalise the used car buying journey. Since launching, the CarNext B2C offering has expanded significantly, including ancillary services, home delivery options, scaling up the reconditioning capabilities and started to actively source for the marketplace. Over the past year, the company has accelerated its strategy in France and witnessed triple sales volumes. Additionally, the

company also reported that its Cars on Display (CODs) increased to an average of 3,000, making the company France's largest online used car marketplace. In June 2021, the company announced its partnership with ProovStation and DEKRA to pilot virtual car inspections using AI technology. With this development, ProovStation's scanner will enable CarNext to improve its inspection and remarketing processes to automate the scanning and damage

detection part of the reconditioning process. The scanner will also ensure checks for all cars offered by CarNext in the Netherlands before they are reconditioned on 228 check points.

In July 2021, Amsterdam-based CarNext was carved out from LeasePlan — a Dutch company that manages a fleet of 1.8 million cars in 30 countries. As part of this process, CarNext is now a fully independent

business owned by a consortium of investors including TDR capital, a wholly owned subsidiary of Abu Dhabi Investment Authority (ADIA), GIC, PGGM, ATP and Goldman Sachs Asset Management. In addition, the company has entered into an exclusive Long-Term Service Agreement with LeasePlan, that guarantees CarNext a supply of close to 300,000 high-quality used cars annually to sell through its B2C and B2B marketplaces across Europe.

The company today provides a B2C marketplace across Europe and an integrated online platform that enables retail customers to buy high-quality used cars online; both from LeasePlan's Car-as-a-Service fleet, and from a network of trusted third-party suppliers. The company offers fixed all-in pricing, a 228-point reconditioning check, a 12-month warranty, home delivery, and a 14-day no-questions-asked return guarantee. Besides, users can also part exchange their old car and access a suite of necessary services, such as financing and extended warranties, fully online.

The company also operates as a B2B auction platform and digital trader app in 22 countries. This platform offers CarNext's trusted used car suppliers, including LeasePlan, access to a digital end-to-end service to remarket vehicles to either B2B buyers or directly to consumers. Besides, the platform also enables CarNext's suppliers to plug-in to its growing network of 30,000+ traders and benefit from their remarketing services; including vehicle transportation, storage, inspection, and reconditioning.

“We have a strong customer satisfaction (consistently high Net Promoter Score) and brand recognition, supported by targeted advertising campaigns, highly visible Delivery Stores located along major highways, as well as our partnership with CarNext brand ambassador and F1 driver Max Verstappen,” says Mr. van Neerven, highlighting what in his view are their key differentiators. “CarNext's next generation technology, including our asset steering model that leverages millions of car value datapoints, proprietary algorithms and technology stacks to match supply and demand across B2B and B2C auctions and geographies. In addition, we have commitment of some of the world's leading investors, which will be invaluable as we pursue our expansion plans and acceleration strategy.”

He adds that as an independent business with strong financial backing, CarNext will accelerate vehicle sourcing from trusted third

parties, expand its offering across Europe and further boost its growth to help even more customers get great cars, hassle free. From this month, CarNext is notably accelerating its growth in Germany by specifically targeting brand building, sourcing and infrastructure development, with an aim to be the biggest online used car marketplace in the country by the end of the year.



The grid reimagedined

Smart Wires is a global power technology company advancing the delivery of affordable, clean electricity worldwide. With its innovative technology and advanced analytics, the company maximises the grid's capacity. Having successfully completed several projects in Europe, North America and Australia, Smart Wires has now entered into a partnership with EirGrid and the research and development consortium Electric Power Research Institute (EPRI). The project is aimed at boosting the flow of renewable energy on the electricity grid of Ireland, and is supported with a financial contribution from the Sustainable Energy Authority of Ireland (SEAI). Peter Wells, Chief Executive Officer of Smart Wires, feels this project underscores his belief that they are at a clear inflexion point in their journey, where technology, product capability and market demands are driving significant and accelerated growth. "In our view, the energy transition is on the verge of dramatic market evolution."

The foundation of Smart Wires' technology was laid following The Northeast Blackout in 2003, which left 55 million people across eastern Canada and the United States in the dark. The prestigious power systems engineering program at Georgia Tech University developed a smart power flow control concept that became an early version of the first-generation PowerLine Guardian®. This new technology was seen as a critical step forward in making grids more efficient. A partnership of some of the largest and most-respected utilities converged around this idea and

launched Smart Wires. The result was an award-winning product that began to change how utilities thought about the need for flexibility on their grids and served as the foundation upon which Smart Wires was built. To meet these needs, Smart Wires' global product team of more than 200 innovative, engineering minds brought SmartValve™ to life. This technology revolutionizes the power flow control landscape with a transformerless device that offers 600 times the impact – at 5% of the cost – compared with the first-generation product.

Mr. Wells joined the company in January 2021 from GE Renewable Energy, where he served as Chief Executive Officer of Onshore Wind for the Europe and Sub Saharan Africa (SSA) Region. An accomplished power industry executive, he has more than three decades of global leadership experience in renewable energy products and services and manufacturing.

Mr. Wells explains that Smart Wires partners with electric utilities across the globe, helping them to solve their biggest challenges, achieve their strategic objectives, and evolve their grids with flexible, high-impact solutions. "Utilities continue to wrestle with challenges far more difficult than those encountered in previous decades of grid operation – integrating more renewables, increasing flexibility and stability, and improving inter-regional power transfers, while reducing constraints, costs, and environmental and community impact. This is where Smart Wires comes in. With our innovative technology and advanced analytics, we maximize the grid's capacity. This means more renewables, at

a lower cost and with less disruption to communities and the environment."

Smart Wires recently announced a partnership with Ireland's Transmission System Operator, EirGrid, and the research and development consortium Electric Power Research Institute (EPRI) on a groundbreaking project aimed at boosting the flow of renewable energy on the electricity grid. The project is part of the SEAI National Energy Research, Development & Demonstration Funding Programme 2019. As part of this two-year project which started in January 2021, with total budget of almost €300,000, Smart Wires aims to develop sophisticated software tools that will enable EirGrid to increase the wind and solar power that can be transported on the grid. EirGrid will provide transmission system data required for the development and testing of these tools and along with EPRI will be providing subject matter expertise. Ireland's target for the average amount of renewable energy is 70% by 2030, significantly higher than today's average of just over 40%. The use of Smart Wires' modular power flow control (MPFC) technology on the transmission system can be an enabler of this ambitious 70% target. The development of software tools and expertise to allow coordinated control of MPFC devices will enable the control centre operators to optimize the use of this technology, and the electricity network as a whole, to maximize the amount of renewable energy that can be transported on the grid.

By the end of the project, Smart Wires expects to have developed advanced tools that will have been tested by EirGrid, and can be rolled out to grid operators across the world. With these tools, system operators will be better positioned to manage the complexities of



a grid with very high-penetration of renewable generation by optimizing the use of digital power flow controllers to help resolve constraints, enable a greater integration of renewable energy, and reduce the need for new infrastructure. With Smart Wires having been engaged in some high-profile projects in Europe, Australia, and North America, gaining industry recognition on an international level, Mr. Wells feels that they are at a clear inflexion point in our journey, where technology, product capability and market demands are driving significant and accelerated growth. "We're focused on two key things: technology adoption and scaling. On the first, we have invested in developing, applying and proving the technology for a decade and have over 2,500 device-years accumulated to-date. This proven development combined with growing market demand shows us that we are at an inflexion point for rapid technology

adoption. On the second, we have invested in the right footprint for the next 18-24 months and will continue to invest for the geographic and market expansion to come. In this way, we can scale with confidence in the quality of our product and service, as well as our capacity for growth. As we continue to grow and support electric utilities across the world to drive the energy transition forward, we will also continue to diversify in our geography, customer segments and offerings."

SMART WIRES

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The nuclear recycling specialists

Orano Group was born in 2017 from the Areva split. The reactors and service branch, renamed Framatome, has become a subsidiary of EDF. Orano, managed by CEO Philippe Knoche and which employs 16,500 people, has inherited the nuclear fuel cycle, from mining to recycling. The company has been transforming and recycling nuclear materials for over 50 years and continues to build on this legacy: its recycling technologies are now adopted and developed by multiple countries around the world. In one notable project, Orano has signed a set of contracts with the German utility companies PreussenElektra, RWE, ENBW and Vattenfall for a total amount in excess of 1 billion euros, for the return of all the German nuclear waste still stored at the Orano la Hague plant. These contracts also allow for the settlement in full of all past commitments made in relation to the German utility companies' nuclear waste.

French uranium mining and nuclear fuel group Areva split into different businesses in 2017, with the nuclear materials development and waste management business rebranding itself as Orano in January 2018. Orano refers to uranium, the core of the firm's business, and its new circular yellow logo references the yellowcake uranium concentrate that it extracts from the ore.

As the world's leader in reprocessing and recycling, Orano's expertise today provides its customers with efficient, safe and responsible management of used nuclear fuels. By recovering the 96% of re-useable materials (95% uranium and 1% plutonium) in used fuel, Orano can recycle the material and manufacture new fuel, such as mixed oxide fuel (MOX), for nuclear reactors.

Two sites address the used fuel processing and recycling needs of electricity customers. Located about 15 miles west of Cherbourg-en-Cotentin, the site in la Hague carries out the first stage of recycling used fuel from nuclear reactors. It is the first industrial centre of its kind in the world. Located in the Gard, the Melox site manufactures Mixed OXide (MOX) fuel assemblies designed to supply light water reactors in different countries. Melox is the world leader in this market with more than 2,800 tons produced since the start of the plant.

Since 1972, 44 commercial reactors worldwide have been loaded with MOX fuel, including 38 in Europe (22 in France, 10 in Germany, 3 in Switzerland, 2 in Belgium, 1 in the Netherlands). In the Netherlands, the only nuclear power plant is operated by EPZ, a long-time client of Orano, which chose to recycle used fuel to reduce its volume of waste.



Orano also has a long history with the four German utilities that it recently signed new contracts with. Between 1977 and 1991, contracts for the treatment of used fuel were signed with them. These contracts resulted in the recycling of fuel elements from German nuclear reactors and in the conditioning of the residual waste. Under the contracts, 5,310 metric tons of fuel were processed at the Orano la Hague plant, thereby contributing to funding a share of the construction costs for the facilities.

In accordance with the terms of the new contracts, the equivalent in mass and radioactivity of this waste contained in the used fuel elements must be returned to Germany. Over 97% of the total radioactivity has already been sent back to date. After consultation between the German utilities and Orano, with the agreement of the German and French authorities, the balance in radioactivity and mass equivalent will be returned in the form of high activity vitrified waste and used packages by 2024. The entry into force of the signed contracts is subject to the formal agreement of the German and French governments.

According to Orano, the recycling of nuclear materials will continue to develop. The company points out that

over 50 years ago, the nuclear industry was one of the first sectors to introduce recycling in order to reduce the volume of waste generated and save on materials. As a result, in France 10% of nuclear electricity is generated using recycled materials. This makes sense as nuclear materials are substances that have a very considerable energy potential and retain significant value even after being used in the nuclear reactor fleet. Thus, 300 grams of depleted uranium from the transformation of uranium into nuclear fuel or 1 gram of plutonium extracted from nuclear fuels produce as much energy as one tonne of crude oil.

All forms of recyclable material (depleted uranium, uranium and plutonium) have been reused in the past, and, according to Orano, will be reused in the future. The stockpile of depleted uranium in France equates to eight years' worth of consumption of electricity produced by the country's nuclear reactors. Uranium from recycling will again be recycled in reactors from 2023, increasing the amount of electricity produced with recycled materials to more than 20%.

As for plutonium, it is already being recycled in reactors today. An R&D program combining studies and

experimentation is being conducted by Orano alongside EDF and the CEA with a view to recycling plutonium several times over. The program aims to load a first test assembly into a reactor by 2025-2028, as stipulated in the industry agreement signed in January 2019.

Orano claims that with the reuse of these materials, it will be possible to generate up to 30% of nuclear electricity from recycled materials compared to the current 10%. This will make it possible to produce low-carbon electricity while economizing on raw materials and reducing the radiotoxicity and volume of the most highly radioactive waste. The cost of this activity represents less than 2% of the overall electricity bill.



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Serving the growing biotechnology community

BioAgilytix Labs, LLC, a leading global contract research organization focused on supporting its pharmaceutical and biotech partners in all stages of large molecule drug development, continues to grow its footprint both organically and through acquisitions. Jim Datin, their President and CEO, explains why the recent addition of MicroConstants and Australia-based 360biolabs® to its family of companies fits in with their mission to serve as a one-stop bioanalysis partner to customers worldwide.

Founded in 2008 as a bioanalytics lab in Durham, North Carolina, BioAgilytix today is a leading global contract research organization focused on supporting pharmaceutical and biotech partners across all phases of drug development. With locations in Durham, North Carolina; Boston, Massachusetts; San Diego, California; Hamburg, Germany and coming soon to Melbourne Australia, the company provides PK, immunogenicity, biomarkers, and cell-based assay services supporting the development and release testing of biologics across a number of industries and disease states. “Our key strengths and differentiators remain Biology, Agility and Analytics,” says Mr. Datin, who joined the company in 2013, bringing to the table many years of experience in the Pharmaceutical, Life Sciences and Biotech industries. Over the course of his 25+ year career, he has been a successful CEO, director, and executive

in companies throughout the United States, Europe, and Asia. He is confident about the growth potential for BioAgilytix. “Our trusted scientific office, clinical expertise and deep bench of tenured experts keep a laser focus on quality, enabling our teams to deliver valuable scientific data on time, the first time. We remain as motivated as ever to helping customers get their beneficial therapeutics to patients faster.”

In November 2018, BioAgilytix was purchased by the private-equity firms of Copeba and GHO Capital. By then, BioAgilytix had already grown to become a recognized global leader in large molecule bioanalysis. The new ownership provided increased funding and resources to meet growing demand for its high-quality services, driven by its strong scientific reputation and leading expertise in biologics development. The company has since not only expanded and enhanced its own facilities, but also

acquired Cambridge Biomedical in 2019, and MicroConstants and 360biolabs® in 2021.

“Our growth, whether organically or via disciplined, aligned acquisitions, is all focused on providing our customers with a wider, expanded menu of services and capacity to help get their therapeutics to patients, faster,” explains Mr. Datin. “Our recent acquisition activities enable us to quickly expand our capacity and footprint into important geographic hubs where our client base is located. And by expanding our expertise and services into new areas such as small molecules, virology testing and other platforms, we’ve evolved into a one-stop bioanalysis partner.”

MicroConstants, known moving forward as BioAgilytix San Diego, is the largest bioanalytical LC/MS/MS lab on the US West Coast at 34,000 sq. ft. (3,000 m2). With its location in close proximity to high-value pharmaceutical and biotech marketplaces, BioAgilytix San Diego focuses on regulated bioanalysis and DMPK for small and large molecule therapeutics. It serves clients across the pharmaceutical and biotech industry and has deep expertise in bioanalytical testing services with over 20+ years of experience performing GLP compliant bioanalytical services. The business will complement BioAgilytix’s already impressive contract research services for the pharmaceutical and biotech industry, as Mr. Datin explains. “We believe that by joining forces, BioAgilytix and MicroConstants will not only create significant scientific and operational synergies, but also better serve the growing biotechnology community on the West Coast. Most importantly, our customers and their patients will benefit from the leading-



edge science the combined company will bring to market.”

360biolabs® is Australia’s most comprehensive specialty laboratory services organization for therapeutic, vaccine and diagnostics development. Located in Melbourne’s biomedical and clinical research hub, it offers world-class virology and immunology expertise, with BSL 2 and 3 laboratories, biomarker and immune monitoring capabilities with a state-of-the-art flow cytometry suite, molecular biology PCR suite and expansive bioanalytical LC/MS/MS capabilities.

Melbourne, Australia is an important Asian biotech hub, and the acquisition of 360biolabs will enable BioAgilytix to be a part of the continued growth of this region. “Our existing network will gain access to 360biolabs services to expand our offerings to current BioAgilytix clients and we will leverage our global network of labs to support growth in the region. Plus, with the addition of the BSL-3 facility in Melbourne, we will be able to conduct a wider array of vaccine and anti-viral work within our existing BioAgilytix network,” says Mr. Datin. BioAgilytix has begun integrating its new colleagues from MicroConstants and expects the acquisition to bring immediate customer benefits. “For 360biolabs, any integration activities must await Australian government FIRB approval, expected later this year,” Mr. Datin points out. “Due to the unique brand equity that the company enjoys in the region, it will be known moving

forward as 360biolabs, a BioAgilytix company.”

In closing, via both organic growth and aligned acquisitions, BioAgilytix continues its growth trajectory and evolution into a leading global contract research organization. “We are proud to offer customers an end-to-end and comprehensive portfolio of laboratory services located in key geographies around the world, all while continuing to maintain top client satisfaction scores and enviable employee retention rates,” Mr. Datin concludes.

The company’s evolution hasn’t gone unnoticed: BioAgilytix was recently ranked number 1939 on Inc.’s annual Inc.

5000 list, the most prestigious ranking of America’s fastest-growing private companies that achieved significant percentage growth of annual revenue over the three previous years. 2021 marks BioAgilytix’s eighth appearance on the list since 2013. 2021 reflects continued ranking improvement, as the most recent two years ranked BioAgilytix at #2951 (2020) and #1968 (2019).

BioAgilytix 

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Providing treatments where none currently exist

10,000 patients in the developed world will be very happy to hear about Ultragenyx Pharmaceutical's announcement that the U.S. Food and Drug Administration (FDA) and the European Commission have granted Orphan Drug Designation for UX053 for the treatment of Glycogen Storage Disease Type III (GSDIII), a metabolic disease caused by a glycogen debranching enzyme (AGL) deficiency that results in glycogen accumulation in the liver and muscle. An Ultragenyx spokesperson notes: "At Ultragenyx, we work to match the best treatment modality with each disease."

Founded in 2010, Ultragenyx is a biopharmaceutical company based in Novato, California, involved in the R&D of novel products for treatment of rare and ultra-rare genetic diseases. Dr. Kakkis is Chief Executive Officer, President and Founder of Ultragenyx Pharmaceutical. The company went public in January 2014 and has grown to more than 700 employees. Ultragenyx now has two approved therapies for rare diseases, Crysvida® for XLH and Mepsevii® for MPS VII.

Ultragenyx' spokesperson adds: "Ultragenyx has a reputation for acting with urgency to deliver new rare disease medicines to patient

communities with few or no available treatment options, and for working tirelessly to ensure patients can access these therapies. Our research and development engine and prowess have resulted in three approved drugs in four indications in the first ten years alone." In July 2021, Ultragenyx received Orphan Drug Designation from the FDA and European Commission for UX053, an Investigational mRNA-therapy for the treatment of GSDIII. Enrolment in a Phase 1/2 clinical trial evaluating the safety, tolerability, and efficacy of UX053 in adults with GSDIII is expected to begin in the second half of 2021. mRNA molecules carry the genetic

information needed to make proteins. According to Ultragenyx' spokesperson, the company works hard to match the best treatment modality with each disease. "mRNA has unique properties that allows us to tackle diseases in ways superior to other modalities. For example, using the mRNA platform for enzyme replacement allows the protein to get places we cannot readily achieve by giving the enzyme directly. Certainly, the COVID-19 vaccines have demonstrated the promise and safety of mRNA science. We were an early investor in this technology through our research collaboration agreement with Arcturus in 2015. Our lead mRNA program, UX053, is focused on glycogen storage disease (GSD) type III, in which a mutation in the AGL gene leads to glycogen accumulation in the liver and muscle."

Glycogen Storage Disease Type III, or GSDIII, is a disease caused by a



Ultragenyx Receives Orphan Drug Designation from FDA and European Commission for UX053, an Investigational mRNA-therapy for the Treatment of Glycogen Storage Disease Type III

ultragenyx
pharmaceutical

glycogen debranching enzyme (AGL) deficiency that results in glycogen accumulation in the liver and muscle. GSDIII can cause hepatomegaly, hypoglycemia, hyperlipidemia, some progressive liver cirrhosis, and skeletal and cardiac muscle disease. There are no approved treatment options for GSDIII and the current standard of care is a strict diet, including frequent doses of corn starch, to reduce the risk of hypoglycaemia.

The FDA Orphan Drug Designation program provides orphan status to drugs and biologics that are intended for the safe and effective treatment, diagnosis, or prevention of rare diseases that affect fewer than 200,000 people in the U.S. Among the benefits of orphan designation in the U.S. are seven years of market exclusivity following FDA approval, waiver or partial payment of application fees, and tax credits for clinical testing expenses conducted after orphan designation is received. The European Commission grants orphan drug designation for medicinal products intended to treat life-threatening or chronically debilitating conditions that affect fewer than five in 10,000 people in the European Union and when no satisfactory method of

diagnosis, prevention or treatment of the condition can be authorized. The designation provides certain benefits and incentives in the EU, including protocol assistance, fee reductions, and ten years of market exclusivity once the medicine is on the market.

"There is a lot of work to be done in the rare disease space," says Ultragenyx' spokesperson. "In fact, there are approved therapies for only about 5% of the estimated 7,000 rare diseases." In the U.S. alone, there are an estimated 25-30 million individuals living with a rare disease, and the impact that a rare disease can have on a family is tremendous. "We now have one of the broadest clinical portfolios among rare disease companies in terms of modalities and indications, and one of the most prolific late-stage pipelines in rare disease. We are now on track to initiate four pivotal clinical trials in the coming months. These include: Phase 3 studies for two of our gene therapy programs, DTX401 in GSDIa (the most common genetically inherited glycogen storage disease) and DTX301 in Ornithine Transcarbamylase (OTC) Deficiency (the most common urea cycle disorder); a seamless Phase 1/2/3 study for gene therapy UX701 in Wilson Disease; and a Phase 2/3 pivotal study

for the monoclonal antibody UX143 in Osteogenesis Imperfecta."

In addition to moving new therapies through development, Ultragenyx is focused on expanding access to its approved drugs for any patient who needs them regardless of where they live. "We have also invested significantly in gene therapy because we believe it offers the best shot at long term management of disease with a single dose. We have a proprietary gene therapy manufacturing platform, the HeLa producer cell line platform, which supports rapid and cost-effective development of new therapies, and we are building our own gene therapy manufacturing plant in Bedford, Massachusetts, that is expected to be completed in 2023," Ultragenyx' spokesperson concludes.

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Building a renewable energy movement

Furniture retailer IKEA is branching out to become a renewable energy supplier with its STRÖMMA subscription service, which is set to bring wind and solar power to Swedish households from September. Launched in partnership with Svea Solar, the scheme will see the companies purchase electricity on the European power exchange Nord Pool before selling it on without a surcharge in order to reduce the cost to the end-user. IKEA says it aims to its clean energy services globally and create the world's "biggest renewable energy movement", in a bid to cut down the 10 billion tonnes of carbon dioxide equivalent (CO₂e) that are generated by lighting, heating and cooling our buildings every year. "IKEA is a home furnishing company, and we want to make it easier for more people to live a more sustainable life at home. Today we offer smart and energy efficient products and services that contribute to prolonging the life of products, reducing waste, saving water, and eating more healthily, as well as reducing electricity usage. Providing solar and wind power at a low price to more people feels like the natural next step on our sustainability journey", says Bojan Stupar, Sales Manager IKEA Sweden.

IKEA is the world's largest furniture retailer and has been for the last decade. The company has put sustainability front and centre, with a 'People & Planet Positive' roadmap describing the sustainability agenda for the total IKEA value chain.

The recently announced STRÖMMA subscription service forms part of IKEA's wider mission to become climate positive by 2030 by reducing more

greenhouse gases than the value chain emits, in line with the objectives set out in the Paris Agreement. By 2030, IKEA wants to "inspire and enable more than 1 billion people to live a better, healthier and more sustainable everyday life within the limits of the planet."

Emissions generated by customers while using IKEA products will also factor into this, according to the

Swedish company. Its customers' use of its products account for around 20 per cent of IKEA's total climate footprint – from appliances, lighting and electronics such as speakers and so on. Making these products more eco-friendly is an on-going effort. IKEA stopped selling non-LED lights and will soon drop non-rechargeable alkaline batteries, for example. The company now even offers a plant-based alternative to its famous Swedish meatballs: the HUVUDROLL, launched in August 2020, is meat-free and has only 4% of the climate footprint compared to the ingredients of the traditional meatball, with the same taste, texture and price. To transport these products in a more environmentally friendly manner, IKEA is investing in increasing the share of alternative fuel consumption. Italy and France are now using liquefied or compressed biogas for heavy duty transportation of IKEA products. This results in a reduction of -80% CO₂ eq, compared to normal diesel trucks, according to IKEA's 2020 sustainability report. By the end of FY20, IKEA product production achieved a 15.5% reduction in climate footprint in absolute terms compared to baseline FY16, due to the increase in renewable energy and phase-out of coal.

Meanwhile it's also investing heavily in renewable energy to power IKEA stores around the world. Since 2009 Ingka Group, the largest IKEA retailer, has invested EUR 2.5 billion in renewable energy and it recently announced it has generated more renewable energy globally than it consumed in own operations, landing at 132% globally, thanks to investments in solar and wind technology. Ingka Group earlier



this year acquired a 49% stake in 8 solar PV parks in South-West Russia, marking the first large-scale foreign investment into renewable energy in Russia by a non-utility company. The energy capacity of the parks equals 160 megawatts, and it will provide enough electricity to power all 17 IKEA Stores in Russia. The company will also launch a programme in India, Poland and China this year, helping suppliers there transit to 100 percent renewable electricity. Under this initiative, IKEA will invest and support nearly 1,600 direct suppliers. Closer to its Swedish home, IKEA has unveiled plans to open a new sustainable store in central Copenhagen. The store will have a public rooftop park, 250 trees, 1450 sqm solar panels and parking for over 760 bikes.

In addition to investing considerably in making its own operations more sustainable, IKEA also wants to make green energy more accessible for consumers. Through its partnership with Svea Solar, the company is currently active in the PV sector in Sweden, through the sale of its "Solstråle" PV modules. The Solstråle service is already offered in other countries where IKEA has signed partnership agreements with local installers to enable the sale of

complete, turnkey home solar rooftop systems. It is currently available in 11 countries.

Svea Solar is also IKEA's partner in the rollout of STRÖMMA, an all-new subscription service which is set to bring wind and solar power to Swedish households from September. As part of a STRÖMMA subscription, households will pay a fixed monthly fee alongside a variable rate, both of which are as yet undisclosed. An accompanying app will allow users to track their electricity usage as well as offering those who own IKEA solar panels the option to sell their excess energy back to the grid.

The STRÖMMA offer in Sweden has a combination of electricity produced by solar and wind, the Good Environmental Choice label from the Swedish Society for Nature Conservation, which shows that the electricity meets the society's strict environmental requirements.

"By only selling electricity from plants that are no more than 5 years old, we put pressure on the market to expand electricity production from solar and wind power," Mr. Stupar elaborates. "In combination with the Good Environmental Choice certification, we also have a strong offer that takes other





sustainability aspects into account. At the same time, we make it as easy as possible for our customers to make a choice that is good for both the climate and their own wallets. We are doing this by offering a simple package, with a mix of solar and wind. Customers don't have to go into all the details themselves but can rely on us to offer a product that is good for the climate."

While Sweden is the first market to roll out STRÖMMA, the company is considering a global rollout of the subscription service. "Based on the experiences we gain in Sweden our ambition is to explore the possibilities to offer similar solutions in other countries," Mr. Stupar confirms. "IKEA today offers solar panels in 11 countries and by 2025 we want to enable

customers in all Ingka Group markets to use and generate more renewable energy through our different IKEA clean energy services."

This is in line with their wider mission and vision, he adds. "IKEA wants to build the biggest renewable energy movement together with co-workers, customers and partners around the world, to help tackle climate change together. With the ambition to become fully circular and climate positive by 2030, using renewable energy and resources, IKEA sees that the future of energy is renewable and wants to make electricity from sustainable sources more accessible and affordable for all, through our energy services offers."



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Powered back support from Japan

Japan-based INNOPHYS has developed a range of power suits that enhance the ability of its wearer, in construction, agriculture, and other sectors where heavy lifting is a daily necessity. The Muscle Suit is a powered hip exoskeleton that uses pressurized air stored in a cylinder attached to the back. "Our latest model Muscle Suit Every, launched in November 2019, has become widespread in Japan, and with the start of active overseas development in 2020, the total number of units shipped in the series has surpassed 20,000," says Mr. Masaru Yoda, Head of International Business at INNOPHYS. "In addition, we have expanded the scope of our products beyond back support with the Muscle Suit GS-ARM in May 2021, which supports the upper arms." Mr. Yoda is currently in the process of expanding their international distributor network, notably in Europe and North America.



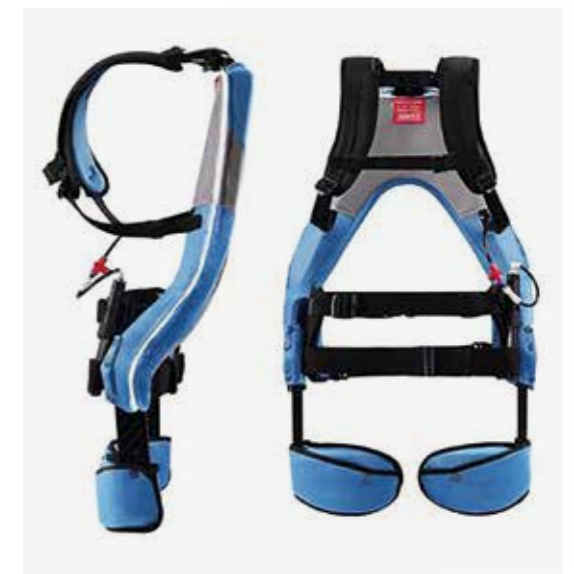
INNOPHYS was founded by Dr. Hiroshi Kobayashi, a professor at Tokyo University of Science. The company's goal is not to create "dreamlike robots" that allow people to fly or lift 100kg objects with one hand, but to create "robots for actual people lives" that address the problems of working people and reduce the burden on their bodies, as Mr. Yoda emphasises.

What makes their robotics technology unique, in his view, is that it uses McKibben-type artificial muscles to provide a strong assistive force without the use of electricity. "In addition, the price of the product is less than a third of conventional exoskeletons, which has expanded its use to small and medium-sized enterprises and small stores. It is ideal for heavy lifting work in manufacturing and logistics, transferring help for elderly people in nursing care, and work that requires a mid-back posture for a long time, such as agriculture."

INNOPHYS currently sells Muscle Suit Every in France, Spain, Italy, Malaysia, China, Korea, Hong Kong, Taiwan and Japan. "We form partnerships with local distributors who have strong connections in the manufacturing, logistics, nursing

care, and agricultural industries in each country," says Mr. Yoda. "In particular, we want to strengthen our expansion in Europe and North America. We are still looking for new partner companies in those regions. The ideal partner for us is a company that has a strong desire to expand exoskeletons together with us, regardless of the size of that company. We have not been able to achieve true product penetration with partners who simply see exoskeleton as "one of many new businesses". On the other hand, with partners who want to improve the working environment by promoting exoskeleton, we have been able to achieve good product penetration even though the current company scale is small."

The market conditions are favourable, according to Mr. Yoda. "For many countries, it is now more necessary than ever to reduce the physical burden of workers and improve productivity. We would like to contribute to the improvement of the working environment all over the world with our products. To achieve this goal, we plan to increase our overseas sales volume to the same or higher level as in our home market, Japan, within the next three years."



INNOPHYS Co., Ltd.
 Website: www.INNOPHYS.co.jp

Next-generation cell-free DNA testing

Natera, Inc., a pioneer and global leader in cell-free DNA testing, has received pathway to future coverage for the Prospera donor-derived, cell-free DNA (dd-cfDNA) test to determine transplant rejection status in multiple organs. Natera has performed over 3 million cell-free DNA (cfDNA) tests and has published more than 50 papers studying over 1 million patients. “We’ve built a very powerful technology platform that’s been proven across women’s health, oncology and organ health indications,” says Steve Chapman, CEO of Natera. “Helping physicians non-invasively detect rejection of transplanted organs may improve the quality of life for the hundreds of thousands of patients living with organ transplants.”

Natera was founded in 2004 and is headquartered in Austin, Texas. Its cfDNA technology platform approach has turned the company into a pioneer in non-invasive blood-based testing in a variety of applications—each with their own potential to revolutionize care for patients. Natera’s team includes clinicians, scientists, biostatisticians, researchers, and laboratory professionals from around the world.

cfDNA can be found in everyone’s blood. Not only do our own cells release it, so do fetal, tumor, and donor organ cells. Using a simple blood draw, Natera’s technology precisely detects each of

these types of cfDNA providing the insight to proactively inform treatment. With a track record of constant innovation over the last 15 years, Natera’s technology has performed more cfDNA tests than any other.

A company spokesperson explains: “Natera is a pioneer in cell-free cfDNA testing with more than 3 million cfDNA tests performed to date. We have built a powerful cfDNA technology platform that allows detection down to a single molecule in a tube of blood, and is versatile enough to be applied to a wide range of conditions. We started by applying this technology to detect

fetal DNA in the mother’s bloodstream. Since then, we have extended our core technology to transplant medicine, with Prospera, a clinically validated test for the assessment of kidney transplant rejection. This test can detect and differentiate between donor DNA and patient DNA. It’s based on Natera’s same model of success as the market leader in non-invasive prenatal testing, which can differentiate between fetal and maternal DNA.

Hundreds of thousands of patients are on transplant waiting lists across the USA. There is a need to help ensure that transplanted organs are successful for patients. As an example, out of the 20,000 kidney transplants that are performed every year, close to half fail within 10 years. Current tools for detecting transplant rejection, such as serum creatinine, are not as sensitive and may require more invasive testing. There’s a significant unmet need for better tools for monitoring the health of a transplant, and Natera’s long-term goal is to meet this need.



Photo: Natera

How Prospera Works

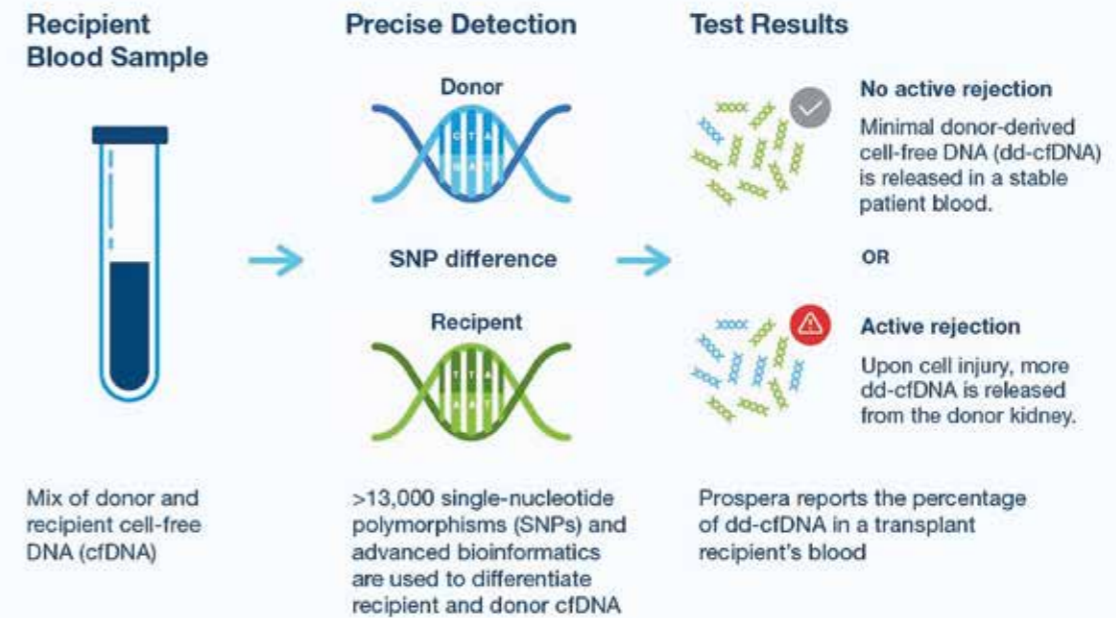


Photo: Natera

Complementing Natera’s scientific and medical expertise in cfDNA is the company’s commitment to the patient experience by offering a suite of complementary, patient-friendly digital health services. A patient can simply click a button to get a consultation, order a test, schedule an at-home blood draw and connect with our patient portal.

The Prospera test is validated and highly accurate. The test works by measuring the fraction of donor-derived cell-free DNA in the recipient’s blood. It may be used by physicians considering the diagnosis of active rejection, helping to rule in or out this condition when evaluating the need for diagnostic testing or the results of an invasive biopsy. Prospera has been clinically and analytically validated for performance regardless of donor relatedness,

rejection type, and clinical presentation. The tests described have been developed and their performance characteristics determined by the CLIA-certified laboratory performing the test. The tests have not been cleared or approved by the US Food and Drug Administration (FDA). Although FDA is exercising enforcement discretion of premarket review and other regulations for laboratory-developed tests in the US, certification of the laboratory is required under CLIA to ensure the quality and validity of the tests.

“According to our internal estimates, we have currently penetrated less than 10% of the approximately \$2 billion market, and we see a significant revenue opportunity for Prospera in the near term given the significant unmet need in transplant monitoring. Prospera

identifies antibody and T cell-mediated rejection, and assesses subclinical rejection. Prospera is able to flag false negative results in patients with active viral infections.

Natera’s goal is to improve the management of disease globally. “We are just getting started with our advancements in science and how we improve the possibilities for patients,” says Natera’s spokesperson. Prospera is optimizing Natera’s technology and growing at a rapid pace to ensure this capability is available to all transplant patients. “Our goal is to expand Prospera beyond kidney transplantation into other organ transplants in the very near future.”

“Natera truly cares about making a difference with their products, services and cutting-edge technology. For once, I felt like I truly belonged, and that my efforts were really adding value to the company’s mission. My team was full of amazing people.”

“Natera has talented set of people who are hardworking and willing to do what needs to be done. The culture here is great, people are nice, and I look forward to coming to work every day. There is so much to learn and so much to contribute.”

NATERA EMPLOYEES ON GLASSDOOR



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Leading managed cloud services

The shape of the internet is evolving. Increasingly immersive digital experiences require faster application performance and response times to delight consumers. To meet this need, Atlanta-based Cox Communications launched Cox Edge, a full stack edge-cloud computing service. Cox Edge delivers ultra-low latency compute solutions, helping customers to improve application performance and to reduce cloud transport and on premise infrastructure costs. Ron Lev, general manager of Cox Edge, and executive director of new growth at Cox, states: "Cox Edge offers the ability to serve our customers as a key technology partner and advisor beyond network connectivity to include a broader set of technology services."

Cox Communications is committed to creating meaningful moments of human connection through technology. The largest private broadband company in America, Cox proudly serves six and a half million homes and businesses across 18 states and is dedicated to empowering others to build a better future and celebrate diverse products, people, suppliers, communities and the characteristics that make each one unique. Cox Communications is the largest division of Cox Enterprises, a family-owned business founded in 1898 by Governor James M. Cox.

In the last 10 years, Cox has invested more than \$15 billion in its

communities through infrastructure upgrades to deliver video, phone and high-speed internet service to homes and businesses in the company's service area. Cox plans to invest \$10 billion in the next five years. Cox's in-kind and direct cash contributions totalled \$60 million dollars in 2016, with a community outreach focus on youth and education initiatives. Cox is a leader in customer satisfaction, earning a total of 34 awards from J.D. Power and Associates, including 10 consecutive wins for residential phone and 9 awards for business services. Also impressive is the fact that since 2012, Cox has connected more than 840,000 people to the internet through

the Connect2Compete program, most for the first time.

With the launch of Cox Edge, a full-stack edge-cloud computing service, Cox Communications is delivering to its customers' ultra-low latency compute solutions, helping them to improve application performance and to reduce cloud transport and on premise infrastructure costs. Technologies like the Internet of Things (IoT) and artificial intelligence drive the need for real-time processing and decision making. These and other innovations can benefit from bringing compute power closer to the action – to where users are engaging and to where sensor data is being created.

Ron Lev, GM at Cox Edge, is an executive with 18 years of international experience in developing, executing and operating technology growth strategies to enable the incubation and launch of new businesses and services at best-in-class telecom and media companies. He explains: "Across all



industries, companies are creating applications and user experiences that require workloads to be processed at the edge to unlock new levels of performance. With the launch of Cox Edge, Cox is proud to deliver these powerful services to developers and enterprises leveraging our network's proximity to businesses and consumers."

With the launch of Cox Edge, Cox Communication is bringing together a full-stack edge services and its global network assets and continuously expanding commercial product portfolio including, Cox Business telecommunication solutions, managed cloud services, complex network management for hospitality, healthcare, education, retail, media, and other verticals, giving them an edge in the digital race for the connected future. Lev explains that the growing number of

applications across industries requires real-time processing and decision making. "With the massive explosion of data being generated, coupled with the need for real time insights, it requires information to be processed closer to where it originates. With Cox's last mile footprint, we are uniquely positioned to deliver on these requirements to meet industry trends."

The shorter the distance between a data center and an IT device, the better the connectivity. The data will be faster at the data center for processing and the IT device therefore works faster and better. In edge computing, the data produced by the IoT devices is processed by the device itself, or on another device in its vicinity. The data is processed at the edge of the network, and not by a central processing system, hence the name edge computing. Only then, the data is sent to the central processing or

storage location to create a distributed system.

Cox Edge is a full-stack edge-cloud infrastructure service deployed from last-mile edge data centers, with offerings that will include Virtual Compute, Storage, Bare Metal, Edge CDN, Distributed Database services, Serverless computing, Distributed Containers, and Enterprise Kubernetes. The services are offered through an integrated user experience so that developers can easily augment their cloud or on premise deployments with edge capabilities.

Cox Edge offers the ability to serve its customers as a key technology partner and advisor beyond network connectivity to include a broader set of technology services. It also expands and compliments Cox's overall cloud services portfolio to focus on customer's need for low-latency compute that augments current internet and centralized clouds architectures. "Cox Edge also enables Cox Business to serve a broader commercial market expanding our reach in areas well outside our current network footprint," Lev concludes.



About Cox

Cox has approximately 6.5 million total residential and commercial customers
Total revenues of \$12.6 billion in 2020

Cox operates 6 cable systems in 18 states: Arizona, Arkansas, California, Connecticut, Florida, Georgia, Idaho, Iowa, Kansas, Louisiana, Massachusetts, Nebraska, Nevada, North Carolina, Ohio, Oklahoma, Rhode Island, Virginia

Cox has approximately 18,000 employees nationwide and 355,000 commercial customers



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Ready for take-off: urban air mobility

In preparation for life as a public company in mid-August, California-based Joby Aviation Inc. (Joby) opened an office in Washington, D.C. The new base, which will support collaborative work with U.S. policymakers and other aviation industry stakeholders, is equipped with a flight simulator that demonstrates operations with the all-electric eVTOL aircraft Joby plans to bring to the market in 2024. "The DC office will give Joby a great opportunity to collaborate with aviation and community stakeholders as well as to work with policymakers on the benefits of zero-emissions aviation and to support community-based planning grants for aerial ridesharing as well as the development of electric aviation charging infrastructure," says Greg Bowles, Joby's Head of Government and Regulatory Affairs.

Joby Aviation founder JoeBen Bevirt has spent more than a decade developing an all-electric, vertical take-off and landing passenger aircraft. The company came out of stealth mode in January 2020 when it announced a \$590 million Series C round of funding that was led by Toyota Motor Corporation. That round later expanded to \$620 million. In December 2020, Uber announced it agreed to invest a further \$75 million in Joby as part of a broader transaction involving the acquisition of Uber Elevate

by Joby and an expanded partnership between the two parent companies. The valuable partnerships with Uber and Toyota gave the firm steady funding in recent years and solidified its reputation in the field. In Q2 of 2021, Joby successfully closed its SPAC merger agreement with Reinvent Technology Partners, with a post-money valuation of USD 6.6 bn.

"Our vision is to create an aerial ridesharing service that saves a billion

people an hour a day," says Mr. Bowles. "That means people will get the time back that they've spent on long commutes. We envision a service that is accessible to all. Like any new technology -- the service will become more affordable as it scales. But even to start with, the aircraft will be more affordable to operate than traditional aircraft."

In 2020, the U.S. Air Force granted its first ever eVTOL airworthiness certification to Joby as part of its Agility Prime program. The company's flight test program has achieved over 1000 flights and it has begun the process to receive a Part 135 Air Carrier Certificate issued by the Federal Aviation Administration. The plan is to operate a ride sharing service on a FAA Part 135 operating certificate, which allows for on-demand commercial operations. Joby's flagship product is an eVTOL that



can fly up to four passengers. It has also flown its full-size prototype up to 150 miles on a single charge. The company says the top cruising speed will be up to 200 miles per hour and the aircraft can fly up to 15,000 feet above sea level.

Electric aviation is an industry with no shortage of competitors as startups work to unlock the secret behind electric urban air mobility. Joby is ahead of others particularly around safety, as Mr. Bowles emphasises. "Our aircraft is designed for safety with high levels of redundancy. With distributed electric propulsion, rather than having a single conventional gas-powered motor at the center of the aircraft with various mechanical linkages extending out to the propellers - we can distribute electric motors around the aircraft, locating a separate motor at each propeller. And we can fly safely with the loss of any one propeller."

Besides being safer, Joby's design also allows their aircraft to be quieter, he adds. "Electric motors operate at a range of RPM allowing us to manage volume and are generally quieter than conventional engines. The aircraft's low noise profile is a core design feature to prevent noise pollution in our communities. It is near silent in

overhead flight and 100x quieter than a helicopter at take-off. Low noise is critically important for community acceptance and will allow skyports infrastructure to be centrally located." Joby aims to operate eVTOL aircraft from skyports in dense urban areas in order to minimize the first and last mile to provide the highest possible time savings.

According to Mr. Bowles, Joby's aircraft will also be more affordable than a traditional airplane or helicopter. "Electric motors have less complexity and lower maintenance than conventional motors. They are also far more energy efficient, reducing energy and maintenance costs."

Joby still must complete certification of its aircraft and develop manufacturing facilities, but it is already on its way to achieving both. The company is also planning to begin construction on a 450,000-square-foot manufacturing facility, designed in conjunction with Toyota, later this year.

"While we are on the leading edge of the electric aircraft industry, it's important to work across the aviation community and with policy makers to assure the broad success of this emerging industry," says Mr. Bowles. "Our DC office allows us to collaborate

as we all work to enable a thriving new industry. Today, the public is demanding safe, environmentally friendly, accessible transportation solutions and we are enabling that. This makes it a great time to have a physical presence in DC as we work towards the certification of our aircraft and advocate for clean, quiet, and affordable air travel."

Mr. Bowles says they expect certification in 2023. The company submitted its Part 135 application for airline ops in July 2021. Pilot production is already underway to support production certification.



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Moving money to move the world

Designed to strengthen small, ethnically diverse businesses and enable them to thrive in a post-pandemic world, Fiserv, Inc., a leading global provider of payments and financial services technology solutions, announced in June 2021, that it has launched its Back2Business programme in the U.K. This ambition is part of a \$50 million global initiative to support small, ethnically diverse businesses. Back2Business is part of the Fiserv Forward Together Plan to further diversity and inclusion. It initially launched in the US in 2020, and so far, has provided grants to over 950 businesses. Nigel Motyer, SVP Global Business Solutions, Fiserv in EMEA explains that Fiserv has always had a focus on enabling small businesses to be successful: "As we believe they are the heart of the economy."

With its Global Headquarters in Brookfield, Wisconsin, Fiserv is a leading global technology provider serving the financial services industry, driving innovation in payments, processing services, risk and compliance, customer and channel management, and business insights and optimization. The company has earned a position as a global leader in payments and financial services technology by helping financial institutions, enterprises and small and mid-sized businesses across the globe to achieve a competitive edge through a commitment to innovation

and excellence. Nigel has a wealth of experience in the card payment business, having held a number of senior roles during his 30-year career: "Our areas of expertise include account processing and digital banking solutions; card issuer processing and network services; payments; e-commerce; merchant acquiring and processing and cloud-based point of sale solutions." He notes that during the past eighteen months there has been an unprecedented acceleration in electronic payments adoption, not only in mature markets but across emerging economies in Europe.

"Multiple pan-regional initiatives by different European bodies are fuelling this acceleration, focusing on instant and cross-border payments. Digital transformation has been at the core of the fintech space for several years and has been amplified by the continued move toward open banking, allowing more players to emerge, disrupt existing processes and fuel competitiveness." Whilst consumers rapidly adopt these convenient, usually mobile solutions, retail banks and incumbent players have invested in their digital transformation. "We undertook a digital transformation program for Santander Bank Polska (SBP), one of the largest financial groups in Europe, and the largest private bank in Poland," Nigel says. "We've helped our enterprise clients across multiple industries in Europe adopt alternative and mobile payments capabilities as an essential plan of their business models." He further explains that for instance, Fiserv enabled app-based payments for TOTAL Group in thousands of gas and



The Gym Kitchen owner Segun Akinwaleola receives a grant from Fiserv representative Sainabou Faal.



Proud Back2Business grant recipients Lanre and Bunmi Tawose of Jemmys Catering, with their children.

electric mobility stations across the region. "And early this year, Fiserv was selected to provide comprehensive management and service of the Polish challenger Nest Bank debit and credit card programs, including traditional and online card issuing and fraud monitoring." To also help small ethnically diverse businesses capitalize on the opportunity of reopening and returning to full operation after the global COVID-19 pandemic, the Fiserv Back2Business initiative has been expanded to the U.K. The programme launched in the United States in 2020 to strengthen small and ethnically diverse businesses and help them resurface stronger in a post-pandemic world. Successful grant applicants can use the grant for any purpose they choose, including technology investment, operational costs such as rent and payroll, premise redesign or marketing. Grants will be administered by the Association for Enterprise Opportunity (AEO), a global organisation that provides support

to underserved entrepreneurs and businesses. In order to be eligible for a grant, businesses must be majority owned by a person from an ethnically diverse background, located in the U.K. and have been in business prior to January 2020, with a revenue of less than £1,000,000 annually and 15 or fewer employees. Fiserv has designated \$50 million for investment in its Back2Business program and associated initiatives. So far over 950 ethnically diverse small businesses have benefited from the grants, which are



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usually in the amount of \$10,000 each and can also include consulting services and technology such as the Clover® point-of-sale platform from Fiserv. Back2Business is part of the Fiserv Forward Together Plan to further diversity and inclusion within Fiserv and in the communities where the company has a presence. As of June 2021, and in recognition of the importance of the ethnically diverse entrepreneurial ecosystem in the UK, each grant recipient can be connected to Fiserv community partners such as the London Chamber of Commerce and Industry and its Black and Asian Business Associations. The amount, variety, and relevance of resources that a participant can access make this initiative a unique one indeed. Nigel concludes: "As the economy recovers, we want to remain ahead of the curve hand in hand with our clients, equipping them across regions and sectors with best-in-class solutions that enable them to better serve their own customers."

Fiserv enables money movement for thousands of financial institutions and millions of people and businesses in a world that never powers down.

- 1.4B global accounts on file
- 100M digital banking users
- Nearly 6M merchant locations globally
- Touchpoints with nearly 100% of U.S. households
- More than 12,000 financial transactions per second
- Nearly 10,000 financial institution clients

Integrating business technology and doing good

As the largest integrated provider of business technology in the industry, Minnesota-based Marco has long been known for being a place where people love to work, translating into a great place to do business. Each year, Marco celebrates its Gold Standard culture with a week of activities. “We care about our people and our community and seek to demonstrate that every day,” says Dawn Zimmerman, EVP, Chief Marketing Officer at Marco.

Established in 1973, Marco started as a small typewriter shop in St. Cloud, Minnesota. Today, the company belongs to the top technology providers in the US, helping organizations of all sizes make the most of their voice, data, video and print technology. Marco is now one of the largest technology providers in the country with over 30,000 clients nationwide, specialized in business IT services, copier/printer solutions and managed and cloud services. Its technology experts break down

complex solutions into simple terms to position businesses for success.

As CMO, Dawn oversees marketing and communications, learning and development, and the company’s overall corporate strategy initiatives, brand and culture. She focuses on initiating strategies to share Marco’s brand across the markets it serves, identifying new opportunities and creating a compelling brand experience. She states: “Marco is the largest integrated provider of business

technology in the industry, with a focus on helping clients leverage our technical expertise and analytic capabilities to assess, implement and manage their technology. We have more than four decades of experience helping clients apply technology in a way that contributes to their success.”

‘Think like a customer’ is one of Marco’s mottos. The company takes the time to understand the needs of its clients to deliver the right technology solution paired with outstanding service and support. Utilizing client surveys, training and its Client Advisory Council helps this mission, next to many free educational resources, such as monthly blogs, questionnaires, and eBooks. Since 1994, Marco has consistently sent out monthly surveys and measured the results to make sure they’re doing everything they can to keep customers happy. “We’re proud to say that 91% of surveyed customers say they would recommend Marco,” the company proudly states.

Marco’s Managed IT Services offer high-end technical expertise that helps companies manage their complex infrastructures and end users. These security-focused services include unlimited help desk support, managed network services, security applications and training, risk management services and more. The services allow organizations to stay up to date with the latest business technologies without adding expenses or staff through receiving regular maintenance upgrades to their IT infrastructure and applications.

Dawn notes: “We are seeing an increased need for technology



volunteered their time and talents by designing and painting over 1,000 terracotta pots, planting flowers in each one, and hand-delivering them to residents at 35 senior living facilities. Dawn adds: “This was our first ever corporate-wide community service project that engaged employees, clients and community members in the 12 states we serve. We enjoyed coming together for a focused effort to do good and appreciated our social media followers for helping Marco select where we could make an impact within our communities.”

She ends by stating: “We plan continue to give back to our communities and grow our footprint nationally and continue to deliver relevant technology solutions that equip our clients to go further.”

integration, mobility and security as we are seeing a more decentralized workforce that needs to stay connected and collaborate to achieve the goals of the day and drive success overtime. We come alongside organizations to assess their environments, create technology roadmaps based on their goals and have the technical expertise to implement those plans.”

Living up to its belief to not only do well as a company but also to do good, Marco elevated its Gold Standard to a new level with a week of donating to non-profit organizations, with employees across 12 states volunteering, and spreading joy in local communities. Each year, Marco celebrates its Gold Standard culture with a week of activities. Marco’s goal this year was to make a difference in the lives of others who live and work in the communities where Marco is located.

Marco employees are encouraged to give back to their communities. They are paid to volunteer on company time

to non-profits they care about and have a voice in which causes the company supports throughout the year. “Giving back to our communities is not simply what we do at Marco, it’s who we are, and this has been a core part of our company since our inception in 1973, that continues to grow as our presence does,” Dawn says. “Gold Standard Week is one way we give back. This is not an initiative or project we do, it is our identity and we seek to live out service to others every day.”

Marco initiated its first Great Give Back, giving \$1,000 to 10 non-profits from the Dakotas to the East Coast for a total donation of \$10,000. The company selected non-profit organizations and asked its social media followers to vote for their favourite throughout the week. The two non-profits in each of Marco’s five regions that were the top vote-getters received a surprise donation to better serve those in need within their communities.

In addition to Marco’s monetary donation, Marco employees



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Shaping tech-enabled legal workflows

Litera, a global leader in legal technology and document workflow, has completed the acquisition of U.K.-based Objective Manager, a world-class software as a service strategic planning and performance platform that addresses needs within the legal market. The U.K.-based company has a strong presence in the U.K. and already empowers critical legal processes at 11 of the top 20 law firms in the country. The recently announced acquisition deal speaks to the goal of client retention by allowing a firm to work together and align on key strategic objectives, according to Haley Altman, a former law firm partner and global head of corporate development at Litera.

Founded in 1999, Litera originally started servicing the legal world from the perspective of document technology solutions. As it developed its technology and acquired products and platforms across the legal technology space, the company understood its work needed to begin before the first document was drafted.

“We looked at how we could expand from documents solution into more of the attorney workflow,” said Ms. Altman. Through technology products,

the company can assist attorneys as they manage matters, consider who they can rely on for expertise, and develop client relationships in the process. Through the addition of products and services, the company has expanded its footprint throughout the legal technology landscape.

Today, the company operates from four offices across America, Europe, and Asia. With a staff of over 600 workers, the company works with over 15,000 law firms in every geographic region.

Litera also addresses the needs of some of the biggest names across several industries in the corporate world, including Goldman Sachs, Amazon, AT&T, and United Airlines. In 2019, Litera Desktop exceeded 60,000 daily global users just one year after its launch.

“We’re really focused on understanding and solving the lawyer and legal teams’ problem,” said Ms. Altman. “We are really passionate about understanding this industry. We want people not to have to go to different solutions to do their work, where they constantly have to jump from system to system to accomplish a single workflow.”

Ms. Altman, an attorney by training who practised law for over ten years and was a partner at U.S.-based law firm Ice Miller, left law to start a company called Doxly in 2016. That

company, which focused on transaction management, was acquired by Litera in 2019. After the transaction, Ms. Altman took on a larger business development role within the company and now leads Litera in its merger and acquisition processes.

The acquisition of Objective Manager affords the Litera suite of products with a top-flight solution designed specifically for helping firms in the legal space manage their strategic planning and performance. The company was founded in 2011 by Ray Oldfield — then the COO of a major law firm — who understood technology could help support organisations as they aligned and collaborated around strategic company goals.

Last year, the firm added seasoned executive Arlene Adams as its CEO with the aim of expanding its presence

in the United States legal technology market. The firm has 35 employees in the U.K. who will join Litera following the acquisition.

“We are excited to join Litera and accelerate our platform presence in the broader North American market,” said Arlene Adams, CEO at Objective Manager. “We believe the addition of Objective Manager to Litera will enhance how we can help law firms use meaningful data to create great firm strategies alongside developing and retaining top talent.”

The Objective Manager platform can equip law firms with a more concerted strategic approach. Through the software as a service platform, the product is able to translate strategic boardroom plans into everyday habits, a process that can deliver a significant business impact for organisations.



“I think there’s a lot of integration opportunities between Objective Manager and some of the tools we



have in Foundation and Clocktimizer,” said Ms. Altman. “The data from each of these companies can make the experience of using each of the products even better. We think that the ability to connect those products and enhance the data in each of them is a tremendous opportunity for us to make these systems more seamless for law firms.”

In addition, the acquisition will allow Litera to leverage its presence and experience with U.S. law firms to support the expansion of the Objective Manager toolset in the region. The product will remain its own platform, but it will connect with the broader toolset offered by Litera.

“We’re really well-positioned to help them continue to grow, achieve their mission and goals,” said Ms. Altman. “We believe in that product and what they’re setting out to do, so we’re going to help them continue to grow it and then find ways to integrate the technology with the larger products. They bring a really great team that deeply understands the problem.”



Within the coming three to five years, the company will focus on listening to the issues and priorities that affect their customers in the law firm space and dedicate resources to understanding where technology products can provide best service to those needs.

“If we think solving those problems can be done by building or adding on to the solutions we have, that’s what we will do,” said Ms. Altman. “If the problems that they want us to solve are better served by acquiring a company with deep experience and knowledge in their area, then we’ll look at acquisitions as well. We’re really driven by what our customers want and need, and we just think about what the best way is to accomplish it.”

With regard to opportunities in the future, the firm guides its mergers,

acquisitions, and product decisions around addressing the most critical indicators for law firms today, including client retention, realisation rate, profitability, and end-user happiness.

“We’re really thinking holistically about problems that the attorney teams and the legal teams are facing within that firm,” said Ms. Altman.



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About Litera

Litera is a global leader in legal technology with 25+ years’ experience helping legal teams work more efficiently, accurately, and competitively. As a leader in document workflow, collaboration, and data management solutions, it empowers legal teams with simplified technology for creating and managing all their documents, deals, cases, and data using such products as Litera Desktop, Clocktimizer, Content Companion, Litera Compare, and others. For more information, visit litera.com or follow us on LinkedIn.



Customize your invoices

FreshBooks, a leading cloud accounting software with paying customers in 100+ countries, announced in June 2021, the availability of its Connector for Microsoft Outlook on Microsoft AppSource, an online cloud marketplace providing tailored line-of-business solutions. The Connector for Outlook will make it easier for small business owners to send invoices to their clients through an integration with Outlook. FreshBooks is also available through Microsoft’s channel partner Ingram Micro. “The Connector is unique in that it allows FreshBooks to provide invoicing features to businesses in the Microsoft ecosystem at no additional cost to the users,” George Kyriakis, Senior Director, Business Development at FreshBooks notes.

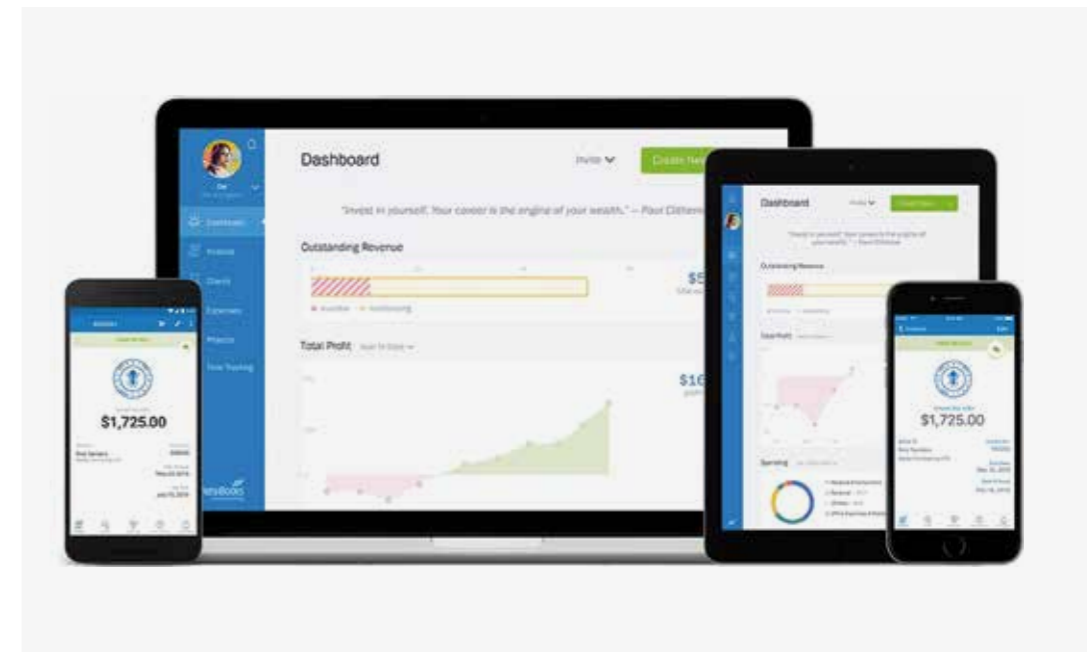
Established in 2003 in Toronto, Canada, FreshBooks now consists of 500+ employees in offices around the world. More than 24 million people in 160+ countries have used FreshBooks to make things like invoicing, expenses, collecting payments and financial reporting easier. Whether you’re just starting out or have been running an agency or firm for years, FreshBooks is designed exclusively for business owners, their teams and their clients. FreshBooks is changing the way business owners manage their books with an owner-first accounting platform that takes an easy-to-use approach to managing finances and client engagement. FreshBooks, known for its 10x Stevie award winning customer support, serves customers of all sizes from offices in Canada, Croatia, Mexico, Netherlands, and US.

With the availability of its Connector for Microsoft Outlook on Microsoft AppSource, FreshBooks’ customers can now connect their accounting software with their Outlook contacts, making it even simpler for business owners to send invoices to their clients and contacts. It meets the needs of users using Microsoft as their email provider (i.e. Office 365 and Outlook) allowing them to send invoices to their clients directly from their inbox.

With over 120 applications that connect data and workflows into FreshBooks, the long term vision of the company is to continue to grow that ecosystem of connected apps in a way that’s easy for its customers to find and use. George concludes: “Microsoft is a leader in software adoption around the world and we have a large overlap of users who use FreshBooks and Microsoft products such as Office365. Developing workflows between our apps helps our customers to become even more productive when using our tools together. This aligns with FreshBooks’ overall Partner strategy of connecting the applications our customers use, so that together they are better, and small business owners become more productive and competitive in their industries.”



Website: www.freshbooks.com



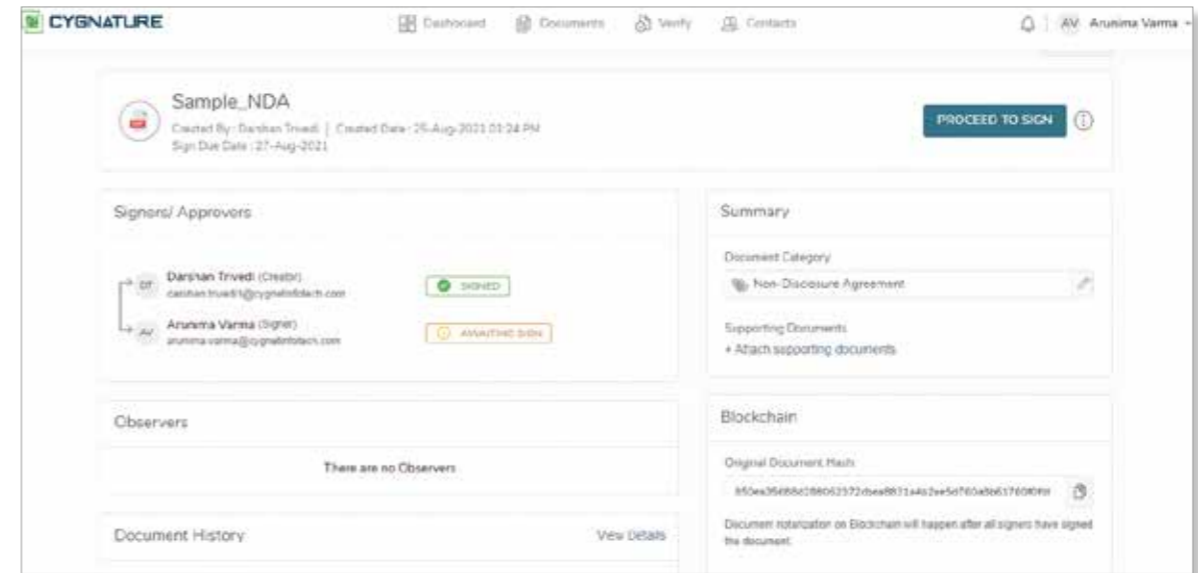
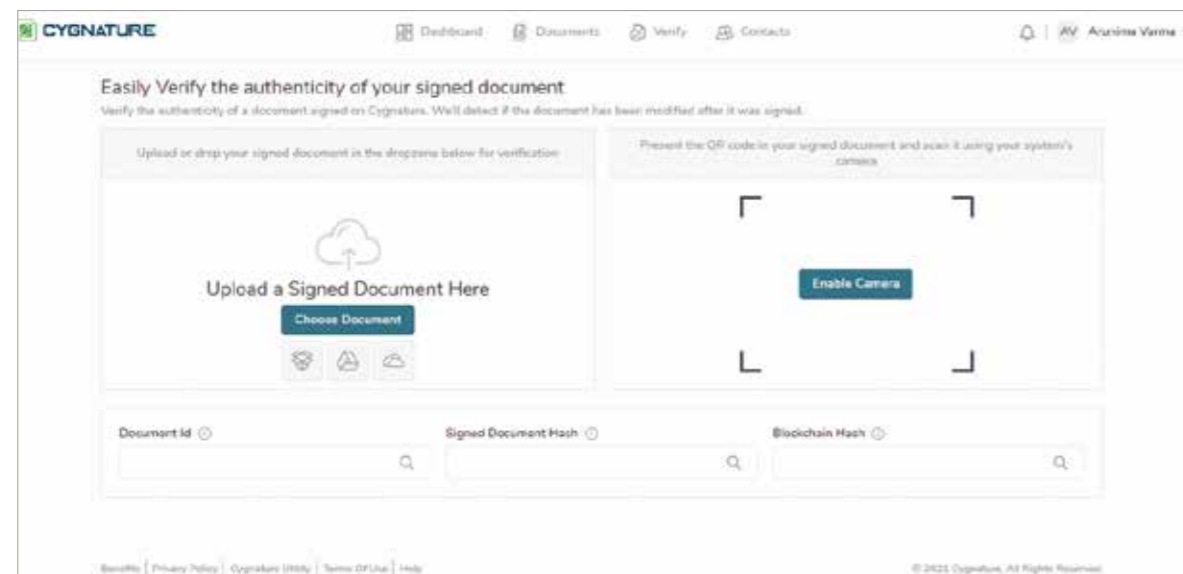
E-signing for a global audience

Cygnat Infotech, a global Technology Products & Services company, has partnered with Document Accounting Solutions (DAS), which is a One-Stop Office Solution for the professional and commercial markets throughout Africa. To offer an enhanced e-signing and document management capability, Cygnat Infotech's award-winning e-signing platform Cygnature together with DAS has created "Cygnature Node" for the 'Square9 Suite of products' Square9 is a leading developer of enterprise content management solutions. With this partnership, the customers of Square 9 can now use Cygnature through "Cygnature Node" available within the Square9 Global Capture and Global Forms modules. DAS being the exclusive reseller of this Cygnature node for Square9, will help make document signing process more accessible to Square9 customers according to Mr. Yogesh Lokhande, Head of Product at Cygnat Infotech.

Established in 2000, Cygnat Infotech works with clients across 35 countries and has teams across multiple regions. Its wide range of solutions include, Digital signing solutions, Tax Technology Solutions, Digital Transformation, Product Engineering, Robotic Process Automation, Test Automation, and more. Mr. Yogesh leads the growth efforts for Cygnature by Cygnat Infotech – an e-signing solution. "Cygnat Infotech decided to invest in developing a unique solution for electronic signing that would help companies to digitize their signing processes in various departments like legal, business, and human resources," he

explains. "The vision for Cygnature is to offer the widest range of signature types in a single solution to cater to the global audience." He emphasises that Cygnat Infotech's Cygnature provides strong data privacy. "There is robust encryption, secure data transmission, the ability to identify the signer, link the signer to the document, capture an irrefutable audit trail on blockchain, and protect the document against tampering. E-signatures ensure more secure, fraud-proof document signatures." In addition, Cygnature, by Cygnat Infotech, supports multiple types of

signatures like Electronic, Digital and Biometric. It is a feature rich and easy to use solution built on blockchain technology. It provides enhanced security, greater transparency, and easy traceability of signing processes, along with authentication of the signer's identity. It also safeguards documents from getting tampered. As a SaaS solution, it allows users to select different types of signatures depending on the purpose or sensitivity of the document or the legality of the signatures. "For instance, you can use simple electronic signatures for intra-office approvals, digital signatures for business contracts and biometric signatures for financial transactions," Mr. Yogesh points out, adding that Cygnature provides a comprehensive digital footprint of the signing transaction which includes the timestamp, browser version, operating system, IP address and even the latitude and longitude of the signer. "This evidence is strong enough for non-repudiation and can be used in the court of law in case of disputes. The documents are stored in the blockchain thus giving an added layer of security and trust."



Cygnat Infotech recently announced it has partnered with Document Accounting Solutions (DAS), which is a One-Stop Office Solution for the professional and commercial markets throughout Africa to offer an enhanced e-signing and document management capability to its customers. Cygnat Infotech's Cygnature together with DAS has created "Cygnature Node" for the 'Square9 Suite of products' Square9 is a leading developer of enterprise content management solutions. Thus, with Cygnature, DAS would be able to revolutionize the process for digital signing of contracts, legal documents, among others, for its customers. This will allow companies to increase productivity, security and compliance. "With this partnership, the customers of Square 9 can now use Cygnature through "Cygnature Node" available within the Square9 Global Capture and Global Forms modules. DAS being the exclusive reseller of this Cygnature node for Square9, will help make document signing process more accessible to Square9 customers.

Hence, providing a full suite offering to DAS's customers," Mr. Yogesh elaborates. Meanwhile Cygnat Infotech continues to introduce new features and reach more industries. "We now offer a compliance module for pharma companies to help them meet the 21 CFR Part 11 FDA compliance for GxP documentation," says Mr. Yogesh. "As pharma companies work towards developing a vaccine for the Corona virus, we can support them in their work by helping them keep an audit trail of their work processes through this compliance module. Similarly, we help businesses use our solutions in various departments such as Finance, HR, Legal, and others." Looking at 2022 and the years beyond, Mr. Yogesh envisions that large enterprises as well as SMEs, will embrace these emerging technologies in the conduct of their regular businesses that will eventually ease up their lives. "I also believe, solutions with a better value proposition and ability to deliver better results will get an opportunity to grow in 2022." He ends: "Finally, I wish everyone's

safety across the world and hope all of us have the strength to come out victorious in this pandemic." Recently, Cygnat Infotech completed 21 years in the industry and marked 15% growth in FY 2020-2021. The company also underwent a brand transformation program, rejuvenated its logo, refreshed its brand fundamentals such as its brand promise and purpose, structured its sub-brands to bring the organization's full strength under a unified master brand of Cygnat Infotech. Cygnat Infotech has also donated tablets to educate 350 less privileged students this year.

CYGNATURE
by Cygnat Infotech

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Global experts in communications

As we enter the era of hybrid work, organizations and their employees need the tools and services to help them seamlessly collaborate by virtually connecting remote and on-site workers. Subsequently, those tools and services demand innovation to improve and simplify IT support for this new standard of working. Meeting this need, AVI-SPL, a leading global digital enablement solutions provider announced in March 2021, the launch of Microsoft Teams user experience services to be co-delivered with Unify Square, a global leader in management and security software and services. Karen Klosinski, AVI-SPL VP of products and solutions says: "This partnership delivers a complete end-to-end managed and monitored Microsoft Teams user experience."

Tampa, Florida-based AVI-SPL works with organizations globally to improve team collaboration and unlock new business value. It is the largest provider of collaboration technology solutions, which includes its award-winning managed services. AVI-SPL's highly-trained team works hand-in-hand with organizations worldwide - including over eighty percent of Fortune 100 companies - to strategize, design, deploy, manage and support Audio-visual (AV) and Unified communications (UC) solutions that are simple-to-use, scalable, serviceable, and measurable to ensure business objectives are achieved. Karen Klosinski notes that AVI-SPL's value proposition is rooted in its commitment to understanding customers' challenges and working with them to create a vision of a better way to work. "We are delivering on that vision with the largest and most-credentialed number of in-house experts in

collaboration and communication, who follow our time-tested processes. We understand that IT teams need to accelerate change in their workplaces and need a trusted guide to help them plan, deploy, and then operate the new solutions that power their businesses. No other company can deliver everything we do with the same high quality: being a trusted advisor to our clients, owning their projects from end to end, and supporting our customers with AVI-SPL Symphony, our patented user experience management application." AVI-SPL Symphony simplifies user engagement, improves meeting success, and enables business outcomes. This multi-tenant cloud-based application helps to easily monitor and manage meeting rooms and devices. "The partnership between AVI-SPL and Unify Square provides a co-delivered managed service that combines the power of AVI-SPL's Symphony Management

Application with Unify Square's PowerSuite application to manage and monitor Microsoft Teams platform and soft-client users," Karen explains. "The combination of tools and technical support provide customers with a complete end-to-end managed and monitored Microsoft Teams user experience from desktop to conference room."

AVI-SPL recognizes that business communications is changing at an amazing pace. "Our mission is to transform how our customers connect, elevate experiences, create new value and enable organizations to thrive and grow. We do this by developing full life cycle services and solutions that enable customers to rapidly meet their collaboration goals whether out-tasking or with full outsourcing support programs. We believe this mission will be as business impacting to our customers three years from now as it is today," Karen ends.



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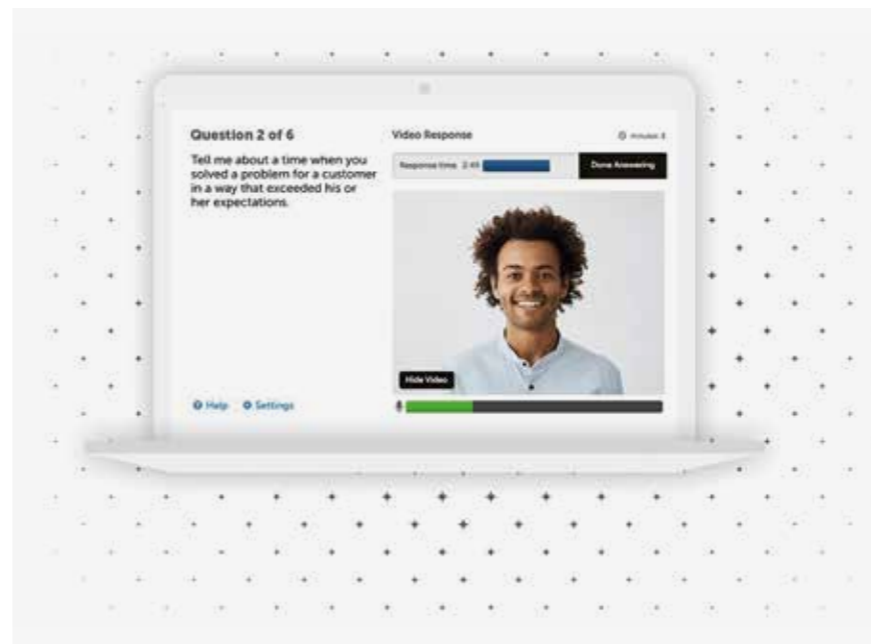
End-to-end hiring experience platform


HireVue, the global leader in video interviewing, assessments, chat and recruiting automation technology, has announced a new partnership with SaluteMyJob, to provide career support and guidance for ex-members of the UK Armed Forces, who often struggle to transition to civilian work and can find interview scenarios challenging. This is a particularly prominent issue for veterans, who entered the Armed Forces at a young age, often with little or no experience of civilian employment. Darren Jaffrey, General Manager, EMEA & APAC for HireVue is proud to partner with SaluteMyJob to support veterans and other members of the armed forces community transition to civilian work.

HireVue has hosted more than 23 million video interviews and 145M chat-based candidate engagements for over 700 customers around the globe. The company's trademark interview technologies empower recruiters to access significantly more job candidates every hour of the day. "Our chatbot solution also enables talent acquisition teams to have engaging, personalised conversations with millions of active job-seekers any time of day or night on the devices they prefer, automatically responding to questions and guiding them through the process in real time,"

says Jaffrey. "This flexibility helps candidate performance and unlocks a huge range of roles that were previously inaccessible." A recent survey by SaluteMyJob of 640 members of the Armed Forces community found that over a third of respondents felt disadvantaged when applying for jobs due to their military association, while only 18% of people said that they found it easy to find the right organisation to meet their needs. Transition support and mentoring was named as the most important need for veterans so the provision of a safe space

where military men and women can practice and build interview confidence is key to the transition process. "Former service members are usually highly skilled candidates, yet often struggle to move into the private sector due to a lack of direct industry experience or formal higher education. Compounded by a lack of interview experience, skills such as negotiation abilities, calmness under pressure, self-discipline and a mission focused mentality can often go unrecognised. Technology should not be a barrier to re-entering the workforce and candidates will be able to build confidence in trialling the virtual interview technology used by many large organisations. Jaffrey summarizes: "Our mission is to democratise hiring through fast, friendly and fair hiring practices. The unequal impacts of Covid-19 demonstrated just how critical it is that we all invest in hiring equity - and we're excited to help companies build those hiring journeys over the coming years. Implementing structured interviews is a scientifically proven change companies need to make to improve imbalances in their hiring process and make hiring fairer. We also never rest on our laurels, so we'll be looking to routinely improve our technology offering to ensure it is always providing hiring teams genuine value and see where it can be improved."





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Detect and defend against the latest cyberthreats

From Schaffhausen, Switzerland, Acronis leads the world in cyber protection, solving safety, accessibility, privacy, authenticity, and security (SAPAS) challenges with innovative backup, security, disaster recovery, and enterprise file sync and share solutions that run in hybrid cloud environments: on-premises, in the cloud, or at the edge. In August 2021, the company released the Acronis Cyberthreats Report Mid-year 2021 update, an in-depth review of the cyberthreat trends the company's experts are tracking. "While the increase in attacks affects organizations of all sizes, something that's under-reported in the coverage of current cyberthreat trends is the impact on the small business community," explained Candid Wüest, Acronis VP of Cyber Protection Research in a press statement.

Data Points from the Acronis Cyberthreats Report Mid-year 2021:

- The average cost of a data breach was around \$3.56 million. The average ransomware payment rose 33% to more than \$100,000.
- 4 out of 5 organizations experienced a cybersecurity breach originating from a vulnerability in their third-party vendor ecosystem
- The most attacked countries in Q2 2021 were the U.S., Germany, and the U.K.
- 94% of malware is delivered by email
- Phishing emails increased by 62% from Q1 to Q2

Since its founding in 2003, Acronis has been a recognized leader in data protection. In response to the rise of cyberthreats targeting backup files, agents and software, the company introduced its innovative Acronis Active Protection anti-ransomware technology in 2016, making it the first data protection vendor to integrate a native

anti-ransomware defense in its backup solutions. That machine-intelligence- and behaviour-based detection technology has since been expanded to address all forms of malware and other potential cyberthreats.

Today, Acronis has more than 1,600 employees in 34 locations in 19 countries. Its solutions are trusted by more than 5.5 million home users and 500,000 companies, including 100% of the Fortune 1000, and top-tier professional sports teams.

The company's flagship product, Acronis Cyber Protect Cloud, empowers service providers with integrated backup, disaster recovery, antivirus, anti-malware, email security, URL filtering services, and endpoint protection management capabilities – enabling them to deliver comprehensive cyber protection services to their clients. The same technology is available directly to

businesses as Acronis Cyber Protect 15. The Acronis Cyberthreats Report Mid-year 2021 is based on examining attack and threat data collected by the company's global network of Acronis CPOCs, which monitor and research cyberthreats 24/7. Malware data was collected by more than 250,000 unique endpoints around the world running Acronis Cyber Protect (either as a client of an MSP using Acronis Cyber Protect Cloud or a business running Acronis Cyber Protect 15).

The full report provides in-depth insights into the top security/threat trends the CPOCs observed during the first half of 2021, a review of malware families and related statistics, a deep dive into ransomware's most dangerous groups, the vulnerabilities that contribute to successful attacks, and Acronis' security recommendations for the remainder of 2021 and beyond.

A copy of the full Acronis Cyberthreats Report Mid-year 2021 can be downloaded from the Acronis website.

Acronis

Website: www.acronis.com



Reducing industries' carbon footprint

Calgary-based carbon utilisation company, Carbon Upcycling Technologies (Carbon Upcycling), has signed a non-binding Memorandum of Understanding (MOU) with Lafarge Canada. The MOU allows for the potential integration of Carbon Upcycling's CO2-Enhanced concrete additive into Lafarge operations, while exploring opportunities to expand Carbon Upcycling's operating capacity by developing larger processing facilities. Carbon Upcycling produces a unique additive that makes concrete both stronger and more sustainable with the ability to reduce the carbon footprint of concrete by up to 25% on a lifecycle basis. "Our mission is to be the most impactful CarbonTech in the 2020s, understanding that this particular decade will be pivotal in humanity's response to sustainability challenges that will drive much of our progress in this century," states Apoorv Sinha, Carbon Upcycling CEO.

Carbon upcycling was founded in 2014 with the vision of converting the waste of today into the building materials of tomorrow. In 2017, it became the youngest carbon utilisation company to launch a commercial product, a concrete corrosion coating that has now been installed in over 2000 locations across the Southern US. In early 2021, the company began to sell its CO2-Enhanced concrete additive to the Calgary market to BURNCO and is now selling to Lafarge as well.

Mr. Sinha explains that Carbon Upcycling's mineralisation process can activate a versatile range of solid feedstocks, ranging from solid wastes from industrial processes (i.e. coal ash, petroleum coke,

incinerator ash, crushed glass) as well as ubiquitously available mineral ores (i.e. volcanic rocks, natural clays) to sequester CO2 in a low energy catalytic reactor. "The versatility of solid feedstocks our technology activates allows for a solid waste management angle along with a carbon sequestration play. Importantly, we've shown that we can tune our reactor to produce a range of additives for different sectors. We've on going testing programs to evaluate the performance of our CO2-Enhanced materials in polymers, energy storage, pharmaceuticals, and even consumer products (i.e. planters and yoga mats, and others). However, our core focus is on the construction market where we've



shown that we can significantly reduce the carbon footprint of concrete by up to 25%, reduce cement use by 10-20%, and impart significant durability benefits to the end product, such as extended rebar protection and sulphate expansion mitigation."

Carbon Upcycling's clients in Canada are currently BURNCO and Lafarge-Holcim. "Through our partners, we are and will continue to serve a range of developers, architects, and contractors that are working on projects in the commercial, retail, and residential construction market," says Mr. Sinha. "We want to lay the groundwork to becoming the most impactful CarbonTech company in the next 8 years and, within that context, want to align ourselves with large emitter companies that are looking for commercially viable, industrially relevant solutions for their emissions problems. In particular, being headquartered in the energy capital of Canada, we're very interested in engaging with multinational energy companies to collaborate on emission mitigation and utilisation opportunities wherein the use of our technology can assist companies like Shell, BP, and others in achieving their ambitious decarbonisation goals."



Carbon Upcycling Technologies
Website: www.carbonupcycling.com



A new Ethos

Ethos Asset Management Inc., USA has announced the formation of Ethos Commercial Consultancy JSC (ECC) in Istanbul, Turkey, a recent creation and addition to the Ethos Group. Carlos Santos, President, and CEO of Ethos, states, "We are very excited and motivated to establish a subsidiary of Ethos in Turkey. This will provide new Turkish and international clients and potential partners in the region with the opportunity to be financed by Ethos dynamically, efficiently, and personally. Recent changes to cross-border laws and the continuing crisis of Covid have significantly affected the banking system. Several banks in the United States, where Ethos conducts primary operations, closed their international trade desks to protect their potential exposure to the default of other institutions and reduce overall risk to the sector, and some bankers believe that this internal policy reduces general systemic risk."

Since the foundation of Ethos, Mr. Santos has been actively involved in the acquisition and structuring of the Group in the 72 countries where the company operates. His passion, drive

and commitment is to develop and grow a thriving and successful finance business to create wealth, and invest in projects and businesses of all types across the world to improve economies and people's life chances.

Mr. Santos sees the establishment of an entity in Turkey as a significant development in the continued growth and expansion of Ethos group as it will allow them to overcome some of the challenges in receiving financial guarantees and other financial instruments into its USA banks from various global jurisdictions. In his view, Turkey, compared to other emergency Markets, has the best banking system. Following the collapse of the Turkish banking system back in 2002, it has successfully restructured. "The 23 banks that received assistance following that crisis today are more stable than the average of all the banks in Portugal, Spain, France and Italy. Their commercial banking system may be weak, but their investment banking system is one of the best in the world. Turkey in general, and Isbank in particular, is the right financial partner to develop our business and to deposit our guarantees."

Ethos Turkey will be the custodian to receive the guarantees issued from its

clients mainly in Asia, Africa and South America. "Through Turkey, part of our cashflow and investments will operate through this new structure. Mainly all the funding necessary to finance projects in the region and surrounding areas," says Mr. Santos.

While the pandemic has been challenging for Ethos and international banking in general, Mr. Santos also sees it as an opportunity to create a new Ethos. "We created a totally new and innovative way to secure ourselves and it is 100 % scalable to any country and any bank, even ones that are not clients. It does not depend on banking rules at the moment of execution. The structure in question decentralised the intervention of the banks and put the transaction at a pure commercial relationship level."

He adds: "The validity of our mission is reaffirmed every day and our goals remain clear. We want to grow steadily and to continue to achieve the goals of our customers, by putting our talent and our skills into the development of a portfolio of services, taking organizations, and consequently our customers, to a higher level. We want to do it with quality, technical performance and a multiple supply of current solutions. All this is achievable and built on the firm foundations of our determination and passion."



Ethos Asset Management
Website: www.ethosasset.com

Give peas a chance

Dutch plant-based food ingredient company The Fooditive Group has launched its first direct to consumer product, a new dairy-free milk alternative. Called GoPeasy, it is made with peas and is free of added sugar, as well as high in protein and low in fat. The Fooditive Group has a focus on sustainability and uses a circular economy model for its production process. The natural sweetener it uses in GoPeasy is made from upcycled apples and pears. "Three years ago, we had never thought of launching our own end-consumer product. However, with the continuous trust and support from our partners, our team, and our investors, we were able to take a new step towards innovation in the food industry," comments Moayad Abushokhedim, Fooditive founder and CEO.

Moayad Abushokhedim, a trained food scientist who was born and raised in Jordan, founded Fooditive in 2018, in the Netherlands, with the ambition to shape the future of healthy food industry by supplying the world with healthy and affordable food for everyone. The beginning of Fooditive's journey started with the launch of Fooditive sweetener in 2018, which the company followed up with several plant-based ingredients suitable for several applications in the food industry. Fooditive's portfolio now includes a fat-replacer extracted from avocado seeds, an emulsifier made from potato, a thickening agent made from banana skins, and a carrot-based preservative. Another game-changer is the vegan casein which is a cruelty-free, sustainable ingredient with the same function as milk proteins.

Fooditive remains dedicated to the continuous search for sustainable raw materials which can have a positive environmental impact in the long term. Apart from sustainability, the easy availability of raw materials in different parts of the world is of great importance as well to the company. After extensive research, the team focused on peas since this raw material ensures a high nutritional value, a great taste, a good

and adjustable price as well as a sustainable end-product.

"GoPeasy has been developed for consumers who want to have a nutritious drink at any time of the day or while on-the go," says Mr. Abushokhedim. "Fooditive's focus was to develop a drink that tastes great through a very well-crafted recipe. GoPeasy has a slightly sweet aroma without any added sugar, balanced with a rich mouthfeel like milk. The product will be launched in the Dutch market by 2021 with a following expansion in the European market, with

the aim to become an internationally recognised product."

He emphasises that Fooditive does not believe in creating products with a focus on competition. "Instead, we believe in creating value for the consumer. Taste, affordability, and sustainability are continuously allowing GoPeasy to thrive; making an impact is of much importance for us because we know we are here to support a common goal: to make the world a better place. As we always ask our partners in the food industry to join our movement of delivering plant-based food, now we are directly inviting the end consumer to be a part of this movement as well."



Fooditive
Website: www.fooditive.nl



Designed to enable innovation

Lattice Semiconductor Corporation recently launched the Lattice CertusPro™-NX general purpose FPGA family. As the fourth device family based on the Lattice Nexus™ platform to be launched in just 18 months, CertusPro-NX continues Lattice's commitment to FPGA innovation with leadership power efficiency, the highest bandwidth in the smallest form factor in comparison to similar devices, and as the only FPGAs in their class with support for LPDDR4 external memory. With advanced performance capabilities and the highest logic density currently available on a Nexus-based device, CertusPro-NX FPGAs are designed to accelerate application development for the Communications, Compute, Industrial, Automotive, and Consumer markets. "The possible use cases for CertusPro-NX are only limited by developers' imaginations, and we can't wait to see how our customers leverage the performance capabilities of the newest Nexus FPGA family in their future application designs," says Eric van der Heijden, Vice President of Sales EMEA at Lattice Semiconductor.



An acronym for Field Programmable Gate Array, a FPGA is a semiconductor IC where a large majority of the electrical functionality inside the device can be changed; changed by the design engineer, changed during the PCB assembly process, or even changed after the equipment has been shipped to customers out in the 'field'.

In 2018, Lattice refocused the company to be 100% dedicated to FPGAs. "This concentrated focus allowed us to specialize in innovation and optimization

within the FPGA space and target the high growth applications that drive the semiconductor industry including edge computing, Artificial Intelligence, machine learning, system security, 5G, and factory automation," says Mr. van der Heijden. "Lattice's dedication to the FPGA market is allowing us to not only differentiate ourselves through robust innovation, but also through the software solution stacks we offer as software is an essential part of Lattice's strategy. In addition to offering a variety of easy-to-use software design tools, our software strategy allows us to

build application-specific solution stacks that make it very easy for our customers to adopt our solutions and to get to market quickly. When a customer incorporates our software into their design environment, our solutions maintain their value through multiple design iterations, making our offerings valuable on a multi-generational basis."

Introduced in December 2019, the Lattice Nexus FPGA platform combines the company's long-standing low power FPGA expertise with leading 28nm FD-

SOI semiconductor manufacturing technology. "This marked the most significant update to low power FPGA technology in nearly a decade," Mr. van der Heijden states. "Through the Lattice Nexus platform, Lattice enables the rapid development of multiple device families, each delivering low power, high performance, high reliability and small form factor."

Lattice CertusPro-NX FPGAs are the latest family to be developed on the Lattice Nexus development platform, designed to enable customer innovation in a wide range of applications. Nexus devices like the CertusPro-NX routinely outperform similar competing devices in other areas as well, according to Mr. van der Heijden, including data processing performance, system bandwidth, memory density, and support for small form factors. He highlights that the Lattice CertusPro-NX FPGA family offers class-leading power efficiency: by leveraging Lattice's innovations in FPGA fabric architecture and a low power FD-SOI manufacturing process, CertusPro-NX devices deliver exceptional performance while consuming up to four times less power than competing FPGAs of a similar class. In addition, with support for up to eight programmable SERDES lanes capable of speeds up to 10.3 Gbps, CertusPro-NX FPGAs deliver the highest system bandwidth in their class to enable popular communication and display interfaces like 10 Gigabit Ethernet, PCI Express, SLVS-EC, CoaXPress, and DisplayPort. And to meet demand for robust data co-processing in Edge AI and ML applications, CertusPro-NX FPGAs feature up to 65 percent more available on-chip memory than other similar FPGAs. CertusPro-NX devices are the only low power FPGAs currently supporting the LPDDR4 DRAM memory

standard, which is preferred due to its projected long-term availability. Lattice expects strong growth in the PFPGA space, according to Mr. van der Heijden. "Having devoted to innovation in the space, Lattice's position in the market is strong. FPGAs provide astounding value for product designers, particularly in their ability to be customizable, which provides necessary flexibility in product development. Beyond that, off the shelf technology provided by FPGAs allows OEM's to decrease time to market, especially when paired with Lattice solution stacks."

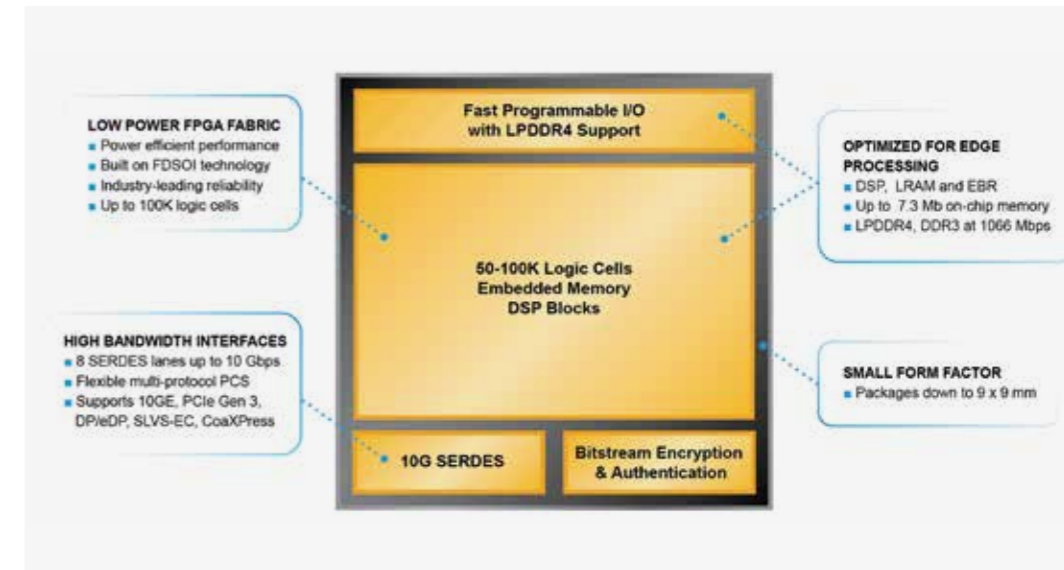
He adds: "More specifically, Communications and Computing are currently two of Lattice's biggest markets. However, Industrial and Automotive are the long-term growth drivers and certainly the areas of interest for Lattice, particularly in Europe. Industrial & Automotive segment revenue accounts for roughly 40% of our total revenue, and we are seeing tremendous growth in industrial automation and robotics applications like predictive maintenance and industrial safety. There is a lot of

opportunity for Lattice in the Automotive market as well. We're seeing a huge uptake in electronics in all sorts of automotive applications. Our products are a naturally good fit, and we've got a healthy design-win pipeline, and we think that's going to be a good growth sector for the company in the future. As customers across our focus markets look for ways to add artificial intelligence to their systems, we recognize that FPGAs are well-suited for such applications due to their parallel processing capabilities, and re-programmability. Because AI algorithms are constantly evolving, the ability to use software to update an FPGA's function is a significant benefit that future-proofs the application."



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Lattice CertusPro™-NX FPGAs



Major investment in Indian data centers

Mantra Data Centers (“MDC”), an independent data center platform and wholesale colocation provider has announced significant investment plans across India. MDC will design, build and operate state-of-the-art Green Energy Data Center facilities with an initial IT load of 20MW in each of the key data hubs: Mumbai, NCR (Delhi), Chennai, Bangalore, Hyderabad and Kolkata. With a population of more than 1.3bn people, India’s digital growth has risen due to digitisation programmes by the Government, increased internet penetration, streaming of Entertainment & Sports, increased adoption of cloud, IoT, growing use cases for Augmented and Virtual Reality as well as Artificial Intelligence and the roll-out of 5G. The fact that the Indian government has introduced a new data protection bill is another factor, as Mr Jaan M. Chainani, Co-Founder & Managing Director of MDC, explains.

MDC was founded by a team of four, including Mr. Jaan Chainani, who also runs their singular family office, and two seasoned data center industry veterans. Mr. Jaan Chainani previously handled the Chainani family office’s real estate portfolio, which includes data centers in Spain.

He explains that their mission for MDC is to cater increasing demand for data center capacity across the whole of India. “A recently introduced data residency bill

means that data that were previously stored in the APAC region outside of India, now all the data of Indians needs to be stored in India. This is a central government policy with a big impact, on the Banking, Financial Services and Insurance industries for example as they store sensitive personal data.”

Mr. Chainani says that there are approximately 120 Colocation Data Centers centers in India with a population of 1.3 Billion People: the US,

with one fourth of the population of India, has over 2,000 Data Centers so it’s clear that India has a lot of catching up to do, helped by some of the major global tech players investing heavily in the digitalisation process. As MDC plans on investing upto \$1 billion to develop data centers in different States of India, the biggest challenge n Mr. Chainani’s view is to is to create a safe working environment and to ensure the safety of everyone in India in this Covid-19 outbreak. Mumbai, which he describes as ‘the Financial & Entertainment Capital of India’ is already fairly well served with a lot of announced future capacity, but other regions are not. “There are two strategic geographical locations one in Mumbai and the other in Chennai as those are entry points of the subsea cables,” Mr. Chainani points out.

Mr. Chainani emphasises that ensuring renewable energy to power the data centers is key to their plans. “We expect to finalise an MoU with a green energy partner in the near future. Our aim is for all our Data Centers to be sustainable. The plan is to have seven data centers across PAN India and to be fully operational within the next three to five years. On Phase II of our expansion Plan we will also target Tier II and Tier III cities of India. It’s an ambitious project, we are proud of what we’ve already achieved. We’ll continue to work hard to ensure that we hit all milestones.”




Mantra Data Centers
Website: www.mantradatacenters.com

Redefining digital healthcare

As a leading provider of cloud-based Practice Management Software (“PMS”) for veterinarians and therapists, Nordhealth’s vision is to redefine digital healthcare and practice management. The company seeks to do this by bringing together and harmonizing all the tools needed to manage a healthcare business digitally. Their recent acquisition of Aspit, the Norwegian supplier of electronic patient record systems, fits in well with that vision according to Charles MacBain, Chief Executive Officer of Nordhealth.

As of April 2021, Three Plus Group and Finnish Net Solutions assumed their new name and corporate identity, Nordhealth. “Our founder, Janne Huttunen started developing online-based software for veterinarians in 2005,” Mr. MacBain explains. “Janne took the traditional windows-based practice management software tools and made browser-based versions to make it easier for practitioners. By focusing only on the veterinary health niche first, and then later therapy practices, Nordhealth understands these practices’ challenges better than any other software provider.” Mr. MacBain acquired the company in November 2018. “We now have a very solid footprint in the Nordic region but our international presence is growing,” he adds. “To date, we have more than 250 employees working either remotely or from collaboration hub spaces around the world, serving a global customer base. A major milestone we have just reached is our listing on the Euronext Growth stock exchange in Oslo.” The company raised €120M funding. “We plan to use the added capital to acquire other software, as we have done with Aspit, and accelerate growth by investing in recruiting and retaining great talent, designing new products and improving existing ones.”

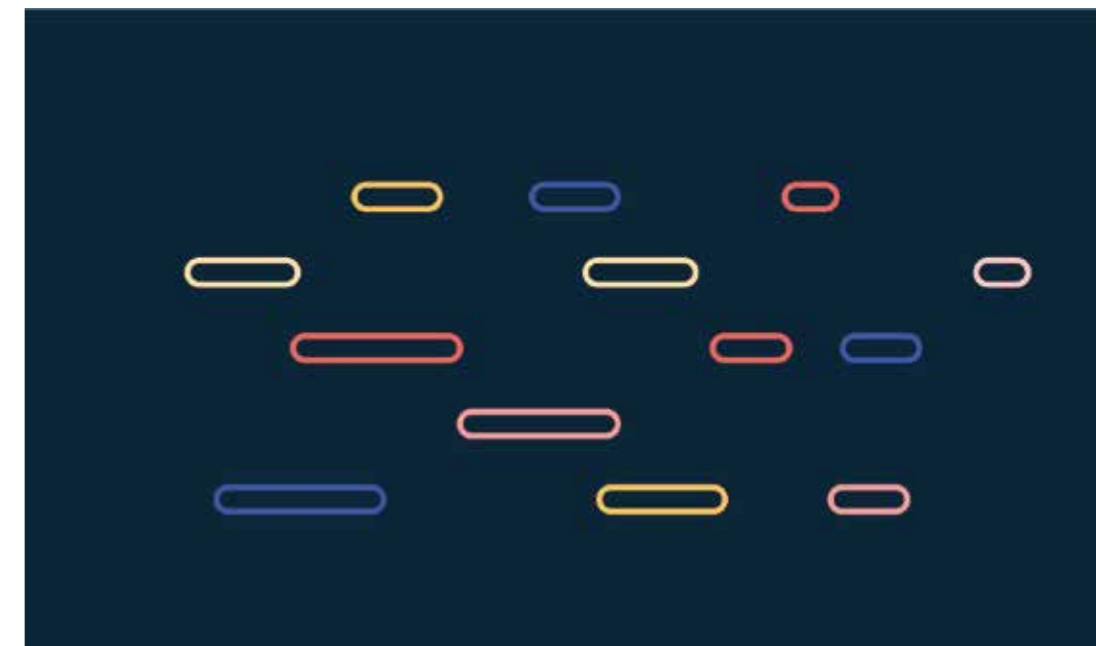
Aspit is a leading supplier of electronic patient record systems (EHR) and IT operations to the healthcare sector in Norway, particularly to the chiropractor/

physiotherapy and psychiatry segments. More than 6,000 physical therapists, psychologists and psychiatrists use Aspit’s cloud-based Software as a Service (“SaaS”) products. “We found Aspit to be a great strategic match for Nordhealth due to their complimentary technology, consistent delivery of strong results and closeness to customers in a key market segment,” says Mr. MacBain. “As we got to know the Aspit team, we saw that there is also a great cultural fit between our companies. This is something I am especially aware of as we execute on an expansion strategy that includes both acquisitions and organic growth. Everyone at Nordhealth must be dedicated to the same goal - to

help practitioners improve care, save time and grow their business.” Digital healthcare and practise management is a dynamic market, as Mr. MacBain points out. “Interestingly, the same transition that our founder Janne began working on more than twenty-five years ago is ongoing today. Over the next 2-3 years, many practitioners plan to shift from using on-premise software to cloud-based solutions. We are excited to seize this opportunity and help many more practitioners focus less on their software and more on what matters most – providing patient care.”



Nordhealth Oy
Website: www.nordhealth.com



A nutritionist in your pocket

For a long time, metabolism measurement tests known as RER tests were only available in hospitals and in clinics for patients or athletes. Lumen has democratized the field with a device and app that measure your metabolism through the breath in under a minute. The Lumen device has officially been peer-reviewed and published in the Interactive Journal of Medical Research (I-JMR), showing that the Lumen® works just as well as the clinical method of metabolism measurement. This basically means that with Lumen, everyone can now have a nutritionist in their pocket. The device is available for anyone who wants to understand their body better and improve their metabolism which results in better weight maintenance, sleep, improved muscle mass and ultimately feeling your best.

Lumen was invented by identical twin sisters Merav and Michal, who along with being PhDs in Physiology, are triathletes, moms, and health researchers. In 2014, they teamed up with world-class entrepreneurs to build a team of expert nutritionists, engineers, and designers with a passion for solving real-world health and fitness problems. Their vision is to revolutionize the way we approach weight management by focusing on metabolism as the starting point for balanced and personalized daily nutrition. With that they tackle a real

issue: in the US alone 88% of adults are metabolically unhealthy which equates to having high blood pressure, suffering from obesity and high glucose levels. Lumen believes that by focusing on metabolic health, people are in a better position to lose body fat, improve sleep, build muscle mass and increase overall energy levels. The company has developed a device and an app that measure your metabolism through the breath. Based on this analysis, a daily personalized meal plan is built to help you lose weight and optimize your workouts. It



also lets you know how much to fuel up for a workout or an ordinary day at the office, for example, and tells you what foods are working for your body and what foods aren't. In addition, Lumen helps you build healthy habits like tracking your intermittent fasting hours, sleep, steps and your carb or fat adaptability to make sure you live a holistic lifestyle. Since sleep and movement are key factors to improving your metabolism, Lumen created a habit system that will help customers maintain sustainable results without resorting to crash diets. Launched in 2018, Lumen is sold to over 126 countries worldwide.

The company continues to evolve its technology, in line with its belief that eventually everything about our health and fitness will be hyper connected. Through tech integrations such as the ones it has accomplished with Apple health, Google and Garmin devices, the company sees the benefits customers experience when they have metabolic insights linked to their wearables. Lumen will continue to promote metabolic health, which, it believes "will be the compass that guides all of our health data and that drives our daily exercise and nutritional decisions. We hope to positively impact the wellness and preventative health spheres with an innovative approach to empower consumers to lead sustainable and healthy lifestyles."



Innovation for a booming market

OPEX® Corporation, a leading provider of innovative warehouse automation solutions worldwide, has made enhancements to Sure Sort®, an automated put wall and one of its most popular products, to better meet warehouse customers' needs. "Our Sure Sort solution is ideal for both small businesses looking to cost-effectively take the first step into warehouse automation and large fulfilment operations looking to streamline processes," said Alex Stevens, Vice President of Warehouse Automation at OPEX. "It is an efficient, scalable system that reduces the large footprint and cost associated with traditional sorters and provides customers with a fast return on investment."

Since 1975, OPEX systems have provided performance-enhancing workflow solutions and cost-effective results to thousands of organizations worldwide. In addition to warehouse automation solutions, OPEX also offers document and mail automation. Their satisfied customer list includes fulfilment operations, distribution centers, financial services, healthcare, government, utilities, service bureaus, insurance, and educational institutions. OPEX has developed Sure Sort automation to offer customers a cost-effective entry into automated parcel sorting systems. "We took our core document and mail automation technology and enhanced it," Mr. Stevens explains. "Our experience in that field has given us in-depth knowhow of the pitfalls of paper handling: paper is hard to handle. So we took that technology, and that experience, and made it applicable for warehouse automation."

The Sure Sort® small-item robotic sorting system can be scaled, sized, and customized in the small footprint of a single-pass put wall. It quickly and accurately processes up to 2,400 items per hour with limited labour. "It's also very useful for returns processing," Mr. Stevens points out. "As the system is compact and modular, you can adapt it to address specific, one-off sorting

challenges, and once you've solved that, move it on to a different job. And it fits right into the systems you already have in place."

The Sure Sort equipment can handle items as small as two inches in length and width and can support products as large as 15 inches long, 12 inches wide, and 6 inches high thanks to the new modifications OPEX just made. The company increased the height capability to accommodate taller items, such as a standard shoe box. "Our customers discovered that if we made it taller they could process 11 percent more items through machines, on average," says Mr. Stevens. "So it made a lot of sense to do this."

OPEX announced the Sure Sort solution enhancements on the back of a very

hectic year as a result of the COVID-19 pandemic. The retail market has witnessed a 28% surge in e-commerce activities and warehouse automation is a top priority. "The primary driver is the need for fewer employees in warehouses to meet safety and social distancing norms accompanied by the need to ramp up operations to meet increased online order volume," says Mr. Stevens. "Also there's a labour shortage throughout the developed world, so companies are trying to figure out how to supplement their workforce and make them more effective. What's been a cool thing for us to see is that people genuinely enjoy working on our machines: our technology doesn't only ensure process improvements but also makes jobs more enjoyable."



Affordable testing for the good of the world

Quidel Corporation, with its global headquarters in San Diego, CA, is a leading provider of rapid diagnostic testing solutions, cellular-based virology assays and molecular diagnostic systems. The company announced in May 2021 that its Sofia® SARS Antigen FIA is the first rapid antigen test to receive authorization from Health Canada for serial testing for the detection of active coronavirus infection in both symptomatic and asymptomatic populations. “Quidel is proud to bring our most innovative and sensitive COVID-19 testing technologies to the Canadian market and make our tests as widely available as possible,” said Douglas Bryant, president and CEO of Quidel Corporation in a press statement.

Quidel was founded by Dr. David H. Katz, M.D., commenced operations in 1981 and launched its first products in 1984. Quidel Corporation was formed in 1991 when Quidel and Monoclonal Antibodies merged. Today, Quidel Corporation is a leading manufacturer of diagnostic solutions at the point of care, delivering a continuum of rapid testing technologies that further improve the quality of health care throughout the globe. A Quidel spokesperson says: “For over 40 years, Quidel has earned a reputation for being a first-to-market and best-in-class

innovator in the medical diagnostics device industry. In our earliest days, Quidel revolutionized the lateral-flow strip technology used in home pregnancy tests. We pioneered the first FDA-cleared point-of-care test for influenza in 1999 and in 2020 Quidel was the first company authorized to market a rapid SARS-CoV-2 antigen test in the U.S. We now offer a comprehensive portfolio of tests and technologies for the diagnosis of a wide range of infectious diseases, cardiac and autoimmune biomarkers, as well as a host of products to detect COVID-19.”

Under trusted brand names Sofia®, Solana®, Lyra®, Triage® and QuickVue®, Quidel’s comprehensive product portfolio includes tests for a wide range of infectious diseases, cardiac and autoimmune biomarkers, next to the products to detect COVID-19. With products made in America, Quidel’s mission is to provide patients with immediate and frequent access to highly accurate, affordable testing for the good of families, communities and the world. “In particular, the FDA’s approval of our QuickVue® At-Home COVID-19 rapid antigen test for over-the-counter sale directly to consumers for symptomatic and asymptomatic screening, is really a step forward for the entire diagnostics testing market. Serial testing to pre-screen people -before they leave the house and can infect someone else -certainly makes sense for coronavirus, but it could apply equally to the flu, strep and a host of other conditions in the future. We can envision



QV At-Home Test.v1

a paradigm shift toward at-home testing, whether that is facilitated by coupling telemedicine with ‘tele-diagnostics’ or through direct OTC sale without a prescription. Our portfolio of QuickVue® and Sofia® tests are prime candidates for reaching these emerging addressable markets,” Quidel’s spokesperson notes. The Sofia SARS Antigen FIA is the first rapid antigen test to receive authorization from Health Canada for serial testing for the detection of active coronavirus infection in both symptomatic and asymptomatic populations. It is a lateral flow immunofluorescent sandwich assay that is used with the Sofia and Sofia 2 instrument intended for the qualitative detection of the nucleocapsid protein antigen from SARS-CoV-2 in nasal (NS) swab specimens, taken directly from individuals who are suspected of COVID-19 by their healthcare provider within the first five days of the onset of symptoms.

The Sofia® SARS Antigen FIA shows excellent performance within the first five days of the onset of symptoms, with positive results agreeing with PCR 96.7% of the time, and negative results agreeing 100% of the time, delivering confidence to physicians, healthcare workers and other customers within the professional segment. This new intended use claim allows the Sofia® SARS Antigen FIA to be used among asymptomatic individuals throughout Canada provided that individuals test at least every three days, or 72 hours. Routine testing by rapid antigen tests has shown to be effective in diagnosing COVID-19.

Quidel’s spokesperson adds that Quidel’s Sofia® SARS Antigen FIA also was the first rapid antigen test to receive Emergency Use Authorization (EUA) from the FDA. “At the time, it was the only COVID-19 test capable of delivering results in 15

minutes, which was a game changer compared to lab-based PCR tests that often took days or even a week to get results. The Sofia® SARS Antigen FIA also set the bar for antigen test accuracy, proving to be in agreement with PCR results 96.7% of the time.” Sofia® 2 is Quidel’s best-selling cartridge-based rapid diagnostic system for infectious disease testing, which utilizes fluorescent chemistry design, an intuitive graphical user interface, and optics system to provide a highly accurate, objective and automated result in 15 minutes. The Sofia® 2 system also comes connected to Virena®, Quidel’s data

management system, which provides aggregated, de-identified testing data to public health authorities in near real-time. “So, in one simple step, we were able to make a difference for both individual and public health. And now that Sofia® SARS has been approved by the FDA and Health Canada for serial asymptomatic testing, we anticipate further expansion of our installed base of Sofia® instruments, which should also drive demand for our Sofia® tests for flu, RSV and other conditions.” CEO Douglas Bryant states: “Health Canada’s approval opens the door to true democratization of the benefits of serial



Sofia 2 SARS Antigen Casette2

testing for both individuals experiencing symptoms and screening of people who may not have symptoms but are actively shedding the virus. Broad-scale application of our Sofia® rapid antigen test for COVID-19 screening across Canada will catch asymptomatic cases early and limit virus spread and is an important tool to get Canadians back to work and getting the economy fully open again.”

COVID-19 testing remains a significant pillar of Quidel's growth strategy going forward. The company sees enduring power in three macro trends – symptomatic testing, asymptomatic screening, and at-home testing – that will be material to both market demand and revenue growth going forward. Quidel is incredibly well-positioned to capture these trends due to its robust portfolio, recent regulatory approvals, and its retail fulfillment partnerships.

According to Quidel's spokesperson Quidel's portfolio extends well beyond SARS assays and some of the most exciting innovations are yet to come. “For example, we are poised to introduce Savanna®, a multiplex molecular analyzer that enables professional customers to analyze up to 12 pathogens or targets, plus controls, in a single assay run in less

than 30 minutes.” The Savanna® system is built on proven, robust molecular techniques, in particular the so-called ‘magnetic bead-based nucleic acid isolation’ and the ‘real time Polymerase Chain Reaction (PCR)’.

“However, due to an ingenious combination of many unique factors, we managed to achieve superior and differentiating performance for the turnaround time, simplicity, ease-of-use, modularity and versatility of the platform. This revolutionary Savanna® technology promises to disrupt and decentralize multiplex molecular testing, extending “big iron” centralized lab capabilities to moderate-complexity labs, regional hospitals, physician offices, urgent care clinics and other point-of-care locations and applications.”

Quidel's spokesperson ends: “The pandemic has been transformational for our company. Quidel has always been a leader in diagnostics innovation, but by every measure our team has truly stepped up to meet the coronavirus challenge. Looking ahead, we believe we are incredibly well positioned to leverage what we have invented and built over the past year and propel the company into the borderless diagnostics marketplace

of the future.” There are several other innovations in Quidel's pipeline, but Quidel's spokesperson finds it suffice to say that Quidel Corporation is confident that its powerful mix of products, partnerships, and macroeconomic trends, combined with the gateways provided for its broader portfolio of diagnostic assays, pave a long, exciting roadmap for continued growth and success as the company advances diagnostics to improve human health.



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Sofia Analyzer

Delivering excellence daily

Atlas Air Worldwide Holdings, Inc. announced in May 2021, that its companies Atlas Air, Inc. and Polar Air Cargo Worldwide, Inc. achieved the Center of Excellence for Independent Validators (CEIV) Corporate Pharma credential from the International Air Transport Association (IATA), confirming their commitment to meeting pharmaceutical manufacturers' requirements to transport temperature controlled and time-sensitive products, including vaccines. “Our employees around the world are dedicated to meeting and exceeding our customers' needs in transporting sensitive medical and pharmaceutical products,” says Michael Steen, Executive Vice President and Chief Commercial Officer of Atlas Air Worldwide.

As a leading global provider of outsourced aircraft and aviation operating services, Atlas Air Worldwide operates the world's largest fleet of 747 freighter aircraft and provides customers the broadest array of Boeing 747, 777, 767 and 737 aircraft for domestic, regional and international cargo and passenger operations. A team of more than 4,000 aviation professionals deliver safe, high-quality services for all customers through the company's global network which includes operations in Africa, Asia, Pacific, Europe, the Middle East, North America and South America. Atlas Air Worldwide operates over 68,000 flights a year to more than 300 global destinations, connecting producers to consumers and generating economic growth, jobs and market stability.

Atlas Air Worldwide is the parent company of Atlas Air, Southern Air, and Titan. It is also the majority stakeholder in Polar Air Cargo. Atlas is the market-leading provider of ACMI (Aircraft, Crew, Maintenance, Insurance) and CMI (Crew, Maintenance, Insurance) services, operating on five continents and serving the entire air cargo supply chain. Michael notes: “We also offer customers tailor-made global charter solutions through our market-leading freighter fleet and global footprint. Whether it's a one-time, ad hoc charter or an extensive, long-term

operation, we have a solution that is efficient and cost-effective, supported by digital visibility tools and a relentless focus on safety.”

The CEIV Pharma certification that the company recently received confirms Atlas Air's and Polar Air's commitment to meeting pharmaceutical manufacturers' requirements to transport temperature controlled and time-sensitive products, including vaccines. “These certifications reinforce the flexibility and reliability of our outstanding team, unrivalled portfolio of assets and scale of our global network,” says Michael. In pursuing this credential, Atlas Air and Polar Air adopted standard operating procedures to handle temperature-sensitive products. The companies also completed a multistep

process to train ground and warehouse personnel as well as vendors in these new procedures, which also included an independent audit.

By achieving this certification, Atlas Air and Polar Air are even better positioned to deliver the best form of safe transportation for their valued pharma and medical customers around the world, offering them the assurance that CEIV Pharma certification provides. Michael concludes: “We will continue to focus on delivering safe, high-quality service for our customers in this very challenging operating environment. We have flexed our global network and increased aircraft utilization to match airfreight demand and we'll continue to closely monitor the market and leverage the diversity of our business model.”



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Supercomputing for creatives arrives in Europe

US-based Silverdraft is a supercomputing company committed to empowering creatives and solving the world's toughest visualization problems. Starting with the software and the customer workflow, Silverdraft is determined to study the process, identify the obstacles hindering performance, and optimize the build that will provide the perfect solution. The company, led by Amy Gile, recently expanded into Europe with the addition of Kurt Doornaert as General Manager and Vice President of Silverdraft Europe. "I am thrilled to be expanding to Europe to better support our clients and continue to enable them to innovate and do the impossible," says Ms. Gile.

As a former actor and producer, Ms. Gile realized that technology and supercomputing could transform the Media and Entertainment landscape to enable creativity and save time and money. She set out to build the world's greatest computing engines, called Devils and Demons, to handle digital content related in modern cinematography. Not stopping there, she sought to extend those computing advantages to many other industries, including Live Sports and Entertainment, Architecture, Engineering and Construction, Automotive and Manufacturing, Artificial Intelligence, and more. Today, Silverdraft supplies revolutionary computing systems, solutions, services and consulting to many professional sports leagues, major network broadcasters, Hollywood studios, and

most major and new automotive firms. The unique compute supplied by Silverdraft spans laptops, ruggedized mobile workstations, large-scale artist workstations, and the industry's premier supercomputers. Silverdraft solutions are coupled with advanced software and implementation services as well as an array of visualization platforms including Head Mounted Displays ("headsets"), the world's largest LED volumes, simulation, and the most sophisticated caves in use.

This ability to bring together all the components needed for successful XR implementations is what sets Silverdraft apart from the competition. It starts with understanding the client's unique workflow and its bottlenecks and challenges, and then applying the

necessary software, compute, and services to alleviate the challenges. Toyota utilizes these solutions to transform the automotive design process into an immersive experience that improves quality and reduces the time to market. The designers of the Hard Rock Hotel in Hollywood, Florida saved hundreds of thousands of dollars on each design iteration they did not need as a result of having high quality virtual models of the hotel available to them.

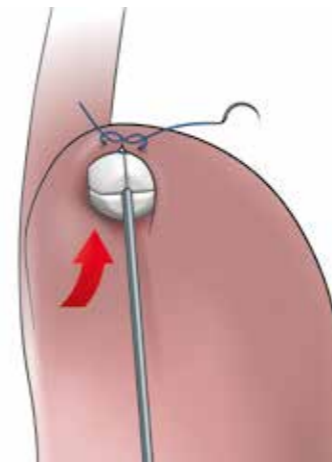
Silverdraft suggests that the COVID pandemic hasn't hindered them, as it has in fact inspired many firms to either adopt virtual production capabilities or expand upon those they prototyped during the pandemic. Europe, notably, is seeing numerous new XR stages being developed that will bring all new opportunities across the continent. Similarly, European automakers are famous for their innovation. So the time was ripe for Silverdraft to establish operations near a growing client base to serve them in their local time zone.

Silverdraft intends to develop a full-scale sales and engineering organization with service and manufacturing capabilities in the EU over the next 24-36 months. "We expect to grow the actual workforce as we staff up lab and support capabilities. We expect to be a significant part of the upcoming virtual production and immersive experiences that come out of the great European creative and technical communities," Ms. Gile comments.



Bringing high tech into the body

Implantica is a medtech group dedicated to bringing advanced technology into the body. Implantica's lead product, RefluxStop™, is a CE-marked implant for the prevention of gastroesophageal reflux that will potentially create a paradigm shift in anti-reflux treatment as supported by successful clinical trial results. Peter Forsell, Implantica CEO, believes their technology could revolutionise healthcare.



Implantica was founded in 2015, building on research dating back to 2003. The company has developed a broad, patent protected, product pipeline based partly on two platform technologies: an eHealth platform designed to monitor a broad range of health parameters, control treatment from inside the body and communicate to the caregiver on distance and a wireless energising platform designed to power remote controlled implants wirelessly through intact skin. "The wireless power supply ensures you don't need battery replacement, and our communication and measuring system ensures that the caregiver can monitor treatment and if necessary adjust certain steps in it," Mr. Forsell explains.

Implantica has identified some 300 potential inventions in a multitude of application areas for its implants and platform technologies, but (for now) has decided to focus on bringing 4 products to market. As the company went public last year and raised funds, Mr. Forsell is

confident that they're capable of doing this, particularly as RefluxStop is already generating revenue.

RefluxStop™ is a clinically proven treatment for acid reflux that treats the cause of the disease, allowing a natural physiological function of the lower oesophageal sphincter (LES) without affecting the food passageway. Mr. Forsell points out that many people suffering from acid reflux take drugs that are called PPIs (proton pump inhibitors) but there are some potentially dangerous side effects. In the US, a 5-year study, conducted by researchers from the Veterans' Affairs (VA) Saint Louis Health Care System and Washington University in Saint Louis, showed that veterans taking PPIs were more likely to experience kidney function decline. An estimated 15 million Americans are prescribed PPIs. "The biggest problem with acid reflux is that it can cause cancer," says Mr. Forsell. "And PPI doesn't protect against cancer risk: all it does is alleviate symptoms."

RefluxStop is approved for use in the EU and several other markets, and Mr. Forsell expects that they'll be able to enter the



US market in one to three years. Meanwhile the company continues to evolve its three other product candidates. Among them, Mr. Forsell highlights AppetiteControl, an implant that imitates the body's own natural functions by stretching the upper part of the stomach in the same way as when the stomach becomes full of food. As with Implantica's other implants, the caregiver can monitor AppetiteControl and adjust parameters. "It's a fully automatic system so very cost efficient as patient doesn't have to go to hospital all the time," says Mr. Forsell.

Prior to Implantica, Mr. Forsell successfully developed the adjustable gastric band business at Obtech Medical AG, and he is confident that Implantica's devices will achieve similar success. "It will take time but we've built a great group of people and we're capable of becoming an important medtech player."



Protecting vulnerable road users

Cars provide a considerable level of protection and advanced safety features, but on a bicycle or scooter we do not have that luxury. The people of Spoke aim to address that issue. The company plans to bring connected technology to vulnerable road users using Cellular Vehicle-to-Everything (C-V2X) solutions from Qualcomm Technologies, Inc. As part of this partnership, Spoke has unveiled a smartphone-sized C-V2X (Cellular vehicle-to-everything) device, which can be paired with a bike computer and help improve your awareness of upcoming hazards. “This is game-changing connectivity for both safety and for the mobility experience overall,” says Jarrett Wendt, Spoke CEO.

Mr. Wendt started Spoke two years ago, having previously served as Executive Vice President of North America for Panasonic. “My mandate was to investigate new businesses and ideas. One of those was Cirrus by Panasonic, today one of the most innovative and trusted V2X mobility systems on the market.” C-V2X is integrated into a growing number of cars and becoming the standard of choice in America as it can be used pretty much everywhere as it doesn’t need cellular networks. With Spoke, Wendt wants to leverage that technology to bring automotive-grade safety to vulnerable road users. In the longer term, the idea is for the digital technology to be pre-integrated but to start off with, Spoke will offer a hardware

product that can be connected to any bicycle computer. “We’re now at the stage where we plant the seeds,” says Mr. Wendt. “We need to convince OEMs that there is tremendous opportunity to deliver a safer, richer, more dynamic trip experience. Consider that there are 45 million bikes sold each year in the USA and EU each year, and that number is growing fast. That’s an interesting and valuable market.” Spoke is working with various scooter, bicycle, and motorcycle manufacturers on associated programmes. Its portfolio, which will also include modem-based communications, will initially be launching with these partners, at a reasonable price. “We’re making use of existing technology and chips aren’t that expensive,” says Mr. Wendt. “The



automotive industry proves that safety isn’t a luxury play. We’ll continue to work on the form factor however and try to bring the price down to a level where we know it’s very absorbable.” The technology addresses the top seven fatality risks for vulnerable use cases, he explains. It includes blind spot and left turn assist functionality, notably. Spoke will demonstrate the use cases on the road with Qualcomm and other partners, at select events. Initially the focus will be on the US, where adoption of C-VX2 is the most advanced, and where several cities and states are investing in connected vehicle technology. These are the stakeholders that should take the lead, in his view. “The end user has to get the benefit, rather than having to make the decision.” Insurance companies could play a part too, he adds. “They represent a huge opportunity for us.”



The Next-Generation MRAM Company

Avalanche Technology, the leader in next generation MRAM technology, announced in June 2021, that it is providing Persistent SRAM (P-SRAM) products for fanless NISE & NIFE Series Industrial Computers developed by NexAIoT. NexAIoT has designed Avalanche’s 8Mbit High Performance Parallel P-SRAM device into its popular Industry 4.0 total solution products.

Avalanche Technology, headquartered in Fremont, California, is the world leader in Spin Transfer Torque Magneto-resistive RAM (STT-MRAM) non-volatile memory leveraging perpendicular magnetic tunnel junction (pMTJ) cell structure manufactured on 300mm standard CMOS process. Backed by more than 300+ granted patents around cell, circuit, and system design leveraging MRAM, its technology and products provide breakthrough speeds, unlimited endurance and non-volatility while reducing power and cost. Danny Sabour, Avalanche’s Vice President of Product, Marketing and Business Development has more than 30 years of experience in the high-tech industry building and leading successful business development, marketing organizations. He says: “Avalanche’s high-reliability

P-SRAM devices provide a number of benefits, including non-volatility with instant write capability, and an extremely low power envelope for a given density, to designers of industry 4.0 systems.” In industry 4.0 there are a lot of end devices with a distributed network of devices, for instance on the factory floor, monitoring anything from a robot arm moving, to a chemical factory measuring temperature, or a nuclear power plant. Danny explains: “All these things are external devices, called nodes, and we want to record temperature, pressure, anything that’s happening there locally. In the event, you lose your connection to the Internet, you want local storage. What our memory device does –because of its characteristics which is excellent for data logging– it logs the event and stores it locally in monitoring devices. Once you

have this local data, then whenever you have a connection to the Internet, you send it back to the cloud for analysis and look for possible future failures or maintenance. That means that overall system reliability goes up, quality goes up, and you avoid failures.”

Also in June 2021, Avalanche presented its new 3rd generation space-grade parallel asynchronous x32-interface high-reliability P-SRAM (Persistent SRAM) memory devices, based on its latest Spin Transfer Torque Magneto-resistive RAM (STT-MRAM) technology. These new products simplify the system design, and by unifying the memory architecture, reduce the power and size requirements of the system, improving overall system reliability and life.

In the accompanying press statement, it states that the space industry has struggled against obsolete business models, limited agility and industry paradigms to remain in the same decade as the commercial industry in all three functional element areas. The arrival of this new technology from Avalanche marks an inflection point for space system designers by allowing modern architectures, previously believed to be impractical, to now be considered. With this development, Avalanche Technology is leading an evolution toward a new level of performance versus cost for modern space electronic systems. Avalanche Technology is delivering on the promise of enabling the next generation of scalable embedded unified memory architecture, making it the true “Next Generation MRAM Company”.

Edge Nodes Require Memory With 4 Characteristics

- Persistence**: The ability to retain memory contents when power is removed.
- High Endurance**: Must support a large number of write cycles before failure.
- Fast Write**: The longer the write time, the longer the processor waits for the memory to complete the operation.
- Low Power**: Power consumption is critical in moving decision making from the cloud to the Edge node.



Sustainability to the core

As a global leader in chemical and ingredient distribution, Univar Solutions leverages its position to help create a better world through a focus on more sustainable processes, culture, products, services and collaborations. The company has committed to a forward-thinking and holistic sustainability journey that supports its efforts to help keep global communities healthy, fed, clean, and safe. In its 2020 sustainability report, Univar Solutions introduces a new set of global sustainability goals to 2025 and beyond were set, with key emissions goals stretching to 2030 in support of a long-term commitment to achieve net-zero emissions by 2050. “Sustainability was “a nice to have” differentiator in the chemical distribution sector but is now becoming an essential building block in the supply chain,” says Liam McCarroll, Director of Sustainability at Univar Solutions. “We have set an ambitious strategy that goes beyond reducing our impacts and instead challenges our business and supply chain to create collective benefits for the world around us. Our journey to achieve our new global sustainability goals to 2025 will be embedded in everything we do as a business, today, tomorrow and together because above all it is our home, our responsibility.”

For Univar Solutions, managing the Environmental, Social, and Corporate Governance (ESG) risks and opportunities facing the Company is fundamental to its ability to adapt and grow. From its first sustainability report published in 2008, Univar Solutions has consistently demonstrated a commitment to transparency and continuous improvement as it established a first

set of goals in 2017, became a signatory of the world’s largest corporate sustainability initiative through the United Nations Global Compact (UNGC) in 2018, adopted ‘Advancing a Circular Economy’ as a sustainability goal in 2019 and found its purpose by supplying critical products during an unprecedented time in 2020 during the Covid-19 pandemic.

Mr. McCarroll, who joined Univar Solutions in January 2017, confirms that the company’s sustainability journey started long before that. “Our first sustainability report, published in 2008, was co-authored by our current CEO, underscoring how committed our leadership is to it. Sustainability is part of everything we do.”

Since 2017, Mr. McCarroll has focused mostly on further embedding sustainability in Univar Solutions’ business, or, as he again puts it, “on ensuring sustainability becomes part of what we do every day. We’ve evaluated where can we make a real impact, and what’s important for our stakeholders, which has led us in defining eight sustainability goals.”

Univar Solutions’ recently published 2020 sustainability report reflects the Company’s commitment to grow Today, Tomorrow, Together through both its commercial strategic priorities and sustainability approach, while featuring an updated dashboard showing progress



against the sustainability goals to 2021 as well as a comprehensive view of the new sustainability goals to 2025 and beyond.

The report is externally, independently assured to be reporting in-line with the Sustainability Accounting Standards Board (SASB) disclosures for the chemical industry, as well as with the latest version of the Global Reporting Initiative (GRI) Standards, which help ensure relevant, transparent, and comprehensive disclosures. It additionally includes a

summary of the material contributions made to the United Nations Sustainable Development Goals (UN SDGs), highlighting the ability of responsible business to make a positive impact on society, the environment, and economies.

The goals set by Univar Solutions are around eight central themes, including, among others, Climate Action, supporting the company’s journey toward a net-zero carbon future, Sustainable Sourcing, in other words getting their supplier base aligned with

sustainability goals, and Diversity, Equity and Inclusion. The latter, while it’s always been important to Univar Solutions, has become even more of a priority according to Mr. McCarroll. “We don’t want to be reactionary, and I don’t believe we have been. Instead we want to ensure that we’re looking ahead. Where diversity is concerned we were on the mark earlier than our peers in the industry,” he comments.

For Mr. McCarroll, the longest stretching sustainability goal is around emissions.





“The chemical industry contributes a significant part to emissions.”

He emphasises that ESG are designed to help investors identify and understand financially material ESG risks to a financial business. Companies such as Univar Solutions that score well on ESG metrics are believed to better anticipate future risks and opportunities, be more disposed to longer-term strategic thinking, and focused on long-term value creation. Univar Solutions is committed to assessing, measuring and reporting on its sustainability performance, and aims for continuous improvement and open communication with stakeholders.

Mr. McCarroll warns that with all things around sustainability, it's easy to get lost in the details. “Sustainability only works when it is core to the business, and when you look at things holistically. With our climate goals, for example, or our safety goals, for us it's about embedding those goals into everything we do every day. It's about behaviour, about building a culture, understanding where risks lie and where the opportunities are to mitigate them. I've never worked for a company where sustainability is so clearly part of the culture, values, mission and vision. It's not just about us though. We have

About Univar Solutions

Based in the US with operations worldwide, Univar Solutions is one of the world's leading distributors of industrial and specialty chemicals. The company represents thousands of chemical producers and provides its customer base, made up of 100,000 customers, with a full portfolio of products. It operates a network of more than 600 distribution facilities throughout North America, Europe, the Asia-Pacific region, and Latin America, with additional sales offices located in Eastern Europe, the Middle East, and Africa.

a global supply base, and in circularity, for example, we need to partner with external organisations. There is still room for improvement but we're on the right track.”

With many others in the chemical industry, Univar Solutions has come to the conclusion that increased collaboration is needed to make an impact, Mr. McCarroll adds. “Our suppliers know that as well. But we want to lead by example. For our business, we have set goals around sustainable sourcing, and set minimum standards across our very diverse supply base. We understand the risk and opportunities, and work with our suppliers to bring sustainable products to market: as a distributor we are in a great position to support this. It's becoming less and less about us, and more and more about how we can support the supply chain journey.”

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Think inside the box

Sonoco Protective Solutions, a division of global packaging and sustainability leader Sonoco, announced in May 2021, the expansion of its proprietary Sonopost® packaging technology into Europe. Utilizing current manufacturing infrastructure, strategically located to support this growing opportunity, Sonoco Protective Solutions will expand with a new Sonopost manufacturing operation in Sochaczew, Poland this summer. Adam Wood, Vice President and General Manager - Paper/ and Industrial Converting International at Sonoco says: “European manufacturing and retailers are aggressively looking for proven solutions to address mandates related to sustainability.”

Founded in 1899, Sonoco is a global provider of consumer, industrial, healthcare and protective packaging. With annual net sales of approximately \$5.2 billion, the Company has 19,000 employees working in approximately 300 operations in 34 countries, serving some of the world's best-known brands in some 85 nations.

Sonoco Protective Solutions, a division of Sonoco, is North America's leading provider of protective packaging, components and material handling solutions. Wood explains: “Our goal is to provide a solution tailored to our customers' unique needs through a simple, streamlined process. Our engineering capabilities enable us to present our customers with complete solutions to their complex problems and with our wide array of offerings, we're able to provide a full-service experience from initial concept and design to prototyping and manufacturing.”

According to Wood, packaging plays a fundamental role in providing sustainable, safe and hygienic delivery systems for food, medicines and other essential products around the world. “We expect to continue to grow our Sonopost business in Europe. We are also looking at expansion opportunities in Turkey and Mexico.”

With its industry leading Sonopost technology, the company sets out in

resistance and superior unit protection. Acting as an internal skeleton, the technology allows manufacturers to confidently package and stack their products without the burden of plastic-based packaging materials. The corner posts also serve as an external skeleton, bracing and supporting bulk loads and securing them into tight units.

Sonoco addresses environmental challenges, such as climate change, based on data-driven scientific criteria. “While we have reduced normalized greenhouse gas emissions by approximately 25 percent since 2009, we also are committed to advancing our environmental progress by setting ambitious new targets to reduce our global greenhouse gas emissions in line with the Paris Climate Agreement,” Wood ends.

Website:
www.sonocoprotectivesolutions.com



Evolving electric vehicles with GaN

New gallium nitride (GaN) technology is steadily shrinking the vehicle bill-of-materials cost while creating power efficiencies and new design solutions in electric vehicles. A specialist in this field, VisIC Technologies recently introduced its new reference design for Totem Pole PFC aimed at on-board charging (OBC) for electric vehicles. "This reference design is another step in the ongoing effort to support our customers and improve the power conversion systems to fit the demanding size, cost, and efficiency targets for the automotive market," says Ran Soffer, SVP Sales & Marketing at VisIC.

Based in Israel, VisIC Technologies Ltd. was established by experts in Gallium Nitride (GaN) technology to develop and market advanced GaN-based power conversion products. VisIC has successfully developed and is bringing to market high power GaN-based transistors and modules. Its high efficiency and reliable products are designed for high power conversion for hybrid and electric vehicles, Datacenters, renewable energy, and industrial motors.

GaN is not a new technology: it is widely in use in LEDs and in other low power conversion applications. What is relatively new is that GaN is now widely considered as an alternative to silicon as the heart of electronic chips, not just to satisfy a growing need for faster, more-efficient circuits in high-power environments. "New generation technologies, electric vehicles and robotics for example, are remotely operated on batteries. Silicon switches

are not efficient enough in power conversion in these applications as energy is lost in the process," Mr. Soffer explains. "GaN is much more efficient, at a cost similar to silicon."

He adds that VisIC focuses on high-power applications in automotive, where requirements around reliability and safety are high. "We believe that it is highly important for our planet to move to green tech, and that electric cars can significantly contribute to this. But we need to bring the cost of these cars down. The battery pack is most expensive factor, accounting for 30 to 35% of the car. The target is to reduce that to 25%. GaN power conversion can contribute to this. With a more efficient way to convert the energy stored in the battery pack, you can reduce the size of the battery pack."

VisIC works with OEMs and tier-1 suppliers in the automotive industry to

get GaN in electric vehicles. It has notably formed a partnership with ZF Friedrichshafen AG, a global leading automotive supplier, to create the next generation of high-performance and high-efficiency electric drivelines for vehicles. The focus of the joint efforts is on 400-Volt driveline applications, covering the largest segment of the electric vehicle market. "The industry across the board acknowledges the potential of GaN in helping to improve efficiency, and bring down the cost of electric vehicles," says Mr. Soffer.

VisIC's ambition is to get its technology in mass-produced electric cars. "It's a good time to be in this industry, as all big OEMs are investing in electric vehicle development. In the process we're also contributing to saving our planet."



Streamline the path from discovery to cure

As businesses, universities and schools reopen, SARS-CoV-2 virus surveillance is critical to the management of outbreaks and emerging new strains, including the Delta variant. To support large-scale research and surveillance programs, Thermo Fisher Scientific introduced the Thermo Scientific SpecIMAX Saliva Collection Kit in June 2021. "We are helping to simplify saliva sample collection with an easy to use kit and with scalability through standardization for automatization," said Susan Magdaleno, interim director of product management, sample preparation at Thermo Fisher Scientific.*

Thermo Fisher Scientific Inc. is the world leader in serving science, with annual revenue exceeding \$30 billion. Whether customers are accelerating life sciences research, solving complex analytical challenges, improving patient diagnostics and therapies or increasing productivity in their laboratories, Thermo Fisher Scientific is there to support them. The company's global team of more than 80,000 colleagues delivers an unrivalled combination of innovative technologies, purchasing convenience and pharmaceutical services through its industry-leading brands, including Thermo Scientific, Applied Biosystems, Invitrogen, Fisher Scientific, Unity Lab Services and Patheon.

Magdaleno notes that until now, labs doing saliva collection have been limited in the collection kits they could choose from. "Either labs were using conical tubes or very expensive collection devices typically used for genetic applications. Conical tubes are affordable but not very efficient when you have to manually process thousands of samples." The recently introduced SpecIMAX Saliva Collection Kit was designed to simplify and streamline saliva collection by using a funnel and making the collection tubes compatible with decapper and liquid handling systems that labs use for processing thousands of samples a day. These cost-effective kits are individually packaged, barcoded, and optimized for

labs time and money. For example, when paired with a liquid handler, labs could save 30 seconds per manual saliva transfers. For every 1,000 samples, that is equivalent to saving 8 hours of labour when compared to using a non-standardized saliva collection kit. Magdaleno concludes: "Fortunately, vaccines are now available and more countries have access to them. However, screening and surveillance is still needed to monitor SARS-CoV-2 and to be able to differentiate it from other respiratory infections. We expect the SpecIMAX Saliva Collection Kit to help labs doing saliva collection and to ease the transition of labs that would like to incorporate saliva sample collection into their protocols."



The pioneer in cognitive procurement

Based in Princeton, NJ, Zycus is the pioneer in Cognitive Procurement software. The company announced in July 2021 that it has filed a patent for its Artificial Intelligence (AI) based Merlin Invoice. It is an intelligent solution for automatically extracting key information from header and line levels of invoice documents. Jim Kanir, Vice President of Sales at Zycus comments: “Zycus is a category creator of ‘Cognitive Procurement’, offering a holistic approach to using AI to help procurement and finance teams do more from less across the entire Source-to-Pay cycle.”

Zycus has been a trusted partner of choice for large global enterprises for two decades and powers its S2P software with the revolutionary Merlin AI Suite. Merlin AI takes over the tactical tasks and empowers procurement and AP officers to focus on strategic projects. Zycus helps enterprises drive real savings, reduce risks, and boost compliance and its seamless, intuitive, and easy-to-use user interface ensures high adoption and value across the organization.

Jim explains: “In an age where procurement teams are being asked to do more with less, the need of the hour is a truly integrated and comprehensive Source-to-Pay suite backed by the power of AI. Zycus’ AI-enabled Merlin suite is a

path-breaking step in this direction. It was launched with the aim of automating mundane & tactical tasks so that procurement teams have more bandwidth to add strategic value. Zycus’ Source-to-Pay suite is also easy to use and easier to deploy ensuring an accelerated road to realising tangible ROI in terms of hard and soft savings on the procurement spends.”

Zycus believes that the COVID-19 pandemic has reprioritized the C-Suite agenda. While companies focused the last decade on driving cost efficiencies, the pandemic underscored the importance of risk and resilience. Industry requires risk management offering which is integrated in the

Source-to-Pay process to gain visibility and control not just on their level 1 vendors, but also level 3 and level 4 vendors. “So essentially lower costs (cheaper), tighter control (better), higher efficiency (faster), Merlin AI for Accounts Payable helps the AP teams achieve this.” Zycus has been avant-garde since its inception, delivering sourcing & procurement related value to its customers. Jim states that Zycus already filed for 30+ patents to date. “To truly offer our customers with the most cutting edge solution, Zycus invests almost 50% of company resources towards research & development (R&D) each year, which is by far the highest in the industry, with 25% of them specifically dedicated towards AI based offerings.”

The pandemic and work-from-anywhere economy has definitely provided tailwinds for a faster transition to 100% digitized procurement, and Zycus will continue to invest in Cognitive Procurement space to develop innovative and integrated products. Jim ends: “From a technology standpoint, we aim to make P2P 80-90% touchless in the coming years with our Merlin AI capabilities. Also, we are bringing conversations of sustainability to the forefront, helping firms embrace sustainable procurement faster with our intelligent tech-based solutions.”



Jim Kanir,
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Boost for ultra-sensitive cancer monitoring

SAGA Diagnostics AB is a personalised cancer diagnostics and disease monitoring company focused on molecular genetic analyses of a powerful cancer biomarker: circulating tumour DNA (ctDNA). Their platform — which is based on digital PCR and next-generation sequencing — can be used to stratify cancer patients, monitor therapy response, identify disease relapse, and guide treatment decisions. “Our new capital raise will enable us to execute on our ambitious growth plans,” says SAGA CEO, Lao Saal. “We will offer a wide range of regulatory-approved assays and services using all our three technology platforms and to broaden our reach to further markets.”

SAGA Diagnostics was founded in 2016 as a spin-out from a highly successful research group at Lund University, co-established by Dr. Saal. “What we focus on is analysis of cancer through liquid biopsies,” he explains. “As the tumour grows, some of the tumour’s DNA escapes from cells and ends up in the blood circulation and other bodily fluids. With the right method you can detect that DNA, and distinguish it from your normal other DNA. This is very helpful for patients as blood samples and other so-called liquid biopsies are much less invasive and more practical to obtain than the tissue biopsy which involves a surgical procedure.”

The idea is to complement surgical testing rather than replace it, he adds. “You can follow a patient over time, check every few months to see if the cancer therapy is working or not, for example. It’s a very useful tool to clinically measure how patients are doing. We’re also looking at gene mutations. Most new therapies that are developed today are so called targeted therapies: they target specific gene mutations and gene pathways. This is a super exciting development that liquid biopsies can support to help identify patients with treatable mutations with a simple blood test.”

SAGA’s products are already used in the clinic and Dr. Saal expects that in 10

years, most cancer patients will have a liquid biopsy test. “There also is an economic aspect to this as liquid biopsies likely will eliminate the need for some surgical biopsies and their high cost, as well as by helping the right patient get the right drug, to reduce the overall cost of cancer treatment. The end goal, of course, is to ensure more patients survive and are cured, and that they are able to get back to work sooner. A lot of patients suffer from side effects from taking drugs they don’t need anymore. With our technology the oncologist’s decisions can be better informed.”

Now that SAGA has secured additional funding, the plan is to release more products to the market, including CE-marked kits for use in hospital settings. The company will also use the funds to perform additional clinical studies. “We also plan to enter the US market and this funding will take us a good step forward, and help us meet a number of milestones.” He adds that they are already generating revenue, so are not purely a research company anymore. “We already have a commercial business work with some of the biggest names in pharma. We meet with a lot of oncologists, key opinion leaders and health professionals, who really see the promise of the liquid biopsy approach and who are particularly intrigued by how our technology is more sensitive than competing products.”



SAGA Diagnostics
Website: sagadiagnostics.com

Celebrating 125 years of innovations

As an independent affiliate of Beiersdorf AG, tesa is one the world's leading adhesive tape manufacturers. While everyone, especially in Western Europe, knows the brand from their office supplies, the brand prides itself on 125 years of innovations in industry, with its adhesive tape becoming an exceedingly technical and vital component in a wide range of products. So that products can keep becoming smaller, flatter, lighter, more effective and more technologically sophisticated, tesa now provides many manufacturers and their suppliers in various industry sectors with specialized high-tech adhesive tapes. The adhesive solutions are used in the automotive and electronics sectors, just as they are used in newspaper printing, the healthcare industry and in the construction of wind turbines. "One of our key messages is 'tesa – holding the world together', because actually you can find our adhesive tapes all over the world in different applications," says Bettina Feldgen, their Vice President Corporate Communications.

The way tesa was invented makes for an interesting story that illustrates that when a new product doesn't take off initially, it can still find its way to global markets when it is successfully reimaged.

The tesa story starts in the 1890s when Beiersdorf, a company founded in 1882 by pharmacist Paul Beiersdorf in Hamburg and sold to Oscar Tropolowitz in 1890, wanted to market a new plaster for the skin. The plaster caused irritation and (according to the company itself) was a total flop.

Tropolowitz quickly modified it and used it to create the first technical adhesive tape, the "Cito Sportheftpflaster" (sports adhesive plaster) with a new purpose, to repair bicycles. An innovative sensation, because back then pneumatic tires often got punctured on the streets.

In 1906, the name 'tesa' was invented by Elsa Tesmer, who at the time worked as a secretary and head of the office for the Beiersdorf company in Hamburg. She created the brand name from the first two letters of her last name (Te-)

and the last two letters of her first name (-sa). It was industrial clerk Hugo Kirchberg, who was given the task of developing and systematically promoting the company's adhesive tape business, who officially made tesa the brand name. Kirchberg was so successful that he became known as "Mr. tesa". The product portfolio consisted of over 600 products by the time he retired in 1974. His great pioneering spirit can still be felt today, since the number of adhesive tape products has increased more than tenfold. To honour his legacy, Kirchberg had the street named after him in Norderstedt, Germany, where tesa is headquartered.

More than a century after the invention of the first tesa-branded technical tape, tesa celebrates 125 years of innovations with the tagline 'tesa holds the world together'. Bettina Feldgen, their Vice President Corporate Communications, says the campaign highlights the fact that they were always involved in industrial markets. "For example, adhesive bindings were used 90 years



ago to protect early cars from damages of bumpy roads. It was and still is the mindset of the company to always look out for new business in fields nobody maybe ever thought adhesives would be helpful at all. We offer clever and innovative solutions for high-tech segments and plan to strengthen our position in these fields."

Throughout the remarkable history, tesa has invented a lot of innovative products which are established as synonyms for the whole product group, such as the name "tesa", which is used in Germany as a synonym for transparent adhesive tape. Or tesakrepp®, which is used as a synonym

for masking tape or tesamol® as a synonym for a sealing tape for windows and doors.

The biggest achievements from a technical perspective are probably very thin adhesive tapes for the mounting of mobile phones which also fulfil requirements such as heat management, removability and high demands regarding optically clear lamination. "We also developed a lot of different tapes for the automotive industry and also we never rest on our success and always pursuit new innovations. An example for that mindset is our latest success story with the automobile manufacturer Porsche.

Here we offered not only the adhesive tapes for the hole covering but also provided an automated process to efficiently place our die cuts on the car body. With this process we were able to save Porsche a lot of time, materials and, what's maybe most important, relieve their employees," says Bettina Feldgen.

At tesa, over 500 scientists in the company's own research laboratories in Germany, China and the U.S. are working on turning innovative ideas into new products and system solutions and on continually improving existing products. The product range is constantly growing. As a result, more





and more forward-looking sectors have the opportunity to use adhesive solutions for their own needs. In sports, for example, pole-jumpers make the smooth surface of their fiberglass rods easier to grip with a coarse layer of fabric tape. Ice hockey players wrap tape around their hockey sticks. Skeleton sliders tape the underside and edges of their sled to improve aerodynamics. On the ice track, the tear-proof fabric tape must endure a lot as the pilots race around

tight turns at top speeds of up to 145 kilometres per hour. In the “top tier” Formula 1 races, mechanics also can’t do without tesa®. A TV broadcast showed that Lewis Hamilton’s headrest was fixed into place at a pit stop with tesa® 4651. The main business markets of tesa are right now automotive, electronics, the consumer & craftsmen markets and the building industry. You can find tesa in trains, boats, planes, furniture, appliances, solar panels, wind turbines and in the printing industry. The company offers a range of 7,000 different products.

“Basically, the worldwide trend is to use more and more adhesives. Adhesive bonding is an alternative to screwing, welding, soldering, nailing or riveting and is therefore becoming increasingly important in many industries. Adhesive tapes can make products thinner, lighter and more appealing – moreover, they can also insulate, control temperatures, store data or conduct electricity,” Ms. Feldgen adds.

Another growth driver for tesa is sustainability. The multinational technology company does not only focus on developing tapes which are better from a sustainability perspective, but also researches new product lines that work without the use of solvents

and instead use bio materials or produce tapes which are recyclable in the first place. In addition, tesa tries to help their customers to be more sustainable.

As an example, the innovative tape tesa® Bond & Detach has successfully addressed the issue with batteries in smartphones being so firmly glued to the device that they could neither be replaced nor recycled. Since 2014, 1.5 billion smartphones have been equipped with an innovative adhesive technology developed by tesa: as the tape bonds efficiently but can also be taken off without damaging the battery, it allows the replacement of the battery. For this revolutionary development, in 2020 tesa was declared the public favourite and awarded the title of ‘Innovator of the Year’ in Germany. It’s an innovation that Oscar Tropowitz and Hugo Kirchberg would have been proud of.



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tesa facts and figures

tesa is present in 100 countries and operates plants in Germany, Italy, China, the USA, and soon also in Vietnam. Around three quarters of the tesa Group’s sales (2020: EUR 1,326 million) are generated by applications for industries. Together with its international clients, tesa develops innovations that are customized at product and process level. Already more than 130 tesa tapes may be installed in an electric car and over 70 in a smartphone. In the printing and construction industries, too, tesa is constantly penetrating new segments and countries with its special adhesive tapes. The company generates almost one quarter of its sales with products for end consumers and professional craftsmen. 300 applications, such as the legendary tesafilm®, make life easier or, when it comes to insect protection, even make it a bit more pleasant. tesa is one of the world’s leading manufacturers of adhesive solutions. Since 2001, tesa SE is an independent 100% affiliate of Beiersdorf AG (i.e., NIVEA, Eucerin, la prairie) with 4,800 employees today.

End to end mobile security

Zimperium, the global leader in mobile security, has broadened its portfolio of mobile application protection solutions by acquiring whiteCryption, a leading provider of advanced application shielding and cryptographic key protection. Zimperium acquired whiteCryption from an investment group led by Intertrust, the pioneer in trusted computing and digital rights management (DRM) technology. Zimperium will continue to support current whiteCryption customers and will integrate whiteCryption’s solutions into Zimperium’s Mobile Application Protection Suite (MAPS), creating the world’s most advanced mobile application protection solution, as Shridhar Mittal, Zimperium’s CEO, explains. “We are excited to join forces with whiteCryption, whose team has developed the most advanced mobile application code and key protection solutions available.”

to stay ahead of them. So we are adding something new every single day. It’s a race right now on both sides to see who wins. But we are confident in our approach.” He has some advice for companies and organisations that develop apps: “Don’t be in a hurry to get them on the market and don’t let security be an afterthought.”

Mr. Mittal joined Zimperium in 2014, three years after it was founded. “Back then, many people didn’t realise that their mobile devices could get attacked,” he says. “But that’s all changed now.”

The unique security issue with mobile devices is that they are for both personal and business use, he points out. “So data privacy is a problem. That’s why we decided to adopt a privacy-centric approach, with all detection done on the device, rather than in the cloud, which is what most of our competitors do. In addition, our technology is enterprise-friendly, and comprehensive. There are so many security tools out there: we integrate them all. Our tagline is “We secure mobile”, in other words, not just the endpoint but also the applications that are running people’s devices.”

Zimperium’s MAPS product helps enterprises build secure mobile apps that are natively resistant to attacks. MAPS is the only platform that protects mobile apps end-to-end, from in-development to on-device. With the addition of whiteCryption’s technologies, MAPS provides app

scanning, app shielding, runtime protection, and protection of sensitive cryptographic keys in one platform. MAPS’ centralized threat management dashboard provides real-time threat visibility and the ability to respond to emerging risks and attacks detected.

“When you build a mobile app, you need to ensure that it is already tested, so that there’s no security and compliance issues,” Mr. Mittal explain. “You also need to ensure that the app’s code cannot be reverse engineered, and that once a device is compromised it can’t be used to attack apps. Now with the integration of whiteCryption we can ensure all three, so that our customers get end to end mobile security.”

Zimperium works for pretty much all security-sensitive sectors, from finance through to healthcare, according to Mr. Mittal. “As cars get increasingly connected, the automotive industry is particularly interesting for us, and for hackers, too. Mobile apps are vulnerable. You need to protect the data and content. We’re continuously innovating but hackers don’t sit still, either, we need



Zimperium
Website: www.zimperium.com



Buying into a strong culture

Sweden-based Dacke Industri is a long-term owner who invests in innovative technology companies focusing on customized components and systems. Its latest acquisition, Exertus, specialises in control systems based on CAN-bus solutions and provides innovative offerings including hardware, software, application development and related services towards the mobile machinery segment. "From my perspective there are great opportunities to build on the strong company culture to make Exertus even more successful going forward. I am really glad that the owners remain onboard for the future journey," says Lars Fredin, Group CEO of Dacke Industri.



Pirkka Tukeva, CEO Exertus



Lars Fredin, Group CEO, Dacke Industri

Dacke Industri was founded in 2016 by Nordstjernan, a family-controlled investment company whose business concept is to develop companies through active ownership and create long-term value growth. "In 2016 PMC Group was acquired by Nordstjernan to form Dacke Industri," Mr. Fredin explains. "We started with four companies and today we are fourteen companies, split into three clusters: Industry, Electronics and Building Systems and Products."

Dacke Industri's business concept is to invest in innovative technology companies. "Preferably with a focus own products, customer specific components and high-performance systems as well value adding application knowledge," says Mr. Fredin.

Exertus fits the bill: specialising in control systems based on CAN-bus solutions, the Finland-based company develops all products and related software in-house which gives freedom to create tailored product for the customers. The standard Exertus product offering consists of a variety of components for all mobile machinery applications including main controllers, IO-controllers, displays, sensors and connectivity devices. Tailored designs are always based on the industry proven design elements from the libraries of the company which will ensure the cost efficiency and quality.

"Besides the fact that they fit right into our business concept, we found that the owners have created a strong culture. Since business is about people we are keen on that aspect when looking at partners," says Mr. Fredin.

Exertus will be an important part of Dacke Industri's continued effort to build a cluster of companies within Electronics with the goal of helping customers to streamline their operations and strengthen the quality by providing products that enable monitoring and improvements in several application areas. Mr. Fredin expects continued solid growth for the company. "Overall, we have a clear goal where we want to be, where both organic growth and acquisitions are important. Dacke Industri is a Partner and acts as a role model for its stakeholders."

Following the acquisition of Exertus, Dacke Industri has completed the acquisition of 100 % of the shares in LIMAB AB, who develop, manufacture and market laser-based sensors and systems for measurements of dimensions and defects in the industry. The current management and owners will stay on and continue to contribute to the business. The intention of the acquisition is to continue the journey to build a more profitable and sustainable LIMAB.



Dacke Industri AB

Website: www.dackeindustri.se