

Business Business Brown Forman Brown Forman 15 (10) 200

MCK DANIEL

***** USA** EDITION

FEBRUARY 2020

www.businesschief.com

Lifescan

The ongoing process of digital transformation City Focus KANSAS CITY

Brown-Forman

Partnerships, teamwork and achieving goals



Chief Executive Officers in the US GOLDEN HIPPO A WORLD-CLASS SUPPLY CHAIN













Sometimes sunlight is more powerful after dark.

Today, energy companies work with IBM Services to intelligently distribute solar and wind power to a network of batteries. This helps balance the grid and enables renewable energy to be stored when demand is low and available during hours when it's high. ibm.com/smart

> Let's put smart to work.™

IBM and its logo, ibm.com and Let's put smart to work are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. See current list at ibm.com/trademark. Other product and service names might be trademarks of IBM or other companies. @International Business Machines Corp. 2019. B33486





elcome to the February edition of Business Chief USA! This month's cover feature zones in on Tim Nall, SVP Chief Information Officer at Brown-Forman Corporation. Nall discusses how data is at the core of the company's digital transformation strategy and how it navitages the road to success.

Other leaders that feature in the magazine include Miguel Louzan, Chief Information Officer at LifeScan. discussing the company's focus on internal changes by leveraging an opportunity provided via a carve-out and how it engages in gradual digital transformation. Elsewhere in the magazine, George Do, Chief Information Security at Gojek, discusses the methods, trends and technologies driving the cybersecurity agenda, and Mike Coleman, Global Head of Design & Delivery at Aligned Energy Company, talks about how the company is delivering large scale adaptive data

centres at speed, while maintaining mission-critical stability for customers.

In our leadership feature we speak with Chetan Dube, CEO and Founder of IPsoft, and Eugenio Pace, CEO and Co-Founder of AuthO, to discuss the challenges of becoming an entrepreneur and the best strategies for establishing your own company.

This month's City Focus takes a look at Kansas City's busy and rapidly growing hub for innovative technology, the automotive industry and the federal government. In addition, our Top 10 looks at the CEOs of the largest public companies in the US ranked by market value.

Do you have a story to share? Please do not hesitate to get in touch and you could be featured in our next issue.

Enjoy the read!

Georgia Wilson georgia.wilson@bizclikmedia.com

PURPOSE LED, PERFORMANCE DRIVEN

BRIGHT SCIENCE. BRIGHTER LIVING.™

The most comprehensive sciencebased animal nutrition solutions, intelligently scaled to solve the sustainability and commercial challenges we face in transforming how we feed the world.

Stay connected at dsm.com/anh



@dsmfeedtweet

dsmanimalnutrition

linkedin.com/showcase/dsm-animal-nutrition-and-health/



Business Chief USA EDITION

EDITOR-IN-CHIEF GEORGIA WILSON

EDITORAL DIRECTOR MATT HIGH

CREATIVE DIRECTORS DANIEL CRAWFORD STEVE SHIPLEY

CREATIVE TEAM OSCAR HATHAWAY ERIN HANCOX SOPHIA FORTE SOPHIE-ANN PINNELL

PRODUCTION DIRECTOR DANIELA KIANIČKOVÁ

PRODUCTION MANAGER OWEN MARTIN

DIGITAL VIDEO DIRECTOR JOSHUA S. PECK

DIGITAL VIDEO PRODUCERS KIERAN WAITE

MARKETING DIRECTOR LEIGH MANNING

DIGITAL MARKETING EXECUTIVES DANIEL WEATHERLEY JACK GRIMSHAW EVELYN HOWAT KAYLEIGH SHOOTER

managing director MIKE SADR

PROJECT DIRECTORS

DENITRA PRICE CRAIG KILLINGBACK SHIRIN SADR RICHARD DEANE MANUEL NAVARRO TOM VENTURO RYAN HALL

DIGITAL MEDIA DIRECTORS ARRON RAMPLING JASON WESTGATE

OPERATIONS DIRECTOR ALEX BARRON

GROUP MANAGING DIRECTOR JAMES PEPPER

CHIEF OPERATIONS OFFICER ANDY TURNER

PRESIDENT & CEO GLEN WHITE

PUBLISHED BY



Click the home icon (top right of page) to return to contents page at anytime

PRESS PLAY!

WHEN YOU SEE THE PLAY BUTTON ICON, CLICK TO WATCH OUR VIDEO CONTENT

in 😏 🜔 f 🞯

Wherever you see these icons in the magazine **click to be directly connected** via social media

> CLICK NOW To Subscribe For Free

Busi

Visit the **BusinessChief.com** website and sign up to receive exclusive access to one of the world's fastest growing business news platforms.

IF YOU LIKE US 👍 FOLLOW US! 🙂

CONTENTS

Partnerships, teamwork and the right goal

niversar



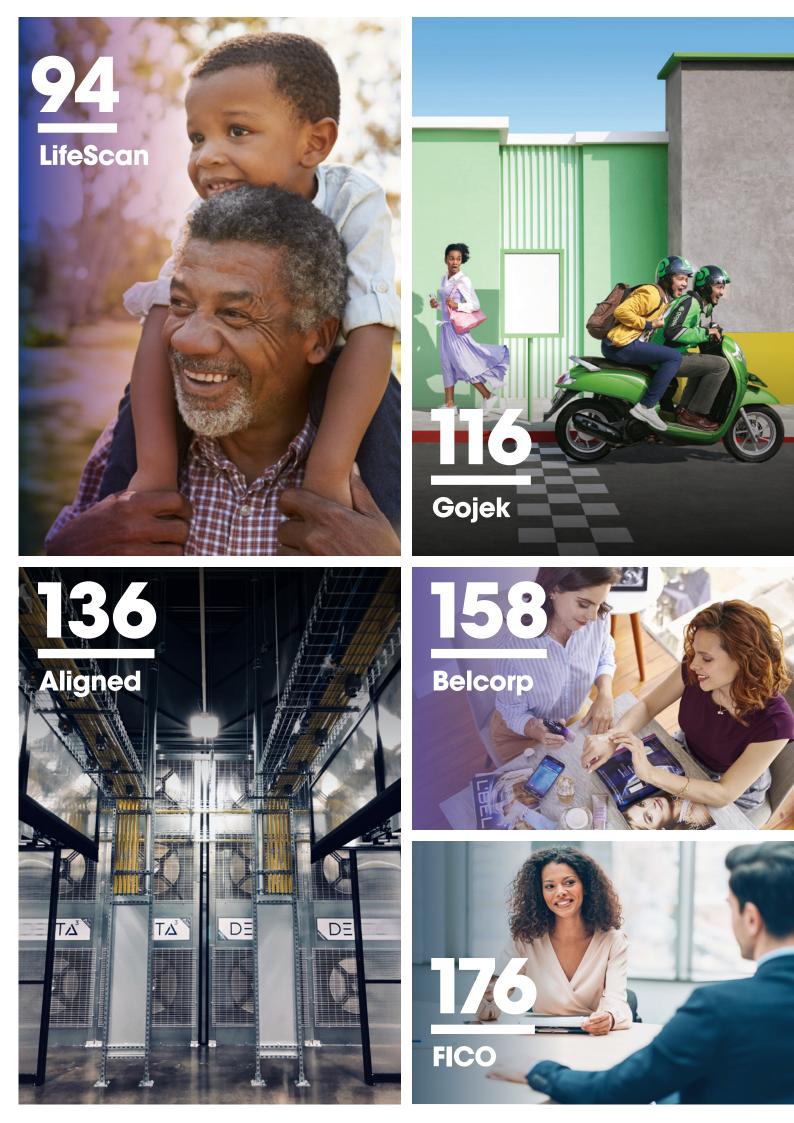
Becoming an entrepreneur: challenges and best strategies Embracing behaviours in a new technological age

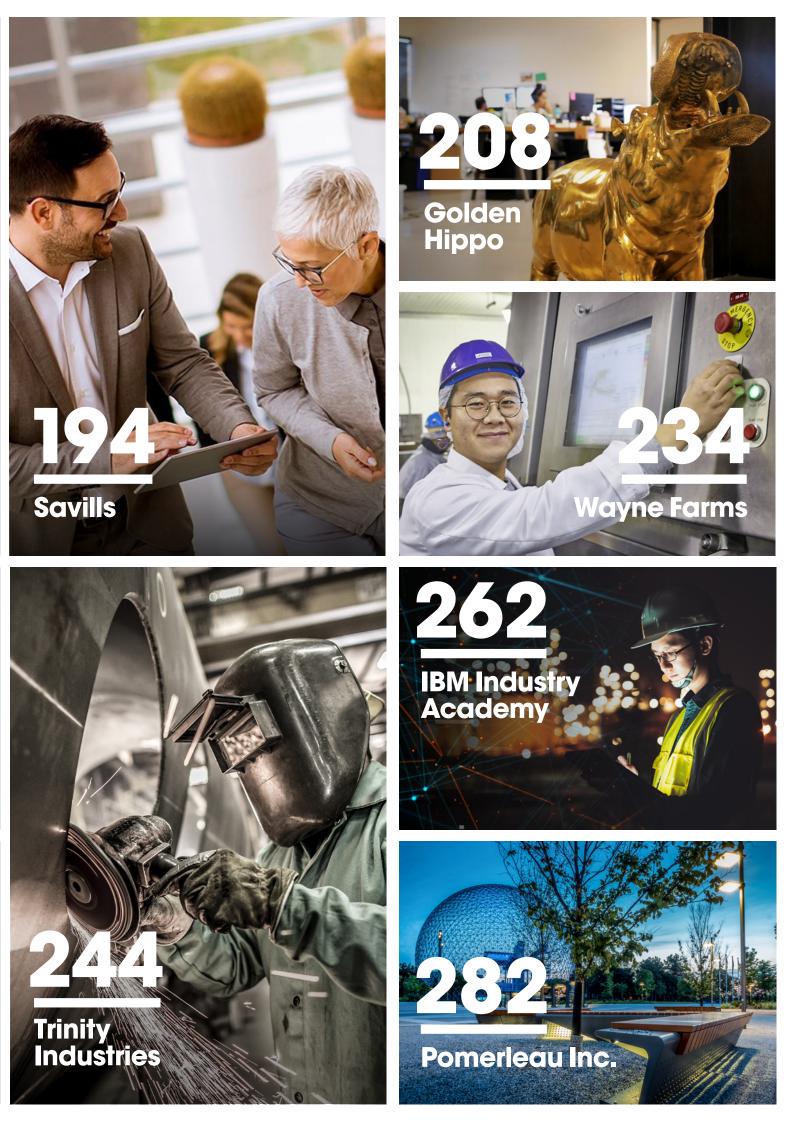
DIGITAL INNOVATION IN LOGISTICS WAREHOUSES











Brown Forman 1870 15 (1) 2020 Anniversary

Partnerships, teamwork and the right goal

WRITTEN BY RACHAEL DAVIS PRODUCED BY MIKE SADR

FEBRUARY 2020



Data is at the core of Brown-Forman Corporation's digital transformation. From partnerships to the right team, we discussed Brown-Forman's strategy and how it navigates the road to success

A provided in 1870, Kentucky-based Brown-Forman Corporation has a long history of producing quality spirits and wines - manufacturing well-known brands such as Jack Daniel's, Woodford Reserve, Finlandia, Chambord and Old Forester. As times change and technology advances, the company's growth strategy has adapted to take full advantage. We spoke to Tim Nall, Senior Vice President and Chief Information Officer; Dan Muraski, Global Director of Business Intelligence, Data Management and Analytics Capability; and Sam Sorsa, Director of Advanced Analytics, to find out more about their data-driven strategy and use of innovative technologies at Brown-Forman.

Data science initiatives at Brown-Forman are backed by a talented team, with wide areas of expertise and a strong bank of knowledge. From data visualisation experts to "translators who can connect our team to the business," making data "easy, available and user friendly while getting the















+++++ + a b | e a u°

5 Keys to Creating a Data Culture

Learn more at tableau.com/data-culture

of companies achieve analytics at scale

-McKinsey

Organizations are investing trillions of dollars to become more data-driven, but only 8% successfully scale analytics to get value out of their data. What separates the top performers from the rest?







Trust

Trust is at the root of a strong Data Culture. Leaders trust their people, people trust the data, and people trust each other.

Commitment

Successful Data Cultures don't just pay lip service to the importance of data and analytics. They commit to realizing the value of their data and their people.

Talent

Even with the best technology, you need people to get value out of data. Data Cultures prioritize data skills in recruiting, developing, and retaining talent.



Sharing

Most problems worth solving aren't limited to a single team. In a Data Culture, people support each other to develop a sense of belonging and purpose.



Mindset

Developing a data-first mindset is just as important as developing data skills. Data Cultures encourage exploration and prioritize data over intuition.

Learn more at tableau.com/data-culture



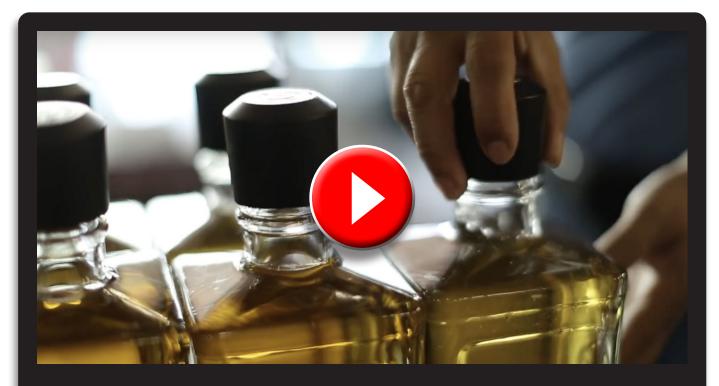
We help people see and understand data. Learn how at tableau.com. @ 2020 Tableau Software, Inc.

traditional data analysts out into the business," is essential to the integration of analytics into all aspects of the business, explains Sorsa.

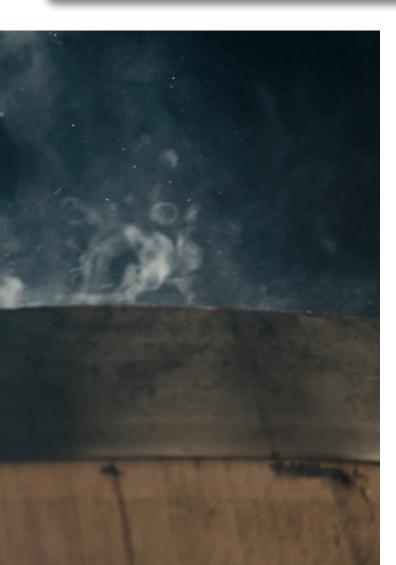
Self-service data analytics, through tools like Tableau, is a key aspect of the strategy. "Bringing the data inhouse and having it available for us to use in creative ways is great," Sorsa says. Modernising technology in all aspects of the business has allowed the data managers to reconcile internal data and maximise the selfservice approach. Additionally, data accessibility and visibility has allowed it to permeate the company so colleagues from all departments have the opportunity to utilise data analysis effectively. Now, there are "40 to 50 sources of information that are available to a Brown-Forman colleague for self-service analytics purposes," says Muraski.

The information that Brown-Forman's data analysts utilise and make accessible is wide-ranging across all aspects of the business, both internal and external, and includes data from distribution





CLICK TO WATCH: 'WHO IS BROWN-FORMAN?'



"Our employees are independently willing to give 110%, and have passion about the success of the business"

Sam Sorsa Director of Advanced Analytics, Brown-Forman

Whatever you're trying to solve, we want to solve it with you.



g.co/cloud/solving

partners, consumer demographic information, internal financials, yield information, Google search trend data, and more. Access to this breadth of information allows the data management and analytics teams to assess whichever data is important to them and to the business at any given time.

"We've had success in stopping colleagues from across the business having to ask for specific data requirements," praises Nall. "We've helped them understand what we have available to answer those questions, and then if we have to go and get some more data, we can." Utilising tools and partnerships is integral to Brown-Forman's success in internal data distribution. The data movement tool Talend is one of the essential aspects of the company's strategy. It allows data to be moved between layers in a logical way, and also has a data management function which, in combination with data analytics platform Tableau, helps colleagues see and understand their data.

Artificial intelligence (AI) can be incredibly useful for Brown-Forman, though the company's Director of Advanced Analytics emphasises the importance of education not only on

EXECUTIVE PROFILE

Sam Sorsa

Sam Sorsa is Director of Advanced Analytics at Brown-Forman Corporation, where he is responsible for developing, implementing, and managing the company's strategy for advanced analytics and data science throughout all regions and functions of the business. Prior to establishing the advanced analytics team, Sam held several leadership positions within finance during his 14 years at Brown-Forman. Prior to Brown-Forman, he spent five years in finance roles across various divisions of GE.

BROWN-FORMAN



"We really leverage our partners to help us understand what's new and what's out there"

Tim Nall Senior Vice President and Chief Information Officer, Brown Forman the capabilities of AI, but on what it needs to make it work and the importance of the human touch.

"It's something that's not really new; if you played chess against your computer in the Eighties, that's AI," Sorsa qualifies. "But in terms of the practical applications, so far we use AI to identify our competitors, to organise our data into a useable format, and probability algorithms which help the end user with data harmonisation."

The role of education in AI at Brown-Forman is definitive. Through education for partners, whether that is within the brand or with commercial partners, the data teams can be "judicious with how we bring it in, making sure it is not just a fad, that it really matters," explains Muraski.

Brown-Forman is partnering with external companies to see what insights can be gleaned within its production forecasting operations. "We have had a fairly traditional forecasting methodology over the years, but we are seeing, with all the information that is now at our fingertips, how leveraging Al and machine learning can change those processes," Muraski says.

As its major vendors bring Al into their everyday operations, Brown-Forman has to develop an understanding of what the application looks like and what the impact might be; whether it is in human resources, customer relationship management, enterprise resource planning, or elsewhere. Again, the data team at Brown-Forman insists that it all comes down to education and making sure any new technologies are adopted smartly. The right partnerships

EXECUTIVE PROFILE

Tim Nall

Tim Nall is Senior Vice President, Chief Information and Advanced Analytics Officer at Brown-Forman where he has overall global responsibility for technology, data, and analytics. Tim is passionate about employing technology to solve complex business challenges in the highly competitive, constantly evolving consumer products sector. His diverse background across operations and technology allow him to view technology, not as a singular solution, but as an enabler for continuous improvement. Prior to his current role, he held senior roles within BF's wine and spirits operations and led their technical service organisation.



are, therefore, essential to Brown-Forman's data strategy. Trace3, which provides advanced IT consulting to help integrate, automate and innovate businesses, assists Brown-Forman in reaching its constituents, engaging with its infrastructure, and ensuring connectivity. Meanwhile, utilising the open source statistical language R through the medium of RStudio helps the teams to make sense of data, as well as to scale and share work.

"We really leverage our partners, whether it's Salesforce, Google, or others, to help us understand what's new and what's out there," says Nall.

"In the last six months, our colleagues have gone to New York for day-long executive briefings at Google, where they've shown us, for example, how Google Ads can help us measure differently. We've also held sessions with Salesforce and our brand leadership, both US-based and internationally," he explains.

The team at Brown-Forman intelligently relies on its partners - "they're the ones doing a lot of the development



EXECUTIVE PROFILE

Dan Murasaki

Dan Muraski is Vice President, Global Enterprise Applications and PMO at Brown-Forman. Dan has spent three decades in the technology organisations of over two dozen companies leveraging the evolution of enterprise technology. Prior to Brown-Forman Dan worked in the software industry with SAP as a Platinum level consultant helping clients adopt process and strategies necessary to optimise value from substantial technology and data investments. He has consulted regarding the application of technology to business processes in the CPG, chemical, oil and gas, steel, utility, pharmaceutical, airline, and financial services sectors.

"We are judicious with how we bring AI in, making sure it is not just a fad, that it really matters"

Dan Muraski

Global Director of Business Intelligence, Brown-Forman



TRACE3

LIFTING TECHNOLOGY LEADERS THROUGH ADVANCED ANALYTICS

Data used intelligently drives competitive advantage, invigorates growth, speeds decisioning, and facilitates business outcomes.

Connect with us at www.trace3.com

© 2020 Trace3. All rights reserved.

ONTAPAI@TRACE3.COM

How RStudio allowed Brown-Forman to harness the full capabilities of their data science team and gain massive efficiencies

"The tools inherent in RStudio allowed our statisticians and data scientists to turn into application developers and data engineers without learning any new languages or computer science skills."

R Studio

- Paul Ditterline, Manager of Data Science, Brown-Forman

LEARN MORE





in this space, and a lot of the technological advancement that we're going to use," said Nall.

While having great partnerships is essential, so is having the right team to implement the strategy. At Brown-Forman, employees across all areas of the business are knowledgeable about their fields, receptive to new initiatives, and embrace change.

"It all starts with leadership, and having a fantastic CIO," says Nall, in mock egotism. But there is truth in his witticism: building a dedicated team is all about having the right goal to work towards, and the right leadership to guide the way. "The goal was to become a data-driven organisation, so when I look back, I realise if there were no goal, there would be no impetus to do any of the things we have achieved," Nall explains.

"I can unequivocally say we would not have made, and will not continue to make the advances we have without the skills and the knowledge of the leadership on the team," he enthuses. Colleagues at Brown-Forman have



embraced the changes being made, and use their skills and knowledge of both their field and of the business to make the changes truly worthwhile and effective.

"Our employees are independently willing to give 110%, and have passion about the success of the business," echoes Sorsa. Giving team members the space and freedom to tackle challenges in their own way, but also providing strong training and "Bringing the data in-house and having it available for us to use in creative ways is great"

Sam Sorsa Director of Advanced Analytics, Brown-Forman

I-FORMAN HANDCRAFTS

gies can thrive. With the assistance of partnerships, a dedicated, knowledgeable and dynamic workforce, and an agile management team, Brown-Forman is rationally and effectively

guidance, creates a dynamic of trust,

faith and support in which new strate-

Forman is rationally and effectively developing its data-driven strategy. Understanding the reach and limitations of AI, the power of education, and the importance of accessible data across business ventures, the data science and analytics teams can leverage technology from a range of partners to assist in Brown-Forman's enterprising application of data.





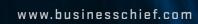


www.businesschief.com

Becoming an entrepreneur: challenges and best strategies

Chetan Dube, CEO and Founder of IPsoft, and Eugenio Pace, CEO and Co-Founder of Auth0, discuss the challenges of establishing a company and the best strategies

WRITTEN BY GEORGIA WILSON



s Chetan Dube, CEO and Founder of IPsoft explains, in the early years of establishing your own company, it can be difficult to convince people of the value that an innovation can provide to a business. "It's much easier to provide a run of the mill product at a slightly better cost, compared to offering a completely disruptive proposition. You need perseverance and conviction if you're going to launch a true first and this challenge can't be underestimated." Dube explains that today, his business is at the forefront of technological innovation. "However, that doesn't make the challenge of staying there any easier if we rest on our laurels and lose our position as the most advanced solution on the market, then we'll get left behind."

Another challenge Dube highlights is the speed of doing business around the world. "The US market is just under 300 years old. With this youth comes a fearlessness of consequences and a hunger to just 'go for it'. It's therefore unsurprising that the American banking and insurance industries are leading the charge in digitisation." Compared with the European market's maturity of 2,000 years, "you can feel that the pace of movement is inherently very different. It is important for American entrepreneurs to remember this difference and not try to push a European bank to act like its daring younger brother across the pond."





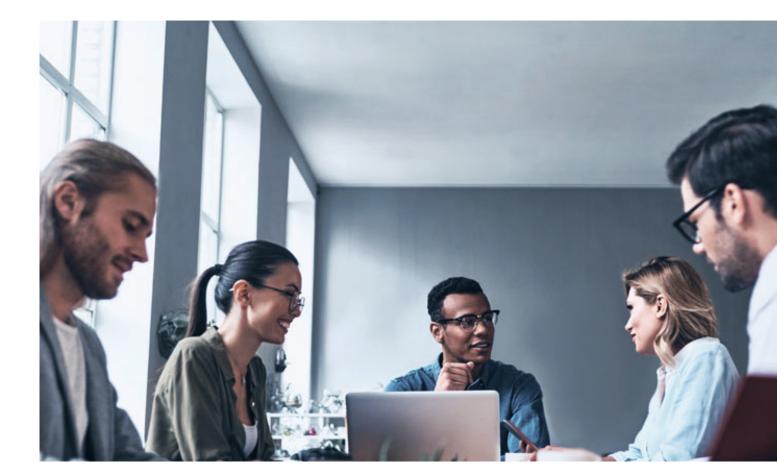
"You need perseverance and conviction if you're going to launch a true first - and this challenge can't be underestimated"

> **Chetan Dube,** CEO and Founder, IPsoft

33

Eugenio Pace, CEO and Co-Founder of <u>AuthO</u> adds that maintaining a global workforce is a challenge for entrepreneurs. "To tackle this challenge, at AuthO we have a remote-friendly work policy where we do not require our team to work in an office. Additionally, to bring our global workforce together, we hold regular companywide video meetings once a year."

To combat business challenges as a whole, Pace looks to philosophers and mentors for advice and support. "This might seem a little off-beat, but I turn to the lessons of stoic philosophers like Seneca, Epictetus, and Marcus Aurelius, whose tenets of self-control and fortitude have served great purpose in my life and helped me through the toughest adversities. I also seek out advice and support from mentors who have guided me through the trials and tribulations of entrepreneurship by forcing myself – while sometimes uncomfortable – to have brutally honest conversations about concerns I am having. Sometimes, all you need is an outside perspective to show you a clear path forward."





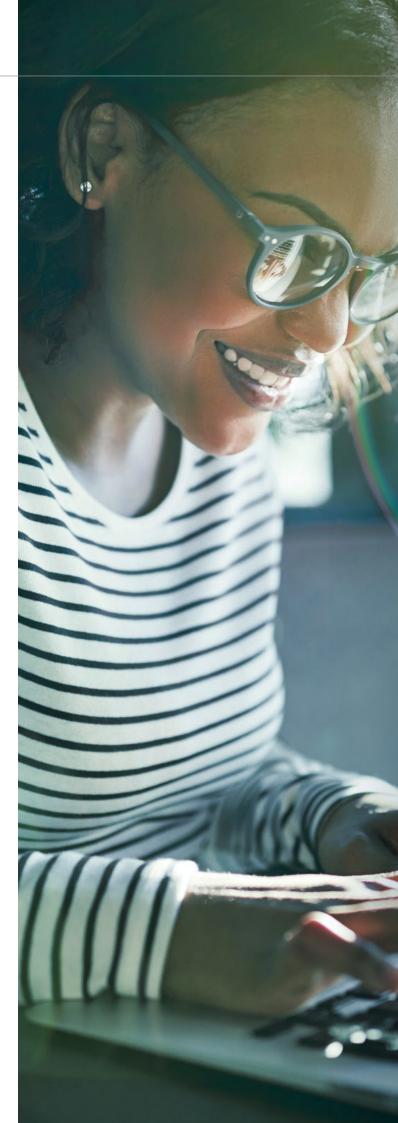
CLICK TO WATCH: 'IPSOFT DIGITAL WORKFORCE WITH CHETAN DUBE'

WINNING THE STRATEGY GAME

When asked about the best strategy for establishing your own company, Dube explains that there are three core elements that underpin a good strategy. "First, you need to find something that you're really passionate about. Second, identify a real way that you can make a difference, and finally, make sure you are different, 'I can do this too' is not enough. Otherwise, you'll just be another pizza parlor around the corner from the other one." Alongside Dube, Pace also emphasises the importance of focusing on the customer. "Since our inception, we have emphasised focusing on customers, thinking about their satisfaction from the outside-in by placing ourselves in their shoes. My co-founder and I work to uphold this everyday, rooting our company in these values."

Dube believes that alongside the standard model such as resource allocation, structure, leadership and operational model, a good business model needs the ability to continuously evolve. "If the rate of change on the outside exceeds the rate of change inside the organisation, it's fair to

assume that the end is near." Agreeing with Dube, Pace acknowledges that, "while passion is certainly necessary when building a business, the business model is what will make or break its longevity. In my opinion, the key element in a successful business model comes down to how wellrounded it is. That's not to say a business model can't be rooted by a founder's 'one big idea', but it is important that it has other legs to support it. These include: strong values and a culture that scales: scalability and long-term, sustainable growth strategies; agility in times of market and competitive shifts; continued product disruption and innovation; customer and employee satisfaction and smart partner ecosystem and business alliances." Ultimately, Dube believes that "you need to understand what your mission is and the values you want to live by in your pursuit of it. There will be sunnier and cloudier days as an entrepreneur, so having these guiding principles will help you navigate those trickier decisions where you ultimately need to decide 'at what cost?""



"While passion is certainly necessary when building a business, the business model is what will make or break its longevity"

> **Eugenio Pace,** CEO and Co-Founder, AuthO



Reflecting on the establishment of their own companies, Dube and Pace agree that embracing mistakes and challenges is important. "This might seem like odd advice to someone wanting to start their own business." contemplates Pace, "but imagine if we shifted our perception of mistakes and saw them as opportunities to grow. We could learn and better ourselves from every mistake made, viewing them as gifts in disguise. While I do not recommend making mistakes, when they inevitably happen entrepreneurs can use them as opportunities to gather information and push through their own previously conceived boundaries."





Embracing behaviours in a new technological age

WRITTEN BY AMBER DONOVAN-STEVENS

Tim Christensen, CTO, SocialChorus, explains how the employee engagement platform understands the nuances of employer to employee communication

38



www.businesschief.com

ocialChorus has earned its name as one of the top employee engagement platforms by working with CEOS to maximise the delivery of information to employees in what is an increasingly misaligned environment. SocialChorus was founded by Greg Shove and Nicole Alvino in 2008, and as the company started to gain momentum, Shove was on the search for a CTO who wanted to transform the company, taking its consulting-based foundations and making it a truly staff-led business. Tim Christensen's belief in creating genuine value in people's day-to-day lives aligned with Shove on a philosophical level, and so he joined the team to create a software that would achieve this.

He explains: "Initially we didn't have a firm idea of what we desired the product to be, but we knew what we wanted it to do: improve a person's day. "Christensen, who hails from a working class family, reflects that over the last 30 years very little has been divested to the blue-collar worker, despite the continued evolution of technology. "For this reason, we wanted to build a product that didn't discriminate against position or function; one that promoted equality and added value into every worker's day." Reflecting on the five years since, Christensen shares one particular milestone he is particularly proud of: increasing the product's daily users from a few hundred to over half a million. "It's very







"Our support team will not be satisfied with anything less than SLA 100%"

Tim Christensen, CTO, SocialChorus



rewarding to see that it is working and making an impact," he says "This has always been about reaching as many people as possible, and my personal satisfaction is seeing this impact on an individual level."

Considering SocialChorus' success, Christensen explains that, while there are several platforms designed for internal communications, knowledge management and collaboration, there is no concrete space in enterprise that connects knowledge and news. "From

"As a smaller company, we don't want to win on scale or number of features, we want to win on quality"

Tim Christensen, CTO, SocialChorus



a workflow perspective, we aim to make the communicator more effective, assist them in telling the right story and we will assist in its delivery and amplifying the goals of the communicator." This, he explains, benefits the worker. "If we can make their lives easier in two minutes each day, then we've been successful, because we're looking at it holistically, both from the worker and from the communicator."

Within this, SocialChorus must embrace the existing preferences of

CEOs and workers when delivering information. "For example," Christensen explains, "a CEO may communicate via email, or workers may receive information when congregating in the break room. Our role is to amplify these messages in a way that enhances preferences, and not just discard them." This often becomes an oversight that has caused many companies to lose out on delivering an optimised service. "Some competitors want to push organisations to use one centralised platform,



CLICK TO WATCH: 'SOCIALCHORUS – BRAND VIDEO'

but if marketers enjoy using Marketo, or engineers enjoy using Slack, or if a grocery teller uses a break room, then that needs to be respected. For example, if you get your information in the breakout room, then a digital display may be the best way to communicate information, or by sending it to their personal email. By pushing users to move to a different platform altogether, another hurdle is placed between the communicator and worker, and that is not solving the issue," says Christensen. "Real success is getting customers to engage with the content, not getting them to engage with the content on our platform."

To carry this attitude with confidence and success, the platform must be accompanied by exceptional service, which Christensen believes the team at SocialChorus has in spades. "We have a great deal of pride in all that we do. For example, our support team will not be satisfied with anything less than SLA 100%, and they will be disappointed with even 5% less. This sort of attitude is present across all of our departments, and prospective clients can see this from us when deciding between us and a competitor – they can see how much we care. As a smaller company, we don't want to win on scale or number of features, we want to win on quality."

While competitors have larger teams, Christensen explains that having a smaller team rewards a much higher quality due to the close-knit dynamics and collective conscientiousness, and this is reflected in positive customer feedback that deems SocialChorus the best in the market. "It is rewarding to know that we have an excellent product," he says, "it doesn't just give out features, it solves real problems."

Christensen forecasts that this year will bring a number of new challenges: "I will likely begin working on new translations and transcripts, as well as low band-width usage." One of his key challenges is to connect the CEO with employees in demographics with low technology, or in other instances, where the CEO may not speak the same language as employees. "I would like to be able to have a CEO record



a message while traveling to an airport and have the service transcribe and translate it to go into an article to be distributed to workers, say perhaps, in Zimbabwe, where there is a weaker internet connection. This would give these workers the same access to information. As data is only growing in value, Christensen shares that the next step in the company's growth is

"It is rewarding to know that we have an excellent product"

Tim Christensen, CTO, SocialChorus





to build upon SocialChorus' analytics capabilities in order to deliver insights and intelligence, not only to discover trends, but to be able to identify why they change and how to respond to it. Paired closely with this, machine learning will be used for auto transcriptions and translations, and AI will enable recommendations and relevancy, for speed and tuning.





AMERICAS PROCUREMENT

CONGRESS 2020



March 19-20, 2020 | Eden Roc, Miami USA

DRIVING THE PACE OF BUSINESS IMPACT

300	130	50	30
Senior Procurement Attendees	Unique Organizations	Expert Speakers & Facilitators	Industries

FIND OUT MORE

AMERICASPROCUREMENTCONGRESS.COM

AN AGENDA BUILT TO **HELP** YOU DELIVER

Increasing the rate of business change

Continuous innovation for continuous result

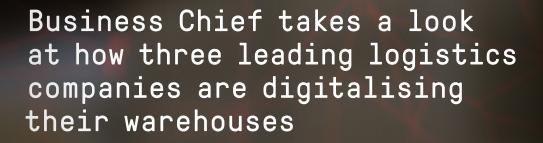
Reconfiguring the whole value chain





48

DIGITAL OF CONTROL OF



WRITTEN BY GEORGIA WILSON

www.businesschief.com

ith technology evolving at an exponential rate, and the logistics industry needing flexible solutions for its complex operation, we take a closer look at some of the successful deployments of digitalisation within the warehouses of leading logistic companies around the world.

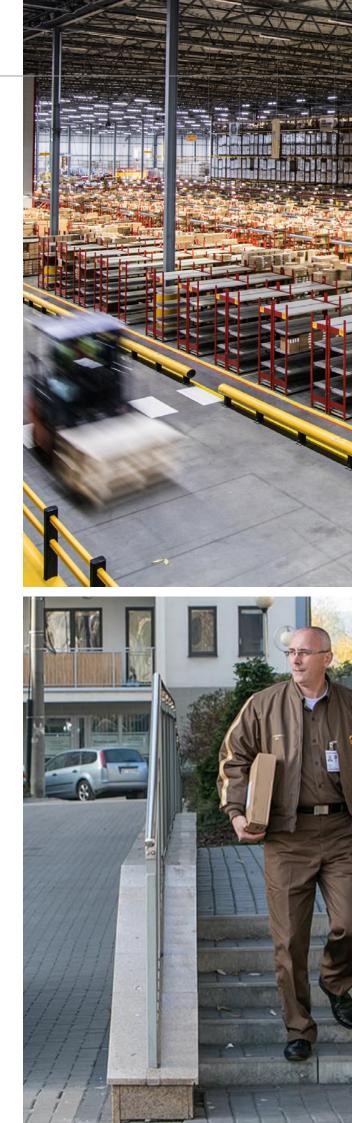
UPS

Founded in 1907, UPS has been "breaking barriers throughout its 100+ years as a leader in global commerce". Within the company's international supply chain and freight operations, its key services include: logistics, distribution, transportation, freight (air, sea, ground and rail) and freight forwarding.

SUPER HUB

To combat the challenges that come with providing efficient and on time delivery during peak seasons, UPS uses new technologies within its warehouse facilities to create operational precision and network efficiencies.

"Our transformation initiatives are enabling UPS to perform at high levels, even as we handle nearly double the average daily







package volume as the rest of the year. We are confident we will sustain these high levels of service and we're ready to take on even more customer shipments in the coming weeks," commented David Abney, CEO and Chairman of UPS.

The new technologies UPS is harnessing include:

 Advanced analytics; UPS has developed a peak volume alignment tool (PVAT) utilising advanced analytics to efficiently manage loads by synchronising its volume demands and capacity. In addition to PVAT, UPS is utilising advanced analytics to better forecast its package volume that needs to be processed.

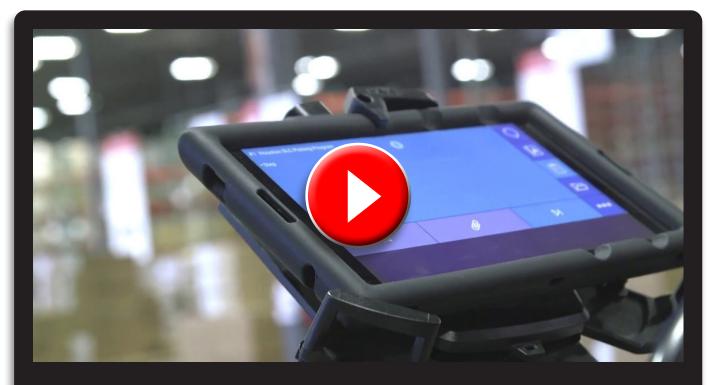
- Network planning tool (NPT); by utilising advanced analytics, artificial intelligence (AI) and operations research, UPS has developed its NPT to help coordinate tractor-trailer movements between its sortation hubs to reduce bottlenecks.
- Dynamic Sort Instruction (DSI); to increase employee productivity and reduce training time, UPS has

developed a bluetooth audio device that gives its employees processing instructions as they scan packages.

In addition to its new in-house technology, UPS has been utilising innovations for its drivers too. These include mobile tools to improve onboarding and effectiveness, via a delivery helper app. UPS has also developed UPSNav to provide drivers with higher levels of accuracy and precision when making deliveries.

As a result of UPS' global deployments of automation, AI and advanced





CLICK TO WATCH: 'DB SCHENKER INTRODUCING DIGITAL PICKING'

"Delivering automation possibilities for logistics and warehouse operations is a foundation for building the next generation supply chain"

> **Xavier Garijo** Member of the Board for Contract Logistics, Schenker AG

analytics, UPS has seen between 25%-35% higher efficiency.

DB SCHENKER

With over 140 years of experience supporting the global exchange of goods, DB Schenker strives to provide its customers with "innovative supply chain solutions to challenge the status quo". DB Schenker provides its solutions for land transport, air freight, ocean freight, contract logistics and supply chain management.

ROBOTICS POWERED BY AI

To provide flexible solutions within its warehouses to drive productivity, DB Schenker has been utilising the combination of AI and robotics with the help of Gideon Brothers – a global manufacturer of autonomous robots.

With the digital age becoming increasingly complex, DB Schenker strives to offer its clients a strategic advantage. "DB Schenker continuously explores opportunities to integrate innovations from visionary start-up companies," commented Xavier Garijo, Member of the Board for Contract Logistics at Schenker AG.



"This is a technological leap, self-driving machines, powered by vision and Al, will succeed where earlier technology failed"

Matija Kopić CEO and Co-Founder, Gideon Brothers



"Delivering automation possibilities for logistics and warehouse operations is a foundation for building the next generation supply chain."

"This is a technological leap," commented Matija Kopić, CEO and Co-Founder of Gideon Brothers. The robotics developed by DB Schenker and Gideon Brothers utilises a visual perception based robotic autonomy system that combines deep learning and stereoscopic cameras, to provide next generation robotics vision. In addition to its next generation robotic vision, the robots can move 800kg and have a hot-swappable battery system to minimise downtime.

"Self-driving machines, powered by vision and AI, will succeed where earlier technology failed," added Kopić. "It will become ubiquitous in industrial environments." "The future is exciting. The future is about innovation and making sure we continuously improve"

Oscar de Bok CEO, DHL Supply Chain

56

Speaking with Oscar de Bok, CEO of DHL Supply Chain in January's edition of Business Chief, de Bok highlighted the need for flexible solutions as supply chains become increasingly complex and the importance of a large global company such as DHL having a strategy that utilises digitalisation and collaborative robotics. Between now and 2025 the company aims to invest US\$2.2bn into digitalisation of its logistics and robotics.







ROBOTICS

From cleaning robots to robotic arms within DHL's warehouses, its operations are seeing the benefits of digital automation to enhance its workforce.

Cleaning robots (Neo); developed by Avidbots, DHL has deployed its cleaning robots in multiple standard warehouses, to reduce the need for people to complete repetitive and tedious tasks.

'Follow me' robots; designed by Effidence, it is a simple trolly that follows an associate will they pick items to help transport the load. Once it is full you can simply press a button to send it on its way, while another replaces it.

Robot arms (Sawyer); Sawyer is a robotic arm developed to sense its surrounded removing the need for it to be static and caged. This robotic arm can be moved to where it is needed to complete repetitive and mundane tasks.



www.businesschief.com

HOW BUSINESSESHOW BUSINESSESCAN BEST ACHIEVELONG-TERMSUSTAINABILITY

Richard Seel, Managing Director, Supply Chain & Logistics (UK & US), delaware, explains how c-level executives can build a sustainable business model designed for the long-haul

WRITTEN BY RICHARD SEEL

58

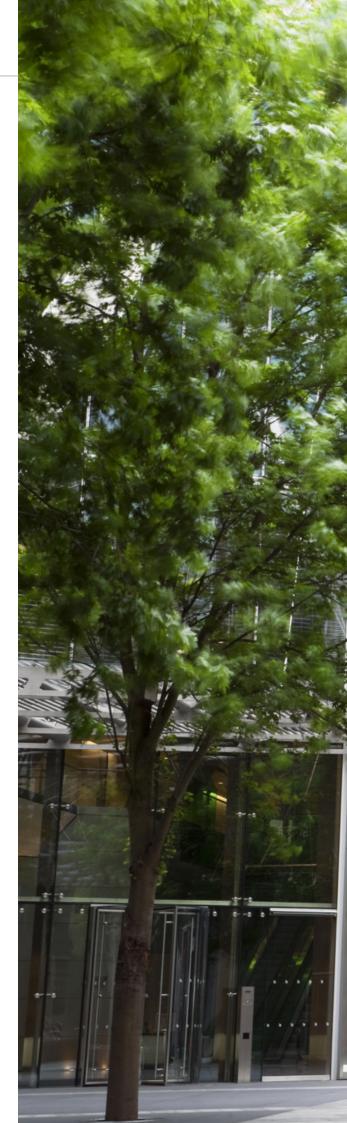


n today's highly-competitive business environment, even the largest, most profitable organisations struggle to maintain business longevity. To increase their chances of long-term success, companies must transform themselves into sustainable enterprises, capable of adapting to changing priorities, markets and customer demand.

European organisations often lead the way. KPMG's latest Change Readiness Index ranks business action on rapid change based on an 'Enterprise Sustainability' metric, which takes into account factors such as carbon emissions per unit of GDP and the energy mix used by the business community. The ranking places Switzerland first overall, and in terms of Enterprise Sustainability, for the second consecutive year. European countries fill five other places in the Enterprise Sustainability top 10.

There are three areas around which discussions and debates about the sustainable enterprise tend to be focused: the environmental impact or footprint of the business, the need to create a sustainable business model and why a sustainable workforce is critical. The focus on reducing environmental impact by reducing energy







"Building a sustainable workforce will only truly work, however, if everyone in the business is committed and open to change"

Richard Seel, Managing Director, Supply Chain & Logistics (UK & US), delaware usage, emissions and introducing 'smarter' practices in the workforce is important. However, businesses also need to make certain that their specific business model is sustainable. They need an approach that sustains resources within the business over time.

CREATING A SUSTAINABLE BUSINESS MODEL

From the outset, planning for the long-term is key, which is becoming increasingly difficult when factors such as market demand and competition are constantly shifting. To achieve longevity, organisations need to apply sustainability principles in everything they do.

Resources – both people and other assets – are crucial. Sustainable businesses focus on making those resources sustainable over time – and that means being willing and able to adapt the business model to match changed priorities.

In line with this, true sustainability is often about understanding the market landscape and ensuring the business proposition

in



CLICK TO WATCH: 'AR METALLIZING ENSURES SUSTAINABLE GROWTH WITH MICROSOFT DYNAMICS'

is aligned to shifting customer demand. To be sustainable, smart organisations must reflect on addressing customer and societal needs, often without even knowing in advance what the optimal solution might be. In today's age of automation, building a sustainable business model will almost certainly involve digital transformation.

That could mean the introduction of machine learning and AI-powered systems that diagnose problems in advance, enabling quick intervention and problem resolution. It could involve the combination of historical data, data analytics and key algorithms to quickly detect anomalies and notify the relevant people quickly, enabling businesses to reduce costs by addressing and resolving any inefficiencies in the process, as well as stay compliant by quickly identifying where it may be in breach of the rules and rapidly rectifying this.

These examples highlight the sustainability benefits that digitallydriven innovations can bring to businesses. However, when organisations move to digital technologies,

they need to have a 'Plan B' in place to be able to keep the business up and running in the event that systems and networks are brought down or experience a security breach. A recent cyber - attack on Norsk Hydro, a global aluminium producer, forced the company into desperate measures. The entire workforce – 35,000 people had to switch to pen and paper as a result. Production lines shaping molten metal were switched over to manual functions, and in some cases, longretired workers came back in to help colleagues run things "the old-fashioned way".

A SUSTAINABLE WORKFORCE

Every business can look to reduce their environmental impact and make changes to their business model to drive long-term sustainability. However, if they do not put practices in place to cultivate sustainable employees, they risk undoing that good work.

To drive a more sustainable workforce, leaders must cultivate an environment that helps people to be empowered, productive and resilient. Technology can play



a key role here in indicating just how positive and sustainable workplace culture is. Businesses need insights into their workforce that span levels, departments and entities — and it's important to link talent data with enterprise information. The answer is a global system of records able to harmonise data generated by different sources, providing key insight into problems or issues. It is this type of reporting which drives sustainability.

Companies must apply the digital mindset to HR and workplace processes



65

"When employee well-being isn't up to par, the business suffers across the entire value chain"

Richard Seel, Managing Director, Supply Chain & Logistics (UK & US), delaware

to support productivity and growth – or risk becoming obsolete. SAP SuccessFactors, a leading cloudbased HR solution, is an integrated environment encompassing all HR processes that is driven by data and analytics – and the ideal path to sustainable smart HR.

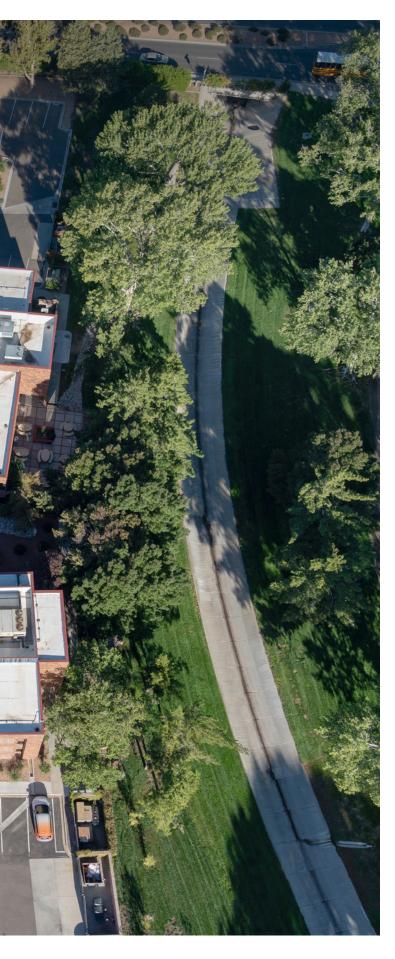
By helping to ensure employees are happy and have greater wellbeing at work, organisations can increase long-term business viability. Employees that are happy are less likely to leave, and the resultant lower attrition rates make organisations more sustainable.

This approach to building a sustainable workforce will only truly work, however, if everyone in the business is committed and open to change. There must be business-wide sponsorship to creating and maintaining a sustainable work culture – and this may involve cultural and operational change.

As we look to the future, it is likely that predictive analytics will become ever more important in maintaining a happy, sustainable workforce. As an "To achieve longevity, organisations need to apply sustainability principles in everything they do"

Richard Seel, Managing Director, Supply Chain & Logistics (UK & US), delaware

66



example, an employee applies for maternity leave through the organisation's HR system. This employee 'life event' triggers the HR department to start offering communications specific to that employee, so for example, asking: have you thought about childcare vouchers? Have you thought about the return-to-work programme or our part-time working options?

In rolling out concepts such as this one, employee wellbeing is prioritised. Ultimately, the strength of a company lies in the health of its people, especially in the professional services industry where human capital is the company's added value. When employee wellbeing isn't up to par, the business suffers across the entire value chain, making burnout a business critical challenge, and driving down overall levels of sustainability into the bargain. But businesses that focus on a sustainable workforce and ally that with a sustainable business model and environmentally-friendly business practices are likely to be here for the long-haul.



City Focus →



FEBRÜARY 20

Business Chief takes a closer look at Kansas City, a busy and rapidly growing hub for innovative technology, the automobile industry and the federal government

WRITTEN BY RACHAEL DAVIES



ansas City is the largest city in the state of Missouri, USA. It is located on the Kansas-Missouri state line near the convergence of the Kansas and Missouri Rivers, historically making it an integral trading and business hub for the midwestern states.

Today, its economy boasts a flourishing automobile industry, a fast-developing tech scene, and a hub for federal government departments. Notably, Kansas City is home to greetings card manufacturer Hallmark, GPS tech giant Garmin, craft company Crayola (a subsidiary of Hallmark), and the telecommunications company Sprint.

THE FOUNDING OF KANSAS CITY

French fur traders, who travelled up the Missouri River from St. Louis in 1821, were the first settlers in what would become Kansas City. By 1850, the settlement was a prosperous trading post, acting as a terminus for the Santa Fe, California and Oregon trails, and was chartered as the town of Kansas after the Native American Kansa tribe. It became Kansas City under an 1889 charter to distinguish it from the territory of Kansas.

This distinction became particularly prevalent during the American Civil War, when the city became sharply divided due to its location on the border between Kansas, a slave state, and Missouri, a free state. It was the site of a decisive battle in October 1864, in which a Confederate army was









forced to retreat by a Union army in the war's last major battle west of the Mississippi River.

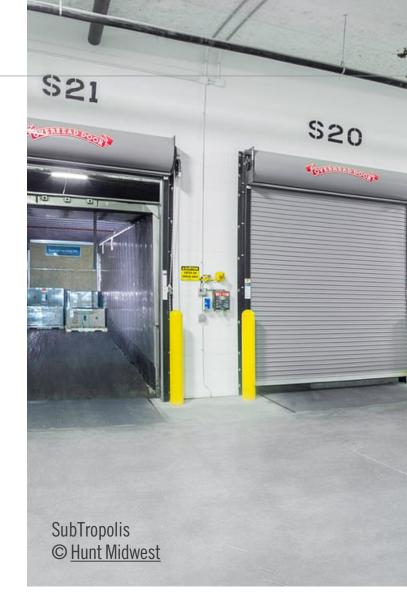
Kansas City's growth was marked after it was reached by the railroad from St. Louis in 1865, and linked with the Hannibal and St. Joseph Railroad by bridge across the Missouri River in 1869. In 1870 a stockyard was opened, and Kansas City became a major cattle market and the centre of the meatpacking industry.

MODERN ECONOMY

Throughout the 20th Century, Kansas City grew exponentially. Both world wars provided major boosts to the city's economy; after World War II it annexed adjacent land, increasing its area more than fivefold. By 1970, the city's population peaked at over half a million, then slowly declined before stabilising in the 1990s. It now has an estimated population of 491,918 in 2018, making it the 38th most-populated city in the United States.

Today, the city's livestock-handling and meatpacking activities have all but disappeared, but it remains the marketing and shipping centre for a vast agricultural region encompassing the production of maize, wheat, soybeans and dairy products. It is a major distribution centre, Kansas City is one of the largest rail hubs in the country and an important trucking centre, it also has a port on the Missouri River and an international airport.

Services constitute the largest share of Kansas City's economy, including government, healthcare, telecommunications and finance. There is also a notable manufacturing sector,



"The federal government is the largest employer in the city, with more than 146 federal agencies maintaining a presence there"



with automobiles, greetings cards, weapons components and pharmaceuticals making up large parts of the city's manufacturing economy, while tourism and research and development in agriculture are also prominent economic sectors. The federal government is the largest employer in the city, with more than 146 federal agencies maintaining a presence there.

SUBTROPOLIS

A unique factor in Kansas City's economy is a vast underground

industrial park known as SubTropolis. Measuring a massive 55,000,000 square feet, SubTropolis is a repurposing of a limestone mine dug in the 1940s. It contains almost seven miles of illuminated paved roads and several miles of railroad track, and has trademarked the phrase World's Largest Underground Business Complex.

Among the companies who lease storage in SubTropolis are the United States Postal Service for its collectible stamp operations, and the United States Environmental Protection Agency for its Region-7 Training and Logistics Center. The National Archives and Records Administration also leases space for a Federal Records Center.

MANUFACTURING INDUSTRIES

Internationally-renowned greetings card manufacturer Hallmark is headquartered in Kansas City. Founded in 1910 by Joyce Hall, it is the oldest and largest manufacturer of greeting cards in the United States. The Kansas City headquarters employs 2,700 people, though the company and its subsidiaries has approximately 30,000 employees worldwide and generates revenues of approximately US\$4 billion.

Ford Motor Company, though headquartered in Detroit, Michigan, operates a large manufacturing facility at the Ford Kansas City Manufacturing Plant in Claycomo. The Plant builds the Ford F-150, the most popular vehicle in the company's F-Series of light and medium-duty trucks. Additionally, The General Motors Fairfax Assembly Plant, which employs over 2,400 people, is located in adjacent Kansas City, Kansas. "Today, its economy boasts a flourishing automobile industry, a fast-developing tech scene, and a hub for federal government departments"





CLICK TO WATCH: 'KANSAS CITY: HEART OF THE NEW MIDWEST'

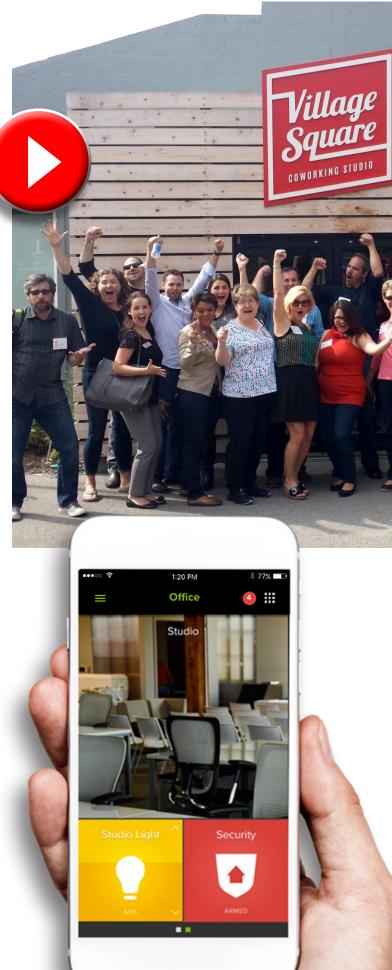


TECHNOLOGY AND STARTUPS

In 2017, Kansas City ranked as one of the top tech-centric cities in the United States, according to a report by real estate services firm Cushman & Wakefield. Its educated workforce, growth in entrepreneurship and access to venture capital funding earned its place at 22nd out of 25 tech-centric cities in the report.

There are several large multinational tech companies with headquarters in Kansas City, including GPS technology giant Garmin, and telecommunications company Sprint. However, the inauguration of entrepreneur-led community Kansas City Startup Village in 2012 has been a catalyst for the growth of the startup ecosystem in the city, "facilitating co-learning and connectedness, engaging and supporting the community; helping bridge political, social, and economic boundaries across the state line; and encouraging innovation using next-generation internet speeds including Google Fiber," according to Crunchbase.

One startup which is making waves in Kansas City is RiskGenius, an InsurTech company working to update and streamline insurance processes for the modern, digital world. RiskGenius utilises machine learning and automation to support insurance professionals, and "streamline the work of underwriters, brokers and everyone in between." The company started as a claim solution in 2011, by former insurance attorneys Chris Cheatham and Doug Reiser, and the RiskGenius software product was launched in 2016. To date, RiskGenius has raised US\$60.5 million over three funding rounds.





"In 2017, Kansas City ranked as one of the top tech-centric cities in the United States"

Another Kansas City startup which has gained traction is **Pepper**, which has created an operating system and delivery platform for the IoT, offering "a secure user experience coupled with extensible architecture". Pepper provides enterprise partners with the opportunity to "launch scalable IoT products, experiences and services", from basic single-function solutions to entire, rich and complicated systems, all while ensuring end user privacy and personal data protection. The company has recently announced a new strategic partnership with Chinabased Dahua Technology, which is the second-largest manufacturer of surveillance cameras in the world and has the leading market share in surveillance in North America. Pepper was founded in 2014 by David Bottoms, Scott Ford, and Steven Bosch, and has raised US\$11.5 million over four funding rounds.







CEOS

Business Chief takes a closer look at the CEOs of Forbes' top 10 largest public companies in the USA, ranked by market value

WRITTEN BY GEORGIA WILSON

79



Darren Woods

In 1992, Darren Woods joined <u>ExxonMobil</u> as a planning analyst. After 20 years at the business he was appointed President of ExxonMobil's Refining and Supply Company, until 2014, when he became Senior Vice President of ExxonMobil Corporation. In 2016,

ExxonMobil's Refining and Supply Company, until 2014, when he became Senior Vice President of ExxonMobil Corporation. In 2016, Woods was appointed Chairman of the Board and then CEO of ExxonMobil Corporation in 2017, a position he still holds. Founded in 1999, ExxonMobil is one of the world's largest publicly traded energy providers and chemical manufacturers. The company applies next-generation technology to its operations to safely and responsibly meet growing energy and chemical demands.

FEBRUARY 2020

80

O Alfred F. Kelly, Jr



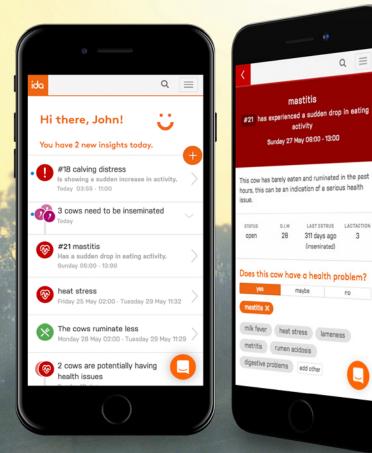
Alfred F. Kelly, Jr. has sat on the Board of Directors at Visa since 2014. Kelly Jr. became CEO of the company in 2016; he still holds this role, alongside his recently appointed role as Chairman of the Board in 2019. Prior to Visa, Kelly Jr. has held multiple leadership positions at companies including: American Express Company (President), Intersection (President and CEO), TowerBrook Capital Partners LP (Management Advisor), NY/NJ Super Bowl Host Committee (Chairman, President and CEO) and Paypal Visit Committee (Chairman). Founded in 1958, Visa is a multinational finance services corporation that utilises technology and innovation to provide the best way for consumers and merchants to pay and be paid.



ida

Hi, I'm Ida!

The Dairy Farmer's Assistant.

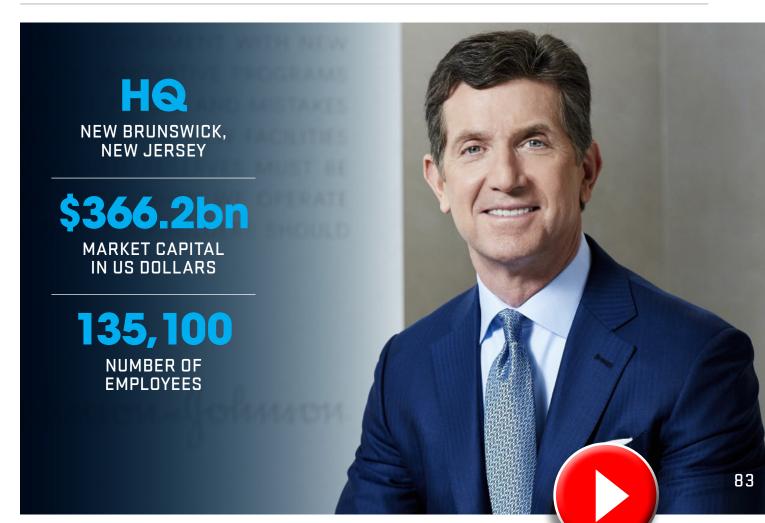


I help farmers run the most efficient dairy farm possible!

I answer all farm related questions, help farmers identify and diagnose issues before they become critical, and support farm optimization.

learn more





O O Alex Gorsky Johnson & Johnson

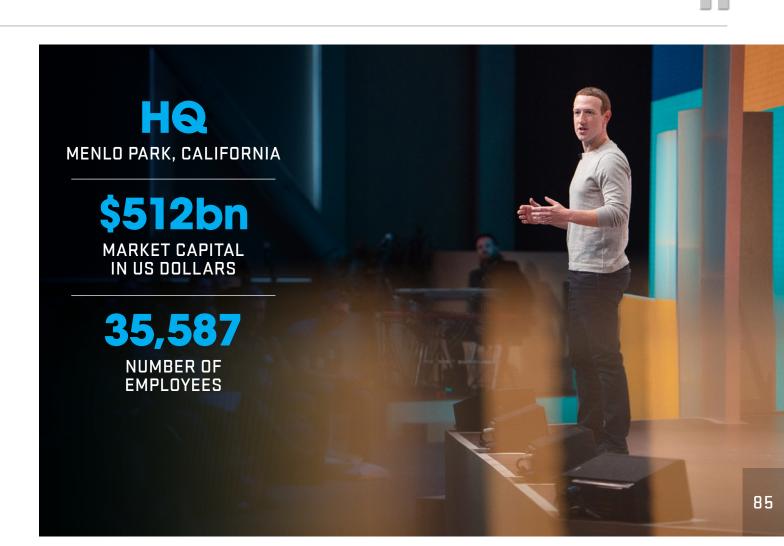
In 1988, Alex Gorsky began his career at Johnson & Johnson as a sales representative with Janssen Pharmaceutica. In his time at the company, Gorsky has advanced through positions in sales, marketing and management. In 2012, he was appointed CEO and Chairman. "The world today requires the very best that Johnson & Johnson has to offer, and we are constantly striving to come up with ways we can innovate and lead," Gorsky has previously explained. Founded in 1886, Johnson & Johnson has been operating for over 130 years, providing affordable, accessible medical devices, pharmaceuticals and consumer packaged goods to create healthier communities.

Jamie Dimon JPMORGAN CHASE



Since 2005, Jamie Dimon has been the CEO of JPMorgan Chase. Before joining the company, Dimon has held multiple executive roles at Bank One, Citigroup Inc., the Travelers Group, Commercial Credit Company and American Express Company. Dimon also sits on the Board of Directors at Harvard Business School and Catalyst is Chairman of the Business Roundtable and a member of The Business Council. Dimon is also on the Board of Trustees at the New York University School of Medicine. JPMorgan Chase is one of the world's oldest and largest financial institutions that can be traced back to 1799. It's heritage is built on mergers and acquisitions of several companies over the years including: J.P. Morgan & Co., The Chase Manhattan Bank, Bank One and more.









In 2004 – at the age of 19 - Mark Zuckerberg co-founded Facebook alongside Dustin Moskovitz, Chris R. Hughes, Andrew McCollum and Eduardo P. Saverin. Zuckerberg has been CEO of the company since its founding. Facebook began its journey as a platform for Harvard University students to match student names with photos. In 2005, Accel invested US\$12mn into the platform, opening it up to other colleges, high schools and international schools. Seven years later Facebook became a public company; Zuckerberg still owns roughly 15% of the stocks. Today Facebook Inc. owns multiple social media platforms including: Facebook, Instagram, Messenger, Whatsapp and Oculus.



Bring together people, data, and processes to transform your organization.

With the latest in AI technologies, you can engage your customers in new ways, empower your employees more than ever before, and optimize operations to become an industry leader. **Start your digital transformation today.**

Get started >



Warren Buffett BERKSHIRE HATHAWAY



The "Oracle of Omaha", Warren Buffett began his career by establishing his own company in 1956 – Buffett Partnership Ltd. The organisation identified undervalued companies, including Berkshire Hathaway, which was originally a textile company. In 1965 Buffett acquired 100% of Berkshire Hathaway, becoming CEO of the company. Today, the business is a multinational conglomerate holding company that owns or holds controlling interests by investing in or acquiring multiple companies including: Heinz, Benjamin Moore, Geico, Dairy Queen and more. With its large market capital, Berkshire Hathaway is one of the largest and most successful conglomerates in the world.

Sundar Pichai



December 2019 saw Google's co-founders, Larry Page and Sergey Brin, step down from their executive roles at parent company Alphabet, with Sundar Pichai assuming the role of CEO. Prior to being CEO of Alphabet, Pichai began his career at Google in 2004, working his way through the business to become CEO in 2015. Pichai graduated from the Indian Institute of Technology in Kharagpur, with a degree in Metallurgical Engineering. Established in 2015, Alphabet was the product of a company restructure to better manage its "Other Bets". Today, it is the parent company of multiple subsidiaries, including Google, Waymo, Calico, Sidewalk Labs, DeepMind, Wing and Loon.







www

In 1994 Jeff Bezos founded the multinational technology company, Amazon. He has been CEO of Amazon since its founding in 1994 and currently owns nearly 12% of the stocks. In addition to being the founder and CEO of Amazon, Bezos owns the Washington Post and Blue Origin. He also has a Bachelors of Arts and Science from Princeton University. Starting its operational journey out of Bezos' garage in Seattle by selling books, Amazon has grown exponentially over the last 26 years. Today it provides a vast suite of services that covers everything from ecommerce and logistics through to web services and technology.

Satya Nadella



Joining Microsoft in 1992, Satya Nadella has held multiple leadership roles within the company before being appointed CEO in 2014. These include Executive Vice President of Microsoft Cloud and Enterprise Group, Vice President of the Microsoft Business Division and leader of Research and Development for the Online Services Division.

Nadella's qualifications include a Bachelor's Degree in Electrical Engineering from Mangalore University, a Master's Degree in Computer Science from the University of Wisconsin-Milwaukee and a Master's Degree in Business Administration from the University of Chicago.

Currently, Nadella is on the Board of Trustees for the Fred Hutchinson Cancer Research Center and the University of Chicago, as well as being on the Board of Directors at Starbucks.

Founded in 1975, Microsoft is a multinational technology company that was founded by Bill Gates and Paul Allen. Originally, the company was named Micro-Soft, standing for microprocessors and software. In the early years, Gates and Allen developed software for the Altair 8800. By 1985 Microsoft had released its Windows software, becoming one of the world's largest personal computer software companies.



REDMOND, WASHINGTON

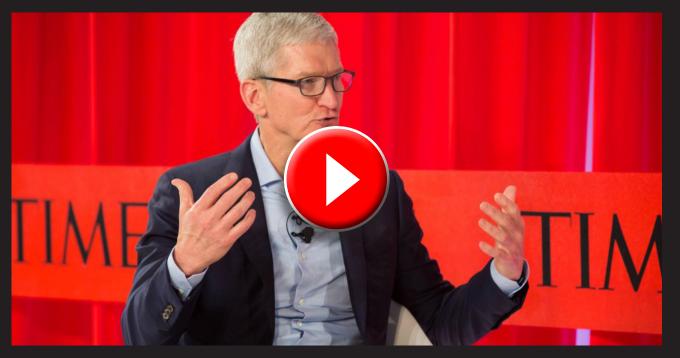
\$946.5bn MARKET CAPITAL IN US DOLLARS

131,000 NUMBER OF EMPLOYEES



CLICK TO WATCH: 'OPENING KEYNOTE WITH SATYA NADELLA, CEO, MICROSOFT'





CLICK TO WATCH: 'APPLE CEO TIM COOK INTERVIEW AT THE TIME 100 SUMMIT – TIME'

HQ CUPERTINO, CALIFORNIA





Image: Constraint of the second sec

www

Starting his Apple career in 1998, Tim Cook has held multiple leadership roles within the company, including Chief Operating Officer and Heading Apple's Macintosh Division. In August 2011 Cook was appointed CEO.

Prior to Apple, Cook has held leadership positions at Compaq (Vice President of Corporate Materials), Intelligent Electronics (Chief Operating Officer of the Reseller Division) and IBM (DIrector of North American Fulfillment). Cook also has an MBA from Duke University and a Bachelor of Science Degree in Industrial Engineering from Auburn University.

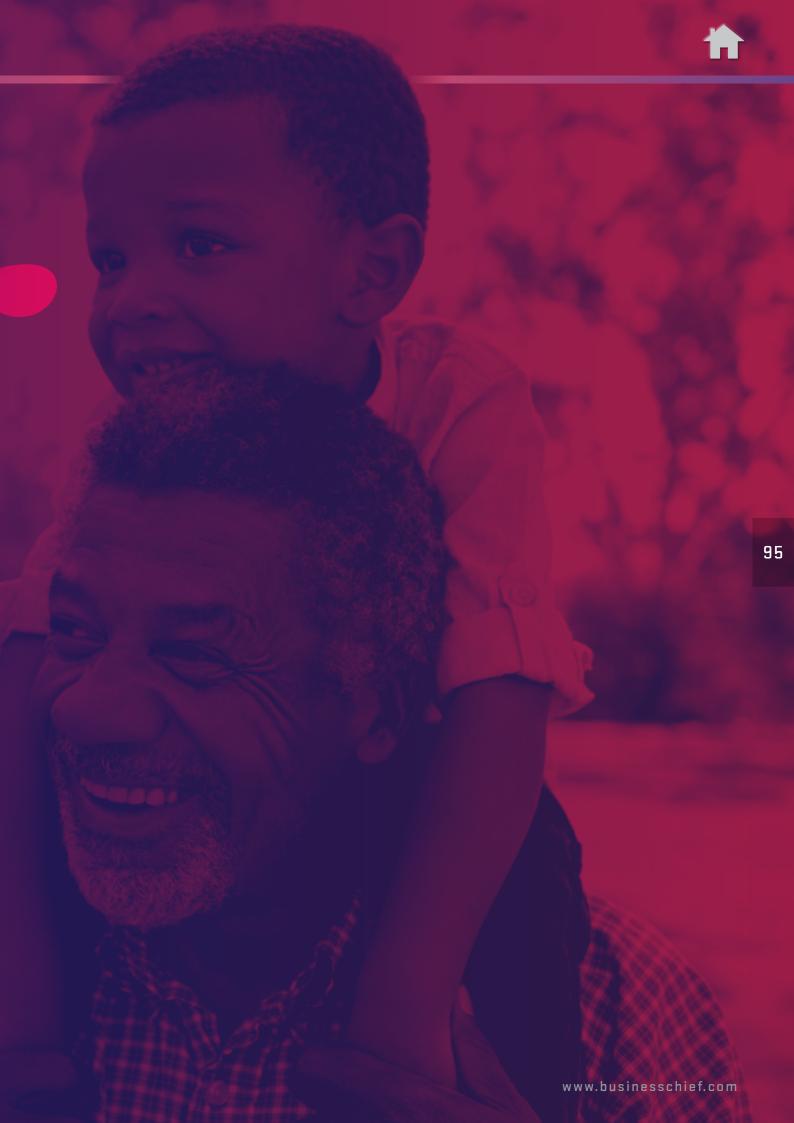
Founded in 1976 by Steve Jobs, Ronald Wayne and Stephen Wozniak, Apple is a multinational technology company that designs, develops and sells electronics, software and online services.



How digital transformation is an ongoing process

WRITTEN BY SHANNON LEWIS PRODUCED BY MIKE SADR

FEBRUARY 2020



Miguel Louzan, Chief Information Officer at LifeScan, discusses how the company engages in incremental digital transformation focused on internal change by leveraging an opportunity provided through a carve-out

ifeScan is a medical device company at the cutting-edge of blood glucose monitoring. Founded over 35 years ago, it reaches over 20mn people worldwide with products under its OneTouch brand such as personal blood glucose meters, testing strips, point of care testing systems, and integrated tech solutions. With 2,000 employees and a reach in 90 countries, it is a truly global company. Its app is one of the top ten most downloaded diabetes management apps in the world. In 2018, it was purchased by private equity firm Platinum Equity, leading to a carve-out from its previous owner, Johnson & Johnson. This has allowed the company an opportunity to expand its digital presence. "We have terrific talent, a phenomenal brand with a wide patient base, and are now a size that allows us to be more agile in response to market forces," says Miguel Louzan, Chief Information Officer (CIO) at LifeScan. "This gives us a competitive edge."







verage Logbook

ОК

(B) REGISTER YOUR DEVICE (D) FREE METER OFFER

You own this moment. Diabetes doesn't.

Search Q

The OneTouch Verio Flex® meter with ColorSure® technology automatically highlights when you are low, in range, or high, so it's easier^ to know when to take action.[↑] Find out if you're eligible for our free meter offer.

See Meter Offer

1984 Year founded

\$1.2bn Revenue in US dollars

2,000 Number of employees challenge the status quo to set ambitions that stretch you

imagine your future with both existing and new business models

WE

— we focus on humans, not technology

an expansive network of experts with insight into what's possible

we are adept at taking you from idea to launch, from start to finish We are in an age when custom engagement is **expected**, relat in **real-time**, choice is **infinit on demand**, change is **consta technology** enables everythin

Digital transformation enal businesses to thrive in this age

Our approach

Deloitte and Deloitte Digital have in-house design, human capital, research, and creative teams that a taking clients from pre-idea through market launc

IMAGINE

Get the right focus

Quickly set ambitions and chart a path to success by developing a roadmap to achieve those ambitions



Define the ambitions, look forward, explore broadly

DELIVER

Get the concept right

Make it tangible, **put the ambition in motion** by moving forward and launching in the market



Iterative concept refinement, and offerings in market for faster income statement and balance sheet impact

Deloitte. Digital

er tionships are **e**, delivery is **nt** and ig we do.

oles

strategy, technology, are highly skilled at h:

RUN

Get the business to scale

Once the ambition is refined, scale the ambition through flexible and integrated delivery teams



Agile operations to create business impact at scale

How we can get started:

Ambition/Digital Transformation Lab

- A hands-on, full-day workshop dedicated to forming and fleshing out your digital ambitions using our proprietary Sense, Aspire, Decide process
- Involves interactive exercises to understand the environments within and outside of your organization that could and will impact your business
- Designed to push comfort levels and boundaries of thinking around your future
- Walking out of the lab, you will have a tangible plan to make progress toward your ambition within 30 days

Digital Day

- A half-day showcase on digital trends, including digital transformation opportunities
- Subject matter experts will be present to share how the digital trends are relevant to you
- Includes example case studies of digital trends in action
- Involves developing some ambitions and high-level provocations specific to you

Digital Transformation Conversation

- A 1-2 hour meeting with you about your ambitions, gaining advantages, and how to be digital
- The exploratory conversation will involve introducing trends, techniques, technologies that could and will impact your business, and discussing what could be done about it

Digital Leadership Lab

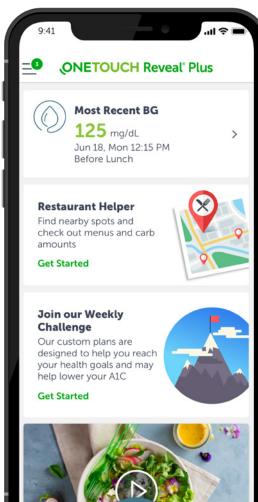
- A full-day lab experience set specifically for an executive who is driving the digital agenda within their organization
- Exposes the executive to trends, technologies, and potential disruptions that could impact their business
- Designed to help the executive effectively fulfill the mandates of their position, leveraging resources such as time, talent, and relationships

Contact us: digitaltransformation@deloitte.com

"For me, that's what digital transformation is about — small improvements that can start really building momentum by themselves"

Miguel Louzan, Chief Information Officer, LifeScan

100



Miguel Louzan has been the CIO at the company for almost two years. With 15 years in digital and tech-based healthcare, he leverages his experience to add value. "Healthcare is a very specific industry. You have to know the exact regulation, what's really driving the business, the value of products, digital and otherwise," he says. The primary focus of the last 18 months for LifeScan has been ensuring it can operate as a standalone organisation. Its established identity and strong branding mean the company isn't



FEBRUARY 2020



CLICK TO WATCH: 'LIFESCAN CORPORATE VIDEO'



starting from absolutely nothing, but it is still at the beginning of its journey. "That's why I refer to us as a USD \$1.2bn start-up," continues Louzan.

According to Louzan, the company is around halfway through its post carve-out digital transformation. 90% of its platforms are now cloud-based and it has majorly simplified, moving from 700 platforms to only 120. "I believe digital transformation never ends," affirms Louzan. "It's a continuous journey." One of the primary goals is to move from an identity as a medical device company to one as a digital



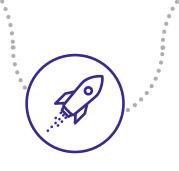


Building Platforms for Digital Business

By stitching together advances in cloud infrastructure, software delivery, automation and analytics, we help Fortune 1000 companies deliver on the promise of digital transformation.

We Engineer Enterprise Cloud Infrastructure

Architect the deployment of workloads across public and private infrastructure based on requirements specific to your business.



We Deliver Modern Applications

Use automation and containers to enable your developers to reduce the time spent on integration and maximize the time spent on creating new features.

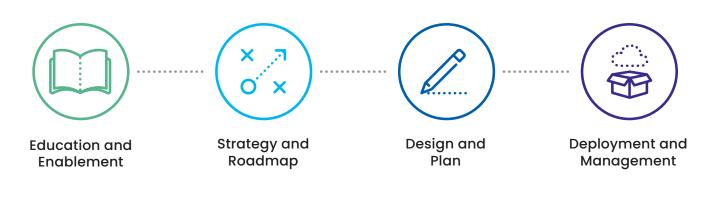


We Run Intelligent Operations

Establish a unified view of performance across infrastructure, applications, and services, using automation and analytics to address your performance issues quickly.

Enterprise Services

From strategy to implementation and operations, we create tailored solutions for all stages of your digital transformation journey.



66

LifeScan is very fortunate to have AHEAD as a business partner. Their team has provided technical expertise, guidance, recommendations and a determination to get the job done on time against all odds. Their drive, attitude and dedication were key reasons for us completing the project on time. Not only is this group talented and dedicated, but they are also great people that my staff and I enjoy working with on a daily basis.



FRANZ DIENES

Senior Director IT Infrastructure, LifeScan





Working with the LifeScan team across many aspects of their separation effort has been an absolute pleasure. Our partnership with them, based on mutual trust, collaboration, excellence in execution, and dedication to a successful separation and rebuild, is a testament to the leadership teams as well as individual contributors on both sides. We look forward to continuing that partnership with LifeScan with new and enhanced capabilities in the years to come to help further differentiate themselves and increase their enterprise value.

DAVID WILLIAMS

Managing Principal, AHEAD

Better Together

We partner with more than 60 technology providers, all toward optimizing your enterprise IT.



















servicenow

splunk>







company. "It's a mindset change," he explains, "if you think about building medical devices, it is a lengthy process of perfecting the product. In terms of digital companies, you don't have to wait to get the perfect product. That's all about continual tuning." Although the company vehemently adheres to the strict regulations required to produce medical devices, it is taking onboard a more digital mentality, focusing on the features of products. "In a digital company, you think about the experience of the user," says Louzan. For this reason, process simplification is one of the main challenges LifeScan grapples with. Third-party partners have provided the necessary tools for LifeScan's digital transformation to succeed. Influence from Google Platform Partner CI&T, IT service group FPT Software, financial service company Deloitte, methodology coordinator Globant, storage and consolidation consultant Data Blue, and digital model-maker gA has allowed LifeScan access to skills and industry expertise otherwise inaccessible.



EXECUTIVE PROFILE

Miguel Louzan

As LifeScan's CIO, Miguel leads its health technology efforts and all aspects of LifeScan's global digital, AI, and IT programs. Miguel has more than 20 years of global IT experience leading organizational transformations that positively impacted profitability and enabled IT to become a trusted partner. Prior to LifeScan Miguel was Global CIO at SWM International, a global manufacturing company of highly engineered and customised materials.

in

BETTER OUTCOMES, BETTER LIVES

CI&T is honored to work with LifeScan on using digital technology to improve the lives of people with diabetes.

....

CI&T delivers meaningful experiences that impact the lives of everyday consumers across healthcare, financial services, retail, media, consumer packaged goods, technology industries and more.

....

Get in touch with us at www.ciandt.com

CIST

Digital Strategy & Roadmap

We bring a point of view that accounts for the context, trends, and opportunities in evolving business ecosystems.

=

Digital Products and Platforms

We design and build cross-channel applications that fit the needs of today's businesses.

Digital Transformation

We open the possibilities and navigate the pitfalls of the path to better outcomes through digital technology



Data, AI & Machine Learning

We use advanced capabilities to turn data-led decisions and meaningful insights into fast, effective action.



Customer Experience

We deeply research the needs and motivations of consumers, suppliers, and partners to create great experiences that deliver real value.



Agile Software Development & IT Modernization

We effectively blend the benefits of lean delivery with the rigor demanded in heavily regulated industries.



PUWERING DIGITAL TRANSFORMATION

Digital Transformation has revolutionized the world and completely changed the way businesses operate. As a Global Leader in IT Services, FPT has been a trusted Transformation partner of 100+ Fortune 500s, including finance, telecom, and manufacturing enterprises. Our worldwide network of experts and engineers work alongside customers to reinvent business operations utilizing the latest technologies -Artificial Intelligence, Big Data, Smart Factory, IoT - leveraging leading technology platforms including AWS, Azure, Siemens, and Predix.

FPT DIGITAL TRANSFORMATION SOLUTIONS

O akaminds

🔾 akaBot

🦟 akaChain

fpt-software.com



Although technological implementation is key to LifeScan's current strategy, its focus on people remains strong. "At the end of the day, it's all about people," explains Louzan. "You can have the best policy, the best tech, the best everything, but if you don't have the right people, it doesn't work." Talent acquisition has been an important pillar at LifeScan, seeking employees with a willingness to learn and join a currently evolving organisation. The improved digital aspect ultimately puts the customer first. "At the end of the day, the patient

"You can have the best policy, the best tech, the best everything, but if you don't have the right people, it doesn't work"

Miguel Louzan, Chief Information Officer, LifeScan





COMPANY FACTS

 90% of LifeScan's platforms are now cloudbased, significantly streamlining operations by moving from 700 platforms to just 120

should be at the centre of everything we do," he says. "User experience drives simplification." Adaptability is important not only at LifeScan, but in the wider industry. It is an industry rife with disruptors, meaning LifeScan needs to move quickly if it wants to keep up. "Constant vigilance towards the market is key to avoid being blindsided," says Louzan. Regulations around data privacy are also constantly changing in different ways around the world, making it difficult to manage as a global company. Local companies might see the rise of GDPR or specific state regulations, but LifeScan has to contend with it all. To ensure it remains up to standard, it implements a programme around data privacy and data security. "It's a strong concern in

Globant)

We empower organizations through digital & cognitive transformation.

G)

Globant is a digitally native company where innovation, design and engineering meet scale. We are ready!

www.globant.com

what we do," affirms Louzan. "We have a group of people in the organisation who are tasked with anticipating what we might need around data protection in the future. Operating with a global footprint, this is at the front and centre of everything we do."

The value of data within the healthcare sphere is only increasing. From a market perspective, data helps companies better understand its customers needs, but for healthcare providers, it also allows companies to add value for patients and personalise patient interactions. LifeScan has been investing in the personalisation space for several months, focused on artificial intelligence (AI) and machine learning (ML). "The goal of getting to that personalised point of interaction with our patient is being able to really target our actions and help them through





"If you think about digital companies, you don't have to wait to get the perfect product. That's all about continual tuning"

Miguel Louzan, Chief Information Officer, LifeScan their diabetes journey," he explains. On a macro-economic level, it also allows the company to understand the financial needs of patients surrounding insurance and contracts. "I would say the future of the industry is personalisation," continues Louzan. "However, at the same time, it's about how we can adapt to the different ecosystem."

The next three to five years at LifeScan will see it continuing along the path of its transformational journey.



The main shift in the next five years, according to Louzan, will be as the company evolves from a medical device company that has a digital presence to being a truly digital company with an associated product. The shift should allow LifeScan to stay competitive in a market of disruptors. "Overall, digital transformation can be a bit of a buzzword. I don't believe it needs to be complicated. It doesn't have to be about changing the world.

It's about small wins. Implement, learn fast, and move onto the next one," concludes Louzan. "For me, that's what digital transformation is about - small improvements that can start really building momentum by themselves."





Ogojek How cybersecurity promotes trust in the super app

WRITTEN BY WILLIAM SMITH PRODUCED BY CRAIG KILLINGBACK

FEBRUARY 2020



George Do, Chief Information Security at Indonesian tech unicorn Gojek, on the methods, trends and technologies driving the cybersecurity agenda

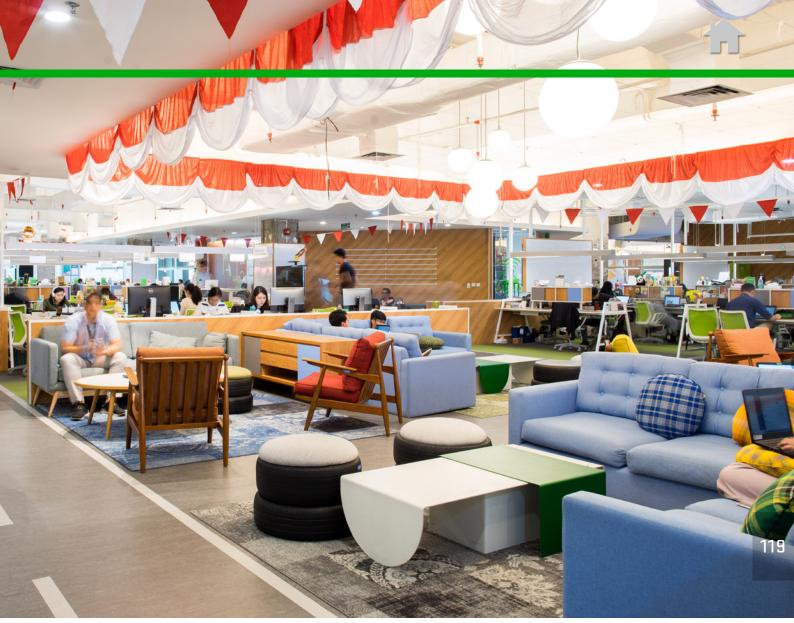
t's refreshing to work for a company that has such a positive impact on so many lives across the APAC region and across the world," says George Do, Chief Information Security Officer at Gojek, a company he joined in September 2019. Gojek provides a technology platform offering a variety of services from ride-hailing to food delivery, an approach that affords the moniker of a "super app". "My charter is to ensure the security of the company and all of our products, services, platforms, as well as all of the systems for our users," says Do. "I would describe the role as driving the mission of the company to help improve millions of lives by reducing its daily frictions. This opportunity to make a positive social impact was such an important factor for me to make the decision to join Gojek."

Do credits his career in cybersecurity to an early inciting incident. "I was lucky enough to be selected as an intern at NASA, which really





FEBRUARY 2020





O gojek

Strategi Gojek 'Melangkah Jauh ke Depan'

r 2019

www.businesschief.com

The physical key to your digital security

Stop account takeovers, go passwordless and modernize your multifactor authentication. Get the world's leading security key for superior security, user experience and return on investment.

Learn more



yubico

Gojek steps up GSuite security with YubiKey hardware-based authentication

Gojek is Southeast Asia's leading on-demand, super app provider, connecting individuals with a wide range of services including transport, payments, food delivery, logistics, and much more. Founded in 2010 with the goal to provide solutions to Jakarta's ever-present traffic problems, Gojek started as a call center with a fleet of only 20 motorcycle-taxi drivers.

With the principle of using technology to improve the lives of people, the Gojek app was launched in January 2015 to provide users in Indonesia with motorbike ride-sharing (GoRide), delivery (GoSend), and shopping (GoMart) services. Today, Gojek has transformed into a "Super App". It is a one-stop platform with more than 20 services, connecting users with more than 2 million registered driver-partners, 400,000 GoFood merchants, and 60,000 GoLife service providers – with more than 130 million total downloads across the region. By providing their users with seamless access to products and services across multiple sectors, Gojek continues to improve efficiency and productivity for Indonesian citizens, as well as boost economic and financial inclusion.

With more than 5,000 internal employees, Gojek understood the necessity to secure company data, while also delivering a simple and friendly user experience. Traditional username and password-based logins aren't secure enough in today's world, and they're also cumbersome for employees. Malware and phishing attacks compromise credentials daily, resulting in new reports of account takeovers every day.

As a GSuite-based infrastructure, Gojek chose to work with Yubico, the leading provider of hardware authentication security keys, to deploy YubiKeys for strong, one-touch authentication. One single YubiKey can secure a multitude of online services with no user information or private keys shared between the service providers. There is no reliance on or requirement for mobile connectivity, cellular devices, mobile apps or manual code entry.

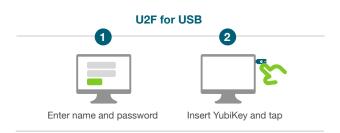
Gojek is looking to replicate the massive success and results that Google has seen using security keys internally for their entire workforce. Based on Google's two year study* to measure the business impact of hardware-based authentication, several benefits can be highlighted:

Heightened security: Internal accounts protected solely with a YubiKey and FIDO U2F have experienced a significant increase in the level of security with zero account takeovers.

Accelerated employee productivity: Employees saw a significant reduction—by nearly 50 percent—of the time to authenticate using a YubiKey compared with using a one-time password (OTP) via SMS. Logins were nearly four times faster when comparing the YubiKey to Google Authenticator. Time saved is primarily due to the unique, one-touch YubiKey authentication that executes in milliseconds.

Reduced support: Compared to using a phone for authentication, YubiKeys are easy to use, robust in design, waterproof and do not easily break. These attributes allowed Google to issue multiple YubiKey backups to each employee and still see cost savings. Support calls dropped, with a 92% reduction in support incidents, saving thousands of hours per year in support costs.

Source https://research.google/pubs/pub45409/



"With the YubiKey seamlessly integrated with GSuite, Gojek employees will be able to fortify their logins by turning on Google 2-Step Verification and self-registering their YubiKey with their accounts. Once registered, access to accounts can only be granted with physical access to their YubiKey and touch to the device, providing the highest level of security and protection when logging into GSuite."

-George Do, Chief Information Security Officer, Gojek

"The bad guys only have to get it right once. We have to get it right every time"

George Do Chief Information Security Officer, Gojek

launched my career. I wasn't into security before then, but I was bitten by the security bug once I started the internship." From there, Do says he was "fortunate to have faced security challenges from both within and outside the walls of organisations, having been part of internal security teams as well as serving as a consultant and as a security architect. That helped me a great deal in learning how to balance and bridge the gap between security and the business."

Cybersecurity at a digital-native company like Gojek offers its own

challenges, but also plenty of opportunities. "Gojek made it into the ground floor of the digital transformation," says Do. "Where we're at today is where a lot of companies around the world are trying to get to. Executing a security strategy for such a cutting edge platform is a very exciting endeavour." The depth and breadth of services a super app like Gojek offers requires a specific approach. "One of the key areas of focus that we target as a super app is DevSecOps," says Do. "That's





CLICK TO WATCH: 'INTRODUCING GOJEK'S NEW LOGO – SOLV'



development, security, and operations, all in one within continuous integration and continuous delivery (CI/CD) environments. We really work hard to bake security into our engineering processes. Because our application is the main interface for our consumers, driver partners, and merchants, we take application security very seriously, so we employ both static and dynamic security tools."

As Do emphasises, it is the maturity of Gojek's cloud capabilities that offers the company enormous benefits. "Gojek was born in the



— Securing The Biggest On-Demand Application Platform in Southeast Asia with Horangi

Committed to the safety of its customers, driver partners, merchants, service providers, and business partners, Gojek works with Horangi to ensure its application platform is continuously hardened with the most rigorous security testing. As Gojek's trusted security partner, Horangi helps the organization to adopt a security-first innovation mindset as it breaks new ground in the region.



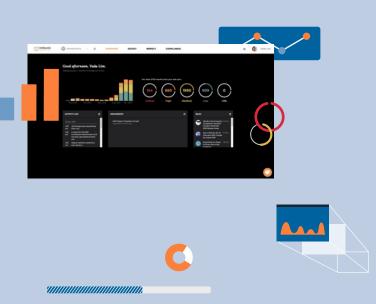
• **GOJEK** is a valuable client with whom we have closely worked together to continuously strengthen their cybersecurity in Southeast Asia. Gojek takes security very seriously, they've been a great and supportive partner taking a proactive measure to cybersecurity.

Webpack-Dev-Server -Missing Origin Validation

Ο

PAUL HADJY HORANGI CEO & CO-FOUNDER





AN INTEGRATED HORANGI SOLUTION



WARDEN

Warden's risk-based cloud defense helps you monitor and patch security and compliance gaps in your AWS environment.



PENETRATION TESTING

Assess your security posture using Horangi's holistic methodology.



COMPLIANCE

Demonstrate compliance with the world's leading cybersecurity and privacy standards.



vCISO

Accelerate secure innovation when you outsource your security to Asia's leading cybersecurity team.

TRUSTED BY ASIA'S INDUSTRY LEADERS











Now available on 💇 aws marketplace Protect your AWS cloud with a free 14-day Warden trial

Start Trial



SEE AND STOP CYBER THREATS

WITH THE LEADING CLOUD-DELIVERED ENDPOINT PROTECTION PLATFORM

START YOUR 15 DAY FREE TRIAL



in

"Gojek made it into the ground floor of the digital transformation"

George Do Chief Information Security Officer, Gojek cloud, meaning that much of what we do pivots around that," Do explains. "While the security concepts remain the same, a lot of the tools and processes are different when compared to traditional organisations that have a large part of their infrastructure still on premise. While traditional companies typically straddle on premise infrastructure applications and a hybrid cloud model, we focus more on the cloud model." While the security workloads might be similar to a traditional company, Gojek approaches them in

EXECUTIVE PROFILE

George Do

George has been working in the information security field for over 20 years concentrating on a wide range of areas including development and transformation of global cybersecurity programs. George has extensive experience in maturing global information security teams. This includes governance, risk, compliance (GRC), cybersecurity security frameworks, cloud security workloads, system and network security, incident response, system forensics and investigation, intrusion detection and prevention, managed penetration testing, and VPN technologies. George also serves on several customer advisory boards.

A

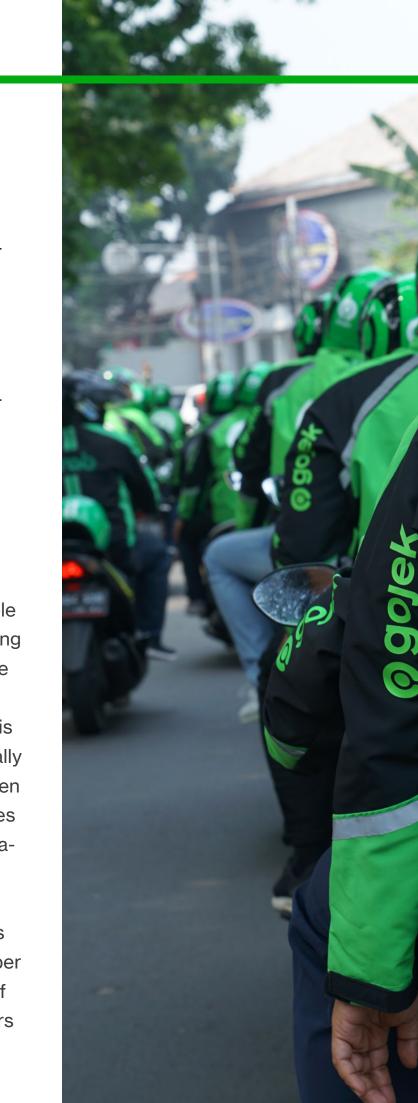
2010 Year founded

HQ Jakarta Indonesia



a different manner. "A good example is encryption and logging, something that's pretty fundamental within the security space. To try to do those things in a traditional environment is quite complex, especially for globally distributed technology stacks. When we do that in the cloud, a lot of times it's really a checkbox or a configuration change to get things moving along faster and more efficiently."

The goal of these technologies is to earn the trust of users. "As a super app, we provide or offer a variety of services to our consumers, partners





130

and merchants," Do says. " Our number one security priority comes down to consumer trust. We strive to provide this trust by employing a very robust security program that ensures security on both our products, services, on our platform, as well as the applications that our internal users rely on every day." That security priority must be balanced with speed of access, something for which identity and access management is crucial. "We want to enable our developers and our engineers to move as fast as possible, but in order for them to do that securely, their identity and how they go about accessing systems to do their work is paramount. So we employ, and have a robust roadmap to implement, a very strong identity and access management program here at Gojek, including multi factor authentication."

Do identifies a number of strategies that he has developed over his career to stay on top of security in a fast-moving organisation. "Number one, leverage the cloud native tools that are available to you," says Do.



"This opportunity to make a positive social impact was such an important factor for me to make the decision to join Gojek"

George Do Chief Information Security Officer, Gojek "Don't try to boil the ocean and create your own tools because some of those will already be at your fingertips. The second thing is finding a good balance between what we build internally, in-house or open-source, versus what we buy commercially. It's important to pragmatically select a build versus buy option based on the security use case and return on investment. Thirdly, in the course of developing applications and releases, there will be vulnerabilities that may be inside the code. We have to be

Protect the entire attack surface with one platform

The Fortinet Security Fabric delivers a unified approach that is broad, integrated, and automated. Reduce and manage the attack surface through integrated broad visibility, stop advanced threats through integrated Al-driven breach prevention, and reduce complexity through automated operations and orchestration.

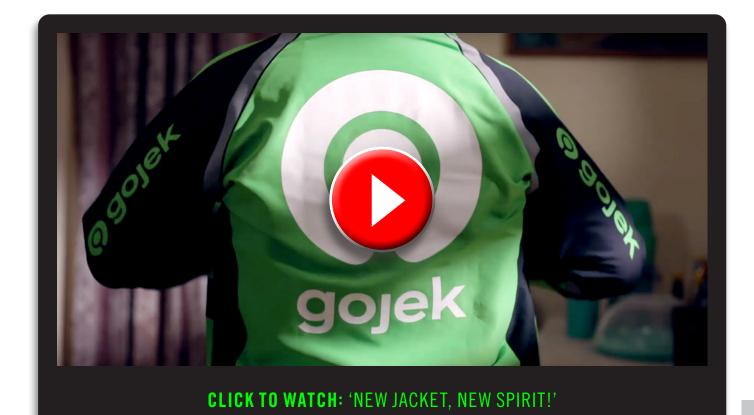
LEARN MORE

🎽 f 🖸

in



www.fortinet.com



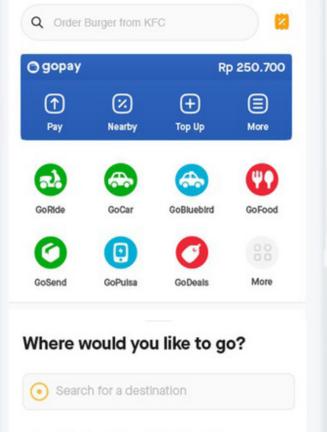
very rigorous around the employment of a continuous vulnerability management program so that the vulnerabilities are detected in real time and remediated as soon as possible thereafter."

Supplementing these preventative methods are reactive measures such as a bug bounty program. "For all of the work that we do from a prevention perspective, we also need a strong and robust incident response capability. That means building out a team and process, a capability by which, if an incident does hit, we're in a state where we're able to respond in an effective and meaningful way."

Gojek's security ecosystem is also reliant on the support of partners such as Horangi. "Horangi is one of many security firms that we use to augment our security program," says Do. "With Horangi, we collaborate on areas like penetration testing and improving the maturity of our security incident response capabilities. We also receive support from them with response playbooks and executing 134

war game exercises." When selecting partners and vendors, Do believes in security platforms as opposed to point solutions. "For me, unless it's truly a critical area of need, I really steer towards a security platform versus spot solution because it reduces the number of technologies that my team has to manage."

As for the future, Do has a clear path in mind for cybersecurity at Gojek. "First and foremost is winning consumer trust. Slowly but surely, we also need to bake security into



Stadion Utama Glora Bung karno Jl. Pintu Satu Senayan, Gelora, 08:08



CLICK TO WATCH: 'GOJEK PRESENT: CERDIKIAWAN'

the culture. With any organisation, security and the culture really is a critical factor. As we grow and expand, doing that will pay huge dividends for us as we scale and expand into new markets and with new product sets." As for the broader industry, Do emphasises that there is strength in numbers. "The threat landscape is constantly evolving. As CISOs, we have to evolve with it. The bad guys only have to get it right once. We have to get it right every time. Really, the game is stacked. Phishing, credential theft, nation-state sponsored hacking, these are just some of the threats we face. Security is an exciting field and I would encourage young people to look at cybersecurity as a career. The more security practitioners we have, the better the industry overall."



🗿 gojek



<section-header><text>

FEBRUARY 2020

136



Aligned is focused on designing and delivering dynamic solutions with industry-leading technology and adaptive infrastructure that align with customers' needs and requirements

ften when a large hyperscale provider is looking for a space, it has an internal plan for the year for capacity and compute - typically based on the individual business being able to support projected growth and requirements for the year. That need for sophisticated capacity planning in the data centre industry is often due to sector volatility or how fluid the business requirements for individual applications are..."

Mike Coleman, Global Head of Design & Delivery at Aligned, leads the company's clients through the minefields of mission-critical; a solution provider able to react quickly to changing needs. "A customer may have planned for 10MW of space, but the business might realise it needs 15MW, and right now," he says. "At Aligned, we have the capability to help them through that and ensure they have the space they need, where and when they need it."











2013 Year founded

550mw Current portfolio under development

www.businesschief.com

IF YOU HAVE THE NEED, WE HAVE THE SOLUTION.



WHO WE ARE

Power Cool Engineers, PC is a mechanical and electrical consulting engineering firm located in Blountville, Tennessee. Our management and key staff have been together for 20 years.

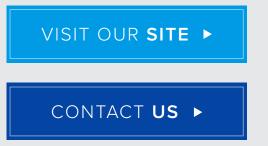
We have extensive experience designing commercial, educational, industrial, medical and mission critical facilities.

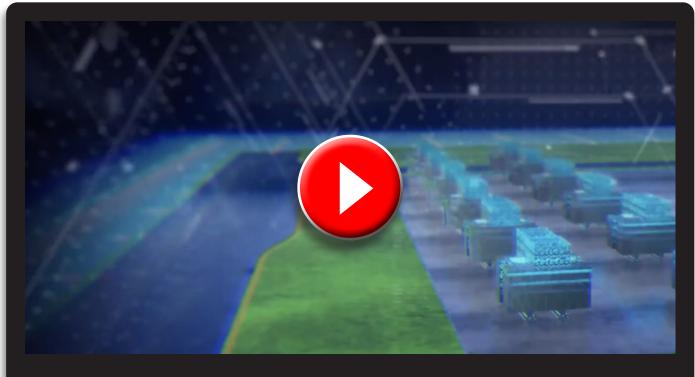


OUR SERVICES:

- MECHANICAL DESIGN
- ELECTRICAL DESIGN
- PLUMBING DESIGN







CLICK TO WATCH: 'ALIGNED – BUILD-TO-SCALE'

Aligned's approach is to design a physical, electrical, and mechanical infrastructure that is very quickly deployable, but also deployable in the right-sized increments to meet customers' unique capacity needs and requirements – now and in the future. "Instead of building a 50MW data centre and having it sit there waiting for it to be fully utilised, we're able to build the physical structure, whether it's a cold or a warm shell, and then incrementally deploy infrastructure at pace," assures Coleman. "For example, we can get the mechanical backplane down to as little as 750KW of cooling capacity in an individual increment. Allied to this, our electrical topology is extremely flexible, allowing us to make adjustments towards a specific customer."

Coleman highlights that this flexibility allows Aligned to deploy incrementally across a building in two ways. "We can add to the planned capacity for the building, but also if the customer decides that they're going to grow in place," he explains. "From a density perspective, we can add that capacity in their current physical footprint and



not require additional square footage or a lift-and-shift of equipment into a different space. That's the philosophy behind the design and the way that we're able to meet those commitments. Once we have the cold channel, we make the space ready maintaining approximately 50MW of our mechanical and electrical infrastructure rolling through the supply chain. We manage that very closely between the sites. By standardising that infrastructure from site to site, we're able to make delivery commitments with our vendors, with our suppliers, with incremental release dates that allows us to keep them up and running."

Aligned has commoditised its processes allowing it to deploy mechanical and electrical equipment in modules. This reduces onsite construction and the labour required while also minimising disruption for any tenants using the facility. "We aim for our work to be seamless and the process to go almost unnoticed," adds Coleman.

Future-proofing its infrastructure solutions is critical for Aligned when



contemplating the overall design of a project. "Future-proofing is typically focused on increased density; with CPUs getting increasingly powerful, they draw more and more power," notes Coleman. "Historically, what happens in the data centre when you look at the retail or wholesale environment, is that a company with a traditional 15-year lease for a larger deployment will start to see a lot of empty space in the room because as they go through a tech refresh cycle, the equipment they're installing is getting smaller, while requiring an equal amount of

"Aligned's approach is to design a physical, electrical, and mechanical infrastructure that is very quickly deployable, but also deployable in the right-sized increments to meet customers' unique capacity needs and requirements – now and in the future"

Mike Coleman, Global Head of Design & Delivery, Aligned



Legendary Customer Service. Dynamic Results. 100% Uptime Reliability.

HOLT CAT is known for delivering legendary customer service, no matter the industry. Aligned Energy relies on HOLT CAT to provide value engineered custom Generator Set Packages, for any critical power situation. For a 21st century power plant, it is crucial to have 100% uptime reliability; with Vendor Managed Inventory, HOLT CAT is able to support these mission critical build schedules by reducing lead times. Whether you're planning to integrate into existing facilities, or develop new infrastructure, our on-site project management will ensure customer expectations are always met.

Visit us online today at HoltCat.com





HoltCat.com

EXECUTIVE PROFILE

Mike Coleman

A former head of global data center operations at Google and Yahoo, Mike Coleman has spent 15 years on the electrical engineering design side for data centers and mission critical, working almost entirely on design-build.

"I've worked on buildings for Microsoft, Adobe, VMware, Intel, Facebook, Apple... You name it," he says. "I have a very strong understanding of the overall cost, construction, scheduling and value engineering needs to help end users, owners and operators focus on their original requirements while ensuring the associated costs and benefits are achieved."

Coleman offers a unique perspective on the process to plan for yearly deployment by individual business units across large global infrastructure and the challenges that need to be overcome. "I appreciate the complexity of their software platforms and how that translates into what our physical infrastructure needs to be able to accommodate." he confirms. "Being able to meet their needs with overall business and capacity planning helps me provide flexible solutions and overcome challenges for our customers at Aligned."

www

cooling. When Aligned started in 2013, our goal was to drive a more sustainable approach to providing a physical structure in a number of ways. Today, we match 100% of our IT load with renewable energy sources."

Aligned saw that with traditional cooling systems, faults would occur and this became the driving force behind the push for future-proofing. "With our Delta Cube arrays, we're able to start off with a customer at a low density, which today averages about five to 10 kW per rack. However, the way that our mechanical structure is deployed enables that customer to then scale up, or in place, without having to maneuver or adjust their infrastructure. They then typically scale to anywhere from the 10kW up to 50 kW a rack. We can incrementally add capacity guickly, and our customers never have to worry about looking for a new space. We call this capability Expand on Demand."

At the core of Aligned's bespoke approach is its proprietary cooling technology – Delta CubeTM and CACTUS[®]. "It could not be any more flexible," confirms Coleman. "For higher







Delivering Safe, Reliable and Efficient Medium Voltage Power Solutions for all Data Center Applications

The adoption of medium voltage power (5-15kV) within data centers has been driven by the deployment of larger facilities and increased power densities.

Until VESTA-AR, data centers had to balance the potential benefits of medium voltage power distribution against the loss of valuable floor space when MV Switchgear was installed.

IEM's VESTA-AR, the industry's premiere medium voltage distribution and control system solution, delivers the benefits of MV but with the **minimum space requirements**, saving over 30% verses standard MV switchgear.

VESTA's high build quality, front accessible connections and withdrawable breakers reduce maintenance time and maximize uptime, and its **metal-clad**, **arc-resistant** design allows operators to work safely and confidently around energized gear, reducing interruption to daily operations and contributing to the highest levels of power availability.

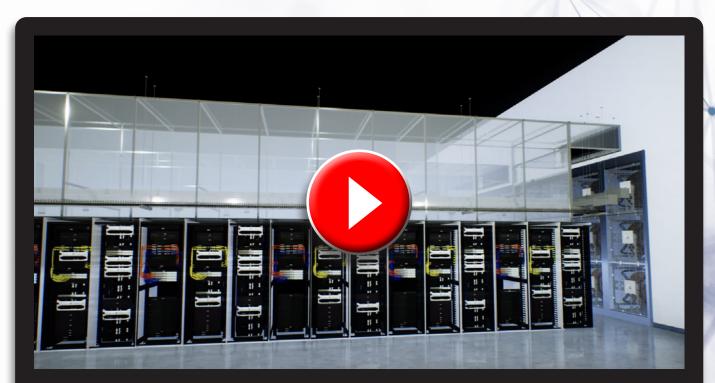
VESTA-AR Switchgear allows data centers to attain the very highest levels of safety and reliability, while saving valuable floor space and maintaining environmental sustainability. **Learn more at www.iemfg.com**



Fremont, CA | Jacksonville, FL | Vancouver, BC | 866.436.8668 For more information please visit: www.iemfg.com or email info@iemfg.com densities than 50 kW per rack, it is also easily integrated with liquid-cooled solutions. The industry really hasn't standardised around anything, so whatever we do right now will not be a catch all. It would be a unique deployment for an individual customer, which we could accommodate."

Aligned's electrical topology, and how it deploys power, is based around a standard offering which is also incredibly flexible. "Many of our customers might have some core systems "We can incrementally add capacity quickly, and our customers never have to worry about looking for a new space. We call this capability Expand on Demand"

Mike Coleman, Global Head of Design & Delivery, Aligned



CLICK TO WATCH: 'ALIGNED – DELTA CUBE TECHNOLOGY, DESIGNED FOR SCALABILITY'

COMPANY FACTS

• Aligned matches 100% of our IT load with renewable energy sources.

• Aligned's cooling system is capable of operating using 80% less energy and 85% less water than traditional cooling systems.

TΔ

Ĵ,



TΔ

7.

150



that require more robust electrical reliability. They might have an N+1 environment for the production equipment and network gear, or more critical systems that are usually deployed in a smaller footprint. These might need to be more robust, whether it's twoline or double-corded, even with our standardisation around our design, we can easily accommodate those adjustments because of the way that we designed the physical infrastructure."

Aligned has the ability to offer any type of renewable energy to its customers. In the U.S., more often than not, this green energy is brought in via the utility, but Coleman notes that some of Aligned's customers are investing directly into wind farms and solar that support their local grid. "Taking this approach, you're shaping and leading the power. We have experience doing this and are happy to work with them."

The company's green approach extends to its cooling system, which is capable of operating using 80% less energy and 85% less water than traditional cooling systems. "There's the Delta Cube, and we also have a proprietary chiller that we develop and

www.businesschief.com

Highland Associates provides Architectural, MEP Engineering and Commisioning services for Mission Critical Facilities including Wholesale Providers, Co-Location Companies and Enterprise Clients. Our firm has completed the Planning, Design and Commissioning of nearly 800MW of UPS capacity in facilities totaling over 7,000,000 square feet.

Highland Asociates is pleased to support Aligned Energy's expansion into the Northern Virginia market and we are proud to be the their design partner providing Architecture, Interior Design and MEP Engineering services for their award winning facility in Ashburn, VA.

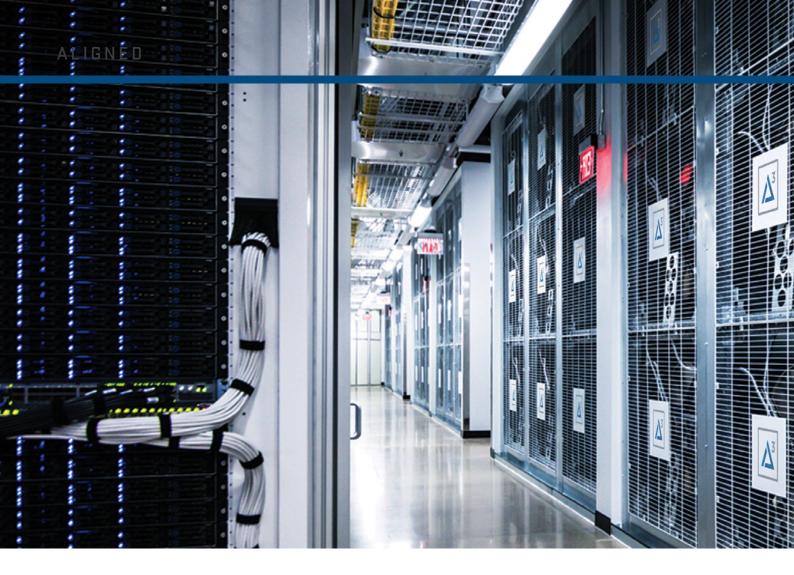
> HIGHLAND A S S O C I A T E S architecture | engineering | interior design www.highlandassociates.com

> > ADBANKO

Data Center Trends

"When you look at the large hyperscalers, the appetite right now to take down space is tremendous," says Aligned's Global Head of Design & Delivery, Mike Coleman. "The pace that they need to fill to try to keep up with the demand is unattainable. Hence, innovation has become secondary to iteration just so they can meet the demand, because every time you add some new technology, it slows the build process down. You have to vet it, there's more testing, you're not exactly sure how well it's going to work, and the business simply cannot tolerance any delay or misses on delivering capacity."

Coleman sees less innovation right now, simply because of the sheer build volumes. "However, it's also allowing the overflow to drive growth in businesses like ours," he says. "Providers are becoming much more strategic partners so that they can meet demand. Therefore, our capital, infrastructure and people provide a great recipe for them to reach out to us for support." Coleman also highlights the significance of what he calls "the return to the metro" of the early 2000s. "In the past, data center construction was almost entirely in a metro area. close to the customer due to latency, with content stores closest to the user. Then, we saw the trend of everybody moving out of the metro to massive campuses in remote locations. But now, the tremendous growth in cloud is leaving the majority of the large cloud users in a hybrid environment. We've gone back to that latency requirement where large cloud deployments need to be close to the metro because very often, they're providing services to an on-prem IT infrastructure, so you need close proximity to that. We're starting to see 30-50MW deployments between these large hyperscalers in areas where they wouldn't look to be building data centers because their sites are typically 200-500MW. The growth in this area is going to be immense."





THE NAME SAYS IT ALL

Optimal Power Solutions has the experience in the critical power industry to create the Optimal Power Solution for your critical environment.

LEARN MORE

optimalpwr.com











TOSHIBA Leading Innovation >>>



manufacturer – the CACTUS," reveals Coleman. "The chiller itself runs predominantly on 100% outside air when conditions allow (when dewpoint is low and temperature is in the right range). It's not until we see adverse conditions, which are not consistent annually, that we activate the adiabatic cooling in the chiller, which does not run all the time." Coleman notes that adiabatic cooling runs for a fractional number of hours a year compared to the outside air. "When dewpoint becomes an issue or humidity is a little higher and adiabatic isn't effective, we do have a traditional cooling system that can kick in as well, so we really have all conditions covered." He maintains the system is designed to run on 100% outside air as much as possible and that reduced energy and water consumption is driving the industry-leading 1.15 PUE that Aligned operates at.

Aligned typically partners with the top five contractors in the U.S. data centre market, drawing on the technical expertise of those who have heavily invested in the talent needed to support mission-critical projects. "Very often, we're partnered with a large general contractor to establish the original building," confirms Coleman. "The other reason is the pace that we build at, nine or even six months in some cases, requires enormous cashflow efforts, and a very large workforce. We have a handful of both capital and construction partners capable of supporting that. Once the site is established and you've got iterative work, whether it's multiple additional buildings on the site or additional build down to the shell, we've developed partnerships locally. The local MEP contractors and subcontractors are

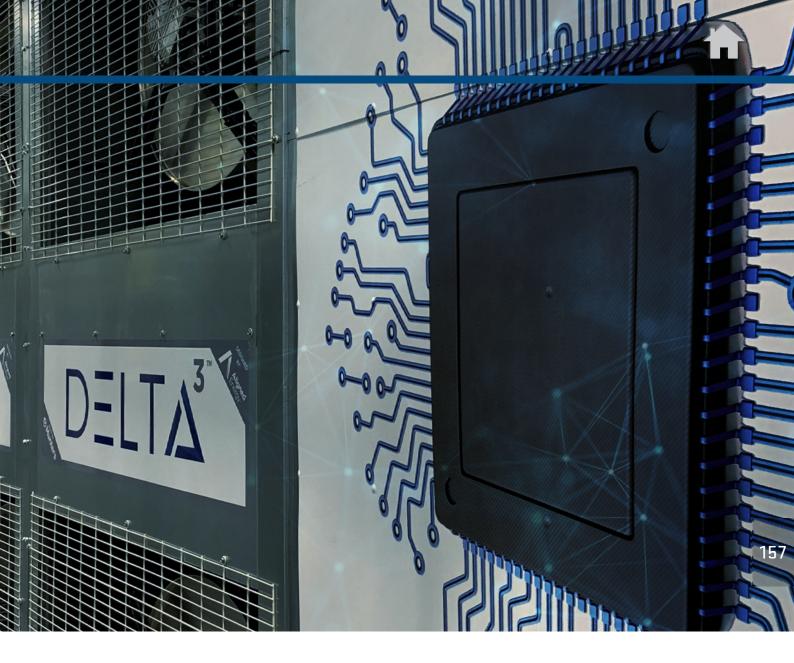
critical alliances for us moving forward to continue the expansion of our operations and be good partners to the communities we work in."

Aligned's recipe has resulted in some notable successes. "I'm very impressed with our first building in Salt Lake City. That was a brownfield conversion of a chip plant where we were able to purchase and retrofit the building, as well as get customers deployed there in under a year; that's almost unheard of in our industry," says Coleman. "Similarly, based on the way that our infrastructure is designed, we were able to complete our first phase of capacity in



"I'm very impressed with our first building in Salt Lake City. That was a brownfield conversion of a chip plant where we were able to purchase and retrofit the building, as well as get customers deployed there in under a year; that's almost unheard of in our industry"

Mike Coleman, Global Head of Design & Delivery, Aligned



Ashburn in about six months, which is the fastest I think I've ever seen. Both amazing accomplishments for us."

Aligned recently secured a \$575mm credit facility, which will further support its goals for 2020 with expansion of its adaptable colocation and build-toscale solutions at current campuses; Salt Lake City and Phoenix expansions are already underway. "We can achieve whatever our customers need. We're not capital constrained, our partners' infrastructure funds are not looking for quarterly earning updates and requirements back on their investment. We have the ability to accomplish anything our clients need, which makes the road ahead truly exciting."





BELCORP: TECHNOLOGY AS AN ENABLER

WRITTEN BY SHANNON LEWIS PRODUCED BY MIKE SADR



00-4

ūΖ

159

We speak to Venkat Gopalan, Chief Digital Officer and Chief Technology Officer at Belcorp, about the company's major transformation over the last few years and how technology has enabled it

ounded in 1968, Belcorp is a leading Latin American beauty and cosmetics company. Based in Peru, its presence spans 14 countries across the Americas. Currently a directselling company representing three brands, L'Bel, Ésika, and Cyzone, Belcorp has been undertaking a company-wide transformation over the past few years. Its development has been phenomenal, with continual double-digit growth leading to a revenue of over US\$1.16 bn. The changes are aimed at both the consumer and Belcorp's vast network of over 800,000 independent beauty consultants.

Technology plays an important role in Belcorp's expansion. Venkat Gopalan, Chief Digital and Technology Officer, is responsible for driving the organisation's digital transformation. Gopalan joined Belcorp in May 2019 following a long history of working in retail tech. So far, Belcorp has explored multiple different avenues: ecommerce, B2B and B2C models. "For over 40 years, we had never been in e-commerce or retail," Gopalan









1968 Year founded

\$1.6bn Revenue in US dollars

6,280 Number of employees

www.businesschief.com

CO-CREATING INNOVATING EXPERIENCES

As a consultant Tech company and software factory, supporting 15 years of experience, developing web and mobile applications, our high level team has been able to serve in Peru, France and Canada.

WHAT IS OUR PURPOSE?

Being a tech digital consultant, our primary purpose/mission is to co-create innovative experiences for our clients.

WHAT DOES CO-CREATE INNOVATIVE EXPERIENCES MEANS?

As the main technological ally of our clients, our mission is to make their dreams and needs come true through teamwork. Working closely with our allies enables us to become forgers of an innovation, implementing a cultural change that goes hand in hand with the final product we develop.



1. Research

2. Analize

3. Ideation

4. Design and Test

TECHNOLOGY

EXPERIENCE

INNOVATION

LEAN

IIX

INNOVATION

PEOPLE

INNOVATION

Ĺ

\$OOO

BUSINESS



The 4 key points to achieve success as a Tech Digital consultant

1 — Technology

Today's digital transformation is not an option, but a necessity. Companies that adopt it and can develop it in their environment will have a competitive advantage over their rivals within an already saturated market. In that sense, it is necessary that from the company there is a vision of business systems with projection towards the future, which is supported by a technological innovation, is able to develop modular and uncoupled applications with the ability to scale and launch the market in short or medium term autonomous and independent digital products that add value to the business.

2 — Agile Frame

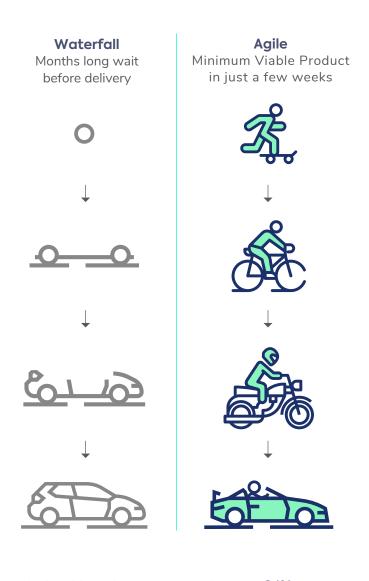
In our ever changing and challenging world, businesses need agility to respond to the competition with quick change. The impact of agility on digital initiatives is important, as it allows teams to deliver value to the business in a short time, usually 2 weeks, leading up to fast innovation and feedback from the customer. Agility is a culture, which involves people and processes, it is how we do things differently to obtain individual outcomes that translates into satisfied customers and a very good return on investment.

3 — Good Resources

At Altimea, it is essential that our human talent is trained in two crucial areas of today's digital world: technical knowledge with constant updates on new technologies and soft skills (emotional intelligence). We feel these factors are necessary due to the constant daily teamwork with our clients. We have a multidisciplinary workforce that thrives to creative beautiful designs focused on user experience which then our developers implements to our high quality standards under the guidance of both our project and tech leaders. Our most differentiator, among other agencies, is the values that govern the work of our team: commitment, responsibility and constant innovation, all adding to the crucial variable for the success of our partners.

4 — Product quality

In addition to having a good team of professionals, we use a wide range of tools that help us ensure quality, maintainable and secure code. Using our Continuous Integration tool and Quality Assurance team we can guarantee that issues are taken care of before reaching our codebase and the end user by automatically warning developers about the compliance of their code with the industry's best practices and security-related matters.



- Agile table with average compliance of **94%** of user stories.
- User stories completed in an average of **3.75 days**.
- Agile table at **Belcorp** considered as high performance by a Agile top consultant.

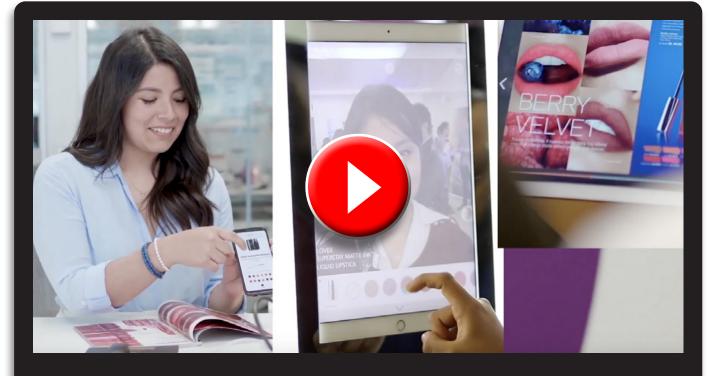
LEARN MORE



"Technology disrupts. The number one priority for us as a tech organisation is moving with speed and agility"

Venkat Gopalan, Chief Digital Officer and Chief Technology Officer, Belcorp says, "so we are expanding into other channels because we aim to create the best brand experiences for our customers and, by doing so, strengthen our independent consultant 's businesses." Currently, its e-commerce offering is available in four countries - Peru, Colombia, Chile and Mexico - with plans to expand as consumers demand it. Belcorp's new business models are aimed at increasing delivery immediacy and reducing payment friction. "Part of it is that we want to be known as the best technology





CLICK TO WATCH: 'INTRODUCING BELCORP'S TECHNOLOGY DIVISION'



organisation in Latin America," says Gopalan. Belcorp's expansion turns both internally and externally. Belcorp Ventures, an offshoot of Belcorp that invests in and partners with companies that can benefit from the multinational's industry experience and market access, and, in turn, provides Belcorp a fresh perspective on the future of beauty. So far, it has invested in four beauty startups. "Investing in an early stage company gains us global access to today's beauty status, as well as to new technology and business models," Gopalan explains. "We can look at the



Big Data | Artificial Intelligence | Advanced Analytics



Specialists in Providing DATA SCIENCE & DATA ENGINEERING Solutions at Scale Across Industries



\$15 MN+ incremental sales from Al/ML solutions



30% Faster time to market with our data science models

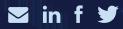
/	\sim
\square	- 22
	- 523

50+ Petabytes of data processed

To explore our AI, ML, Open-Source and Cloud Solutions

CLICK HERE

Retail | CPG | BFSI | Hospitality | Hi Tech



cultural change and get inspired by new products to inform and streamline our company's transformation. It's about partnership and knowledge."

Belcorp's digital transformation began two-and-a-half years ago as an effort to shift its own view of technology to understanding it as an enabler rather than just support. Belcorp's expansion centres on reinventing direct selling, becoming an omnichannel provider, providing an exceptional consumer experience, and focusing on internal talent. Digital transformation touches on all four. Technology organisation is a key element; moving to an Agile enterprise allows Belcorp to launch initiatives such as e-commerce quickly and efficiently. Salesforce, which has previously been a key element in the company's growth, is equipped with digital tools, which enables consultants to learn about product, better interaction with consumers and enable frictionfree selling. Consumers also benefit from the tech transformation, with augmented reality that allows them to try on virtual makeup and virtual portraits that give them the opportunity to learn about products.

EXECUTIVE PROFILE

Venkat Gopalan

Venkat Gopalan is Chief Technology and Digital Officer at Belcorp, where he is responsible for leading the beauty multinational's digital transformation and enabling the company's corporate and sustainability strategy through technology. Venkat has over 20 years of experience leading transformation initiatives for Fortune 100 companies.



FEBRUARY 2020





"Digital transformation is about how we reinvent things," Gopalan states. "At the same time, it's about enabling the workforce to drive the cultural aspect." Projects that used to take many months are now completed in a few weeks, freeing up employees to think creatively rather than focus on manual tasks. A new personalisationbased commercial tactic using artificial intelligence and machine learning benefits both consumers and consultants. Internally, Belcorp has introduced a new engineering career path, the first of its kind in Peru. "Talent development is what will allow us to become leaders in the space," Gopalan says. Talent development initiatives include LinkedIn Learning, Tech Training, Agile Academy and Tech Academy. "We want to be a continuous learning organisation," Gopalan continues. Belcorp runs Open Tec, a tech conference for employees, bringing in organisations like Amazon, SAP and Valtech to talk about the importance of innovation, data culture, and the cloud. It also brought in six startups to talk about their offerings, and CEOs from across Latin American tech companies

Digital+ Business

More innovation faster

Technology leader delivering hybrid networking, cloud connectivity, and security solutions to customers around the world. Through its extensive global fiber network, CenturyLink provides secure and reliable services to meet the growing digital demands of businesses.

Learn more







CLICK TO WATCH: 'BELCORP'S CORPORATE COMMITMENT TO SUSTAINABILITY:'

"Investing in an early stage company gains us global access to today's beauty status, as well as to new technology and business models"

Venkat Gopalan, Chief Digital Officer and Chief Technology Officer, Belcorp to promote data culture. "It's about bringing the community across Latin America together to share, learn and transform," Gopalan explains.

Partnerships are highly valued at Belcorp. Relationships with universities function symbiotically, providing interns and innovation partnership for Belcorp and real-world challenges for the students. Partnerships with other companies have allowed Belcorp to further its tech understanding. Altimea, one of the leading digital consulting and transformation providers in Peru and Latin America, has been a key partner





New challenges, New ideas

Gfi Group, present in 22 countries, is a leading provider of value-added IT services and software with a unique combination of proximity, sector-based organization and industrial-quality solutions. The Group generated revenue of €1395 million in 2018.



in D YouTube





on Belcorp's business end. Its focus is on using technology to help push and manage content. Belcorp's interest in data analytics sees it turning to Sigmoid, which has spent the last year and a half advising on AI and machine learning models, as well as looking at population logistics and forecast planning. As heavy cloud users, Belcorp relies on CenturyLink for infrastructure, a key strategic and social partner. Meanwhile, Hundred Group, a part of GFI, has been with Belcorp for the last 15 years, providing solutions for digital tools and helping Belcorp with

"We have to continue to innovate, to bring new products to the market, to reinvent the direct selling"

Venkat Gopalan, Chief Digital Officer and Chief Technology Officer, Belcorp



its mobile application development. These strategic partnerships bring specialised technology expertise into Belcorp, allowing it to continue along its digital transformation journey.

Transformation at Belcorp is always done in alignment with its purpose, core values and commitment to sustainability. Sustainability is a focal point of the corporation, aimed at creating a future full of possibilities for everyone, and centred on five pillars: women's empowerment, extraordinary talent, care for the planet, integrity and transparency, and responsible products. The company has goals set for each of these pillars over the next five years. "If you look at the pillars of sustainability," Gopalan says, "each is helped by our digital transformation. Digitisation helps us reduce waste and carbon footprint while increasing transparency."



Looking ahead, Belcorp plans on continuing to expand and transform. "In five years' time, we want to be recognized as the best place to work and the definition of talent and innovation across the board", Gopalan says. For this, having committed and creative people is key. "We have to continue to innovate, to bring new products to the market, to reinvent the direct selling," Gopalan says. "Technology disrupts. The number one priority for us as a tech organisation is moving with speed and agility."



www.businesschief.com



Faster, smarter and more profitable decision making

WRITTEN BY MATT HIGH PRODUCED BY SHIRIN SADR

176

FEBRUARY 2020



178

How FICO's innovative decisioning technology is driving financial services' digital transformation

ccording to market surveys, close to 90% of businesses in financial-intensive industries – banking, insurance, credit cards, payments, etc. – see digital disruption as a looming threat. Conversely, and with somewhat staggering disparity, only a fraction of those companies – for example, just 3% of banks –consider their organisations to be 'extremely' disruption proof. The first statistic should come as little surprise - the ongoing proliferation of innovative digital technologies is, after all, seeing every industry worldwide facing its own transformation. The second should cause more concern for those operating in the global financial services sector.

The breadth of the challenge that the sector faces from digitally disruptive technologies was set out in a research paper created by Arizent, a B2B business information firm; the paper was sponsored by FICO, a leading analytics organisation that uses advanced analytics and optimisation to improve business decision making and drive growth, profitability and customer engagement. The purpose







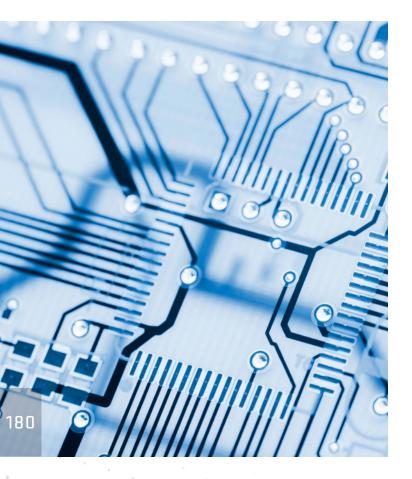






5,000 Number of employees

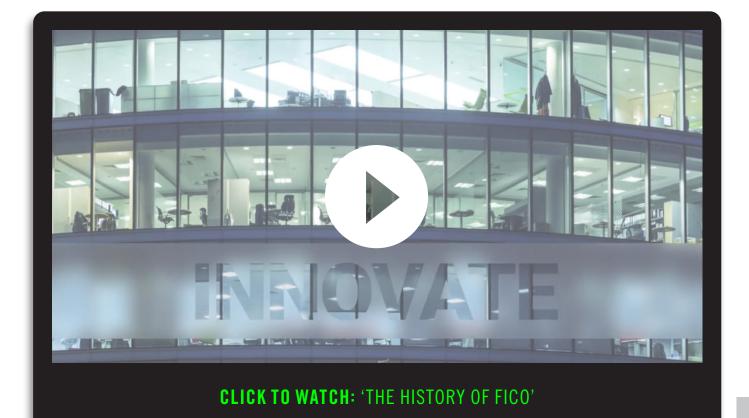
www.businesschief.com



of the research, focused on digital disruption, digital transformation and customer-centricity, was to learn about the perceptions of senior executives regarding the core advantages, disadvantages, opportunities and threats posed by such disruption. It found that digital disruption is "mercilessly changing the competitive landscape in the financial services industry" and that those companies that thrive will embrace change through a dedicated focus on making smarter, faster and more profitable decisions.

"What's holding many banks back from truly embracing digital transformation is their starting from a siloed set of systems that don't view you as a customer, but rather, view you as an account"

> **Bill Waid**, General Manager of FICO Decision Management, FICO



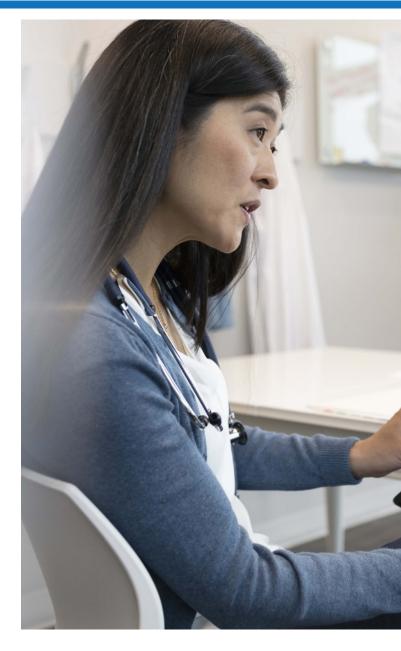
FICO can inform those decisions. The business is a leading proponent of digital decisioning through its Centralized Decisioning solution, a unifying infrastructure that enables businesses to use raw data to better inform decision making and greatly improve the customer centricity of products and services or, as FICO suggests, "to take the offensive and be a disruptor, not a disruptee". Customercentric services are a key driver of change in all industry sectors, and yet many are seeing difficulty in becoming more customer-centric – 44% of banks

and 24% of fintechs, for example, are not confident in their ability to anticipate customer needs and proactively offer ideal products and services, as stated in the aforementioned research.

According to FICO, this shortfall in achieving customer centricity is a result of many businesses' operational frameworks relying on siloed, on-premises systems, data and processes. "Typically, in financial services, there are multiple disconnected ways in which companies interact with customers; you can bank with one institution but have savings or checking accounts, credit cards, mortgages and investments. What's holding many banks back from truly embracing digital transformation is their starting from a siloed set of systems that don't view you as a customer, but rather, view you as an account," explains Bill Waid, General Manager of FICO Decision Management.

For Waid, the provision of a true digital experience that breaks down the siloed approach in order to focus on the individual is driving digital disruption across many industry sectors worldwide. He references, for example, Amazon's digital retail experience, which has revolutionised the traditional consumer dynamic. Although not at this level yet, the financial services sector, he concedes, is on the brink of

in



EXECUTIVE PROFILE

Bill Waid

As GM, FICO Decision Management Software, Bill is responsible for FICO's cloud-based Decision Management Software (DMS) business, delivering innovative analytics and decision management for better business outcomes.



such a transformation. "From a digital experience perspective," he says, "the risk of being disrupted comes from the connection and the experience that the consumer has on a very individual level – does the bank or insurance company understand me? Is it offering me the right products and the right level of engagement for my specific needs, and does it give me optionality and anticipate what I may need before I have to ask? These are essential guestions to answer and the challenge is that, when you move to something like the financial services sector, the depth of that experience becomes even more complicated because there are multiple ways in which companies can interact with the consumer."

EXECUTIVE PROFILE

Kevin Deveau

A senior executive with over 30 years' international experience. Kevin is Vice President & Managing Director for FICO's operations in Canada, as well as heading the company's North American Insurance business segment.

in

If you're not disrupting, you're being disrupted. Let FICO help you flip the switch.

Digitization is disrupting the very fabric of business. New entrants are displacing incumbents. Omni-channel models are replacing brick and mortars. Speed, precision, and innovation are survival imperatives.

To monetize your digital infrastructure, you need to liberate big data insights from business siloes. Unleash explainable, AI-powered decisions across your enterprise. Instinctively sense and respond to customer and economic shifts. Deploy new solutions in a snap.

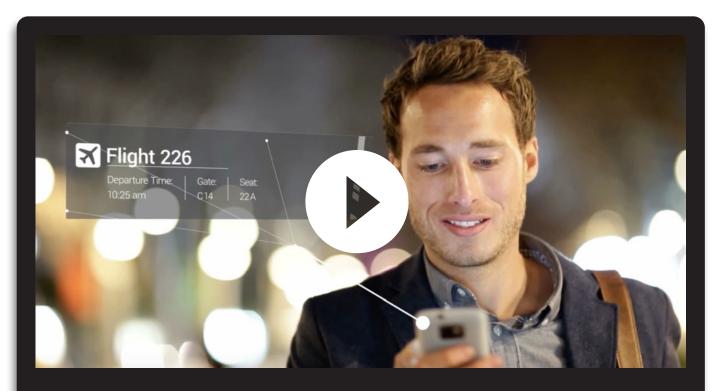
FICO can help. For more than 60 years, we've empowered banks, insurers, retailers, and others to build more profitable and sustainable customer engagements through decision management.

FICO Better Business Decisions

© 2020 Fair Isaac Corporation. All rights reserved.



Learn how our flexible, scalable approach can help you be a disruptor-not the disrupted. VISIT US AT fico.com/CentralizedDecisioning 186



CLICK TO WATCH: 'FICO® DECISION MANAGEMENT SUITE'

Although FICO is best known for working with many of the world's leading financial services organisations, the company also works closely with some of the largest names across several other sectors. According to Waid, the company has seen and worked with some early adopters of this customer-centric mindset that are taking efforts to drive their digital strategy and improve consumer experience. "Alongside that, you have several followers but also, unfortunately, many laggards across the sector," he adds. "The numbers of those that have

already begun their digital transformation journey and made some progress are relatively small; it's a much larger number of those that will 'go next', from our perspective."

Alongside banking, FICO recognises growing interest from the insurance sector - another industry that has historically engaged with customers in a disparate, siloed manner. Kevin Deveau, Vice President & Managing Director, FICO Canada elaborates: "In insurance in particular, companies across the board are rapidly realising that keeping pace with this digital transformation of the sector really comes down to defining that customer journey - or the 'customer 360'. The businesses that are on the wrong side of that are losing out and paying a price, but that's rapidly becoming true for any customer-facing business."

Insurers have, says Deveau, made steps in areas such as claims handling, which has seen a redefining of the journey from accident to resolving, for example. "But, increasingly we're seeing insurers building out their engagement and involvement with the customer; they want to be closely aligned with them throughout all the relevant life events. We view the insurance sector in particular as shifting from a state of detect and repair to predict and prevent, and this is where a digital, decision-first platform such as ours comes in, being able to gather, analyse and connect siloed data in a real-time environment. This enables companies in any sector to be more nimble, to be proactive rather than reactive and to provide that level of

"Companies across the board are rapidly realising that keeping pace with this digital transformation of the sector really comes down to defining that customer journey"

> Kevin Deveau, Vice President & Managing Director, FICO Canada

customer experience that they need to in order to be successful."

The challenge for both insurers and banks, concedes Deveau, is that while most are now actively seeking to engage their experience offering, a large majority are still embedded in legacy systems and technologies. FICO's Centralized Decisioning, for example, connects all business-critical insights across an enterprise, enabling that decision making process to be optimised across an entire customer lifecycle. FICO recognises several traits of a 'best-in-class' decisioning process, including a unified, scalable decision platform that optimises and monetises the use of people, data and analytics; the ability to create personalised customer treatments at scale; the ability to validate and simulate decisions before they are put into production; and the creation and management of the strategies, rules and analytics that drive decision and actions.

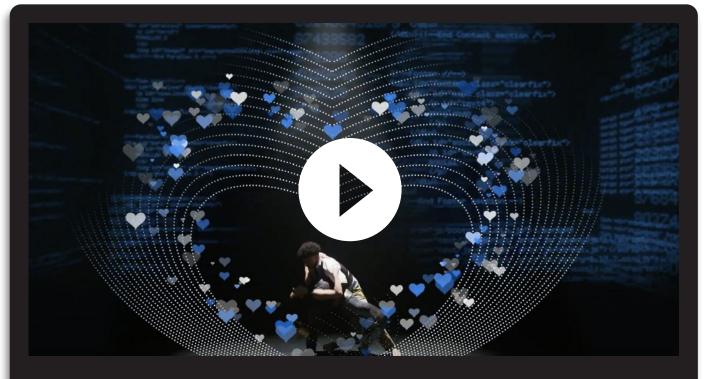
To give some perspective on these being put into practice, FICO and Arizent's research revealed that just 5% of banks are using all of the data at their disposal, only a third (37%) are





confident in their ability to make accurate decisions in real time and 38% are very confident that their customers receive consistent service across all channels. Notably these figures are significantly higher across the board for fintech companies. On customer centricity, for example, it was found that fintechs are three times more 'extremely confident' that their customers receive personalised treatment. Similarly, business users in fintechs are more than twice as empowered to manage analytics strategies than their counterparts in banks; they are also noticeably more confident in their ability to make accurate decisions in real time.

"The initial perception, quite often, is 'we are interested, we wish to improve, but how do we take all of our systems we have used for years - often decades - and make them talk to one another," Bill states. "The short answer is, you can't. It's too complicated and too difficult. The fintechs have a leg up on those incumbent institutions because they started with the premise of having all their data and systems connected. Banks should understand 190



CLICK TO WATCH: 'JOIN THE DANCE WITH AI'

that getting all their data into a decisioning process doesn't require the moving of that data, it's about ensuring that they can consume that data in real time."

Waid affirms that this is where technologies such as machine learning and advanced analytics play a key role, enabling a rapid assessment and decisioning process based on the information presented in the data. "Customers of ours that adopt this approach tend to start with the limited data they have, deploy these advanced machine learning models and



strategies, understand the data and the build in rapid succession," he notes. "Once you begin on such a journey, you then have the flexibility to pull in even more data, further enrich your process and continue to build. It's an incremental change that works at 'digital pace' rather than IT pace, and it's working very well in financial services and also increasingly in insurance."

Such a system, according to Deveau, is one that FICO offers and something that those in the industry should consider "the holy grail: bringing all of your



data together, building the models and technology as rapidly as possible, and move to making decisions and acting in real time. It's that approach that will bring the financial institutions and insurers to the levels of success seen by retail companies."

In order to achieve this 'holy grail', FICO works with clients on three pillars. The first of these is the ability to attach data and data sources, stream that data in real time and apply analytics and strategies to understand it at a customer level. Secondly, organisations should use the rich/enriched data to make better decisions about a consumer and improve the level of user experience. Lastly, understand the impacts of how data is applied and the decisions that it leads to in terms of the wider business outcomes.

"We refer to this as business simulation," says Waid, "and it's all about the ability to make comparisons, to understand the outcome should you make changes, take more risks with a certain customer profile and so on. Some of our customers refer to this aspect as 'the brain', as it's specifically focused on the wider intelligence around their business."





Understandably, as is the case with businesses in many sectors that are wedded to legacy systems or a particular company culture, FICO sees some hesitancy to fully adopt these three pillars in too quick a success. Waid states his belief that, if you are to make changes you must do so with confidence, understand the process and embark on a true digital transformation journey, while Deveau notes that, while many of FICO's customers begin with small steps, once they see the potential offered by its services growth follows in rapid succession. For any business, what moves the dial is results," Waid adds. "Most of our clients see results when their first use case goes live. They see material impacts to their business very quickly and that commitment to change, that desire to take the organisation forward, means that they want more to follow."



savills

Savills Critical Facilities Group: how knowledge builds trust

WRITTEN BY SHANNON LEWIS PRODUCED BY TOM VENTURO



Rick Drescher, Corporate Managing Director of Technical Services, and Ian Zilla, Executive Managing Director, discuss Savills Critical Facilities and building client trust through IT expertise

hile Savills was founded in 1855, Critical Facilities Services only became a part of its brand in the mid-2010s, when it purchased American-based tenant representation specialist, Studley Inc. The Critical Facilities team has served clients since 2000, when it began working as a consultancy focused on helping companies define strategy around its data center needs, whether that meant building a facility or leasing space from a provider. "Our core focus," Rick Drescher, Corporate Managing Director of Technical Services, says, "is representing users of space and services. Across all business lines, we focus on user representation." In the late 2000s, cloud service providers rapidly gained popularity, which led to an increased client demand for analysis and discussion of outsourced infrastructure alternatives. Ian Zilla, Executive Managing Director, adds that "it became clear that, to really engage with customers appropriately, we needed to understand their entire infrastructure stack from a detailed technology perspective, starting with









39,000 Number of employees "We've talked about opensource software, but now there's open-source infrastructure. People are contributing for the greater good of the industry, trying to lessen the impact on the planet as data center growth continues"

Rick Drescher, Corporate Managing Director of Technical Services, Savills

198

applications and moving deeper into systems and network requirements, as well as legacy platforms."

According to Zilla, in the early 2010s, the team was looking to expand its IT expertise to engage clients on a more technical level. In came Drescher, a 20-year IT professional with a focus on network engineering and large-scale infrastructure project experience. Drescher notes that he and Zilla pair in two fundamentally connected areas: the technical aspect, helping clients analyse their current and future





CLICK TO WATCH: 'SAVILLS CULTURE COMMERCIAL REAL ESTATE'

technical requirements and developing strategies to get them there based on what is important to them; and the financial analytics and structure aspect, which focuses on strategic acquisition planning and identifying financial structures that best suit each client and project. Critical Facilities works with a wide array of clients at different stages of their company life cycle, from startups to Fortune 100 businesses, meaning customisation and specialisation are key elements of its client dynamic. Both Zilla and Drescher have IT backgrounds. According to Zilla, this allows them to connect to IT clients as they are knowledgeable about both their experiences and the subject matter. Drescher notes, "we've been in the trenches of IT and understand the challenges those professionals face. Our goals are to reduce friction by educating various organisational stakeholders, and move digital initiatives forward to help empower our clients' businesses."

A point of pride for Savills is its hiring strategy that seeks out-of-the-box problem solvers with diverse backgrounds and varied expertise. "We look



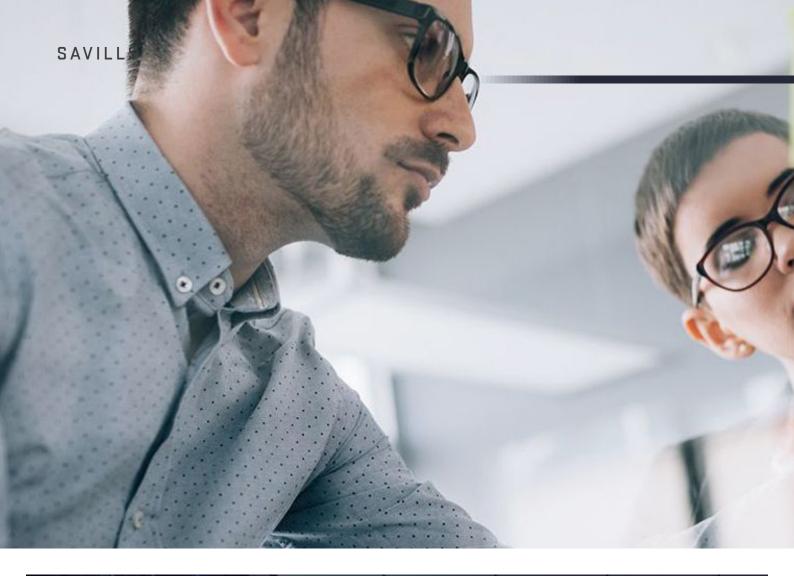
at what a project is likely to need from a skillset perspective. While many of the engagements brought to the company have common elements, each client has access to our full team to provide the best possible advisement for their specific situation," Drescher says. This can mean anything from bringing on an additional IT specialist to analyse challenging network connectivity needs in a particular geography, to consulting with an engineer to review technical drawings and ensure the client is being delivered what they are expecting. "The real value of having a multidisciplinary team is being able to meet our customer where their need is," Zilla says. The team is analytical, with a consulting-focused planning process. It provides advisory, strategic and transactional services, as well as real estate and financial planning from the beginning of any project. This allows clients to know from the start what their requirements are and what decisions lie ahead. "We are continuously keeping updated on the latest developments in the data center industry, and, just as importantly, on what technology trends are shaping infrastructure moving forward," Drescher says. "We're a nimble firm that gets creative with client solutions."

With how quickly technology solutions change, it is difficult for users to discern between options. "The speed at which new technologies are being released is a constant challenge," Drescher says. "People are apprehensive about making decisions on something that they could change their mind on in 12 months' time. There is a lot of analysis paralysis around which choices are correct but rarely is the best decision to do nothing." This is where Savills comes in, as a trusted advisor. A proven track record of experience in the field, as well as its exposure to the marketplace, allows the firm to be a knowledgeable partner in a constantly changing industry with an overwhelming amount of options for end users. As a firm that believes in providing clients an objective view of their best options, Savills Critical Facilities Services values partners with the same priorities. "We've been

EXECUTIVE PROFILE

Ian Zilla

Zilla joined Studley (now Savills) in 2005 as a member of the Corporate Services Group (CSG). His background in computer science, technology and finance complements his team's quantitative strategic planning approach and financial consulting services, and contributes to clients' mission-critical facilities and complex headquarters transactions. Zilla's experience with critical power acquisition, as well as his expertise with scenario modeling and financial analysis, has positioned him as one of the practice leaders of the Savills Critical Facilities Group (CFG), working on the largest and most complex transactions and gained national experience implementing portfolio-wide strategies focused on data center and headquarters transactions.



HYBRID & HYPERSCALE BUILT ON INTELLIGENT INFRASTRUCTURE

QTS is a leading provider of hybrid colocation and hyperscale data center solutions, throughout North America and Europe. We are partner-focused, with an innovative, real-time Service Delivery Platform, and industry-leading customer satisfaction.

LEARN MORE

in 🕨 f 🎔 🖾





fortunate enough to partner with firms that have the same user-first belief system we do," Zilla says.

"Ultimately, it comes down to ensuring the customer feels comfortable with their final decision. Clients often face a lack of transparency from service providers. Different service providers don't always provide services, such as colocation, in the same way," Drescher explains. "We understand the provider landscape and the areas where they excel. We are able to engage the right potential partners for our clients.

EXECUTIVE PROFILE

Rick Drescher

Drescher is recognised for unparalleled technical expertise and creative solutions at the intersection of real estate and technology analytics. His over 20 years' IT experience in the financial services, technology and global telecommunications industries and extensive knowledge of enterprise IT systems has been leveraged to successfully design, plan and execute the fit-out and migration of more than 30 data centers and trading floors, totaling more than one million square feet. As a founding partner of the firm's Critical Facilities Group, Drescher provides strategic planning and advisory services pertaining to data centers, interconnection, cloud infrastructures and other technology-intensive real estate transactions. "During a recent facility expansion project, the Savills team combined a diligent analytical approach – backed by significant market research – with a strong dose of tenacity. Working with them has been a pleasure, and the results create significant new opportunities for our business going into 2020"

Zac Smith. CEO, Packet





It takes a solid understanding of each client's technical, financial and operational goals to dig into the details of what's being offered from various proposals. It's about making sure our client is entering into a partnership with a service provider that meets their current and future needs most closely."

This wide base of knowledge allows Savills to build client trust. IT knowledge is increasingly important; real estate and IT are now interwoven thanks to phone systems, cloud computing and network services. An often-overlooked element of cloud migration, for instance, is the effect it will have on network connectivity. By providing a strategic planning process that does a full technical and operational assessment, the company mitigates these challenges. Zilla notes: "It creates trust and a partnership. Decisions are made by the entire organisation, which helps solve problems as they come up through objective, data driven analysis. The need for deep IT and financial knowledge is a must." Client trust is important as many transactions between Critical Facilities and clients are long term, lasting 12-24 months. "There is nothing

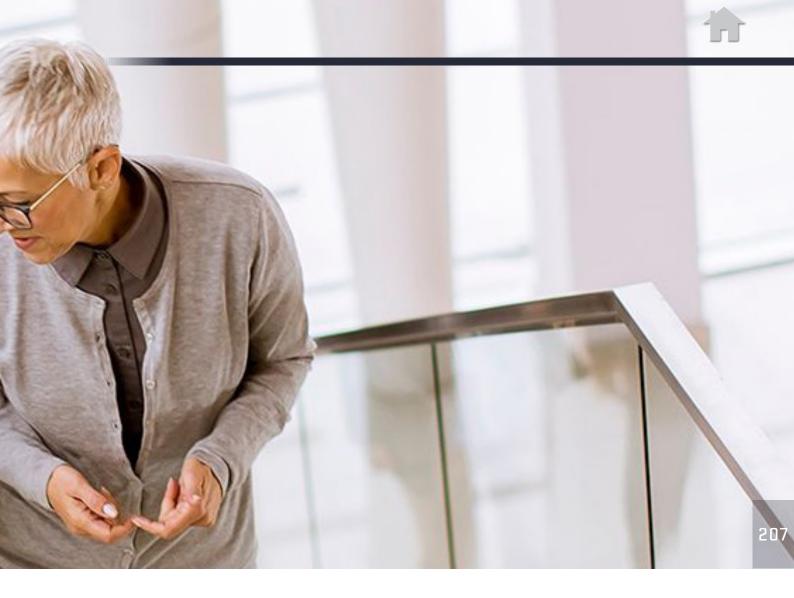


"The real value of having a multidiscipline team is being able to meet our customer where their need is"

lan Zilla,

Executive Managing Director, Technical Services, Savills more important than building a trusting relationship," he adds.

Savills' involvement in the Asian and European data center markets has been expanding rapidly, a trend that will continue based on demand from the cloud technology industry, as well as expanding end user needs. As a result, sustainability is increasingly becoming a priority for tech companies, with users driving the change by demanding greener alternatives. "The good news," Drescher says, "is that the industry is addressing it. Energy



efficiency continues to improve across several key areas. Utility providers are providing more access to renewables, equipment manufacturers continue to develop more efficient MEP systems for data centers, and most importantly, service providers and end users are incorporating these advancements into their designs.

"We've talked about open-source software," Drescher continues, "but now there's open-source infrastructure. People are contributing for the greater good of the industry, trying to lessen the impact on the planet as data center growth continues." According to Zilla, there is also an economic incentive to go green. "People feel more of a responsibility to the planet, and tech innovators and markets are responding to that feeling with services that align with client's corporate sustainability initiatives."



www.businesschief.com

GOLDEN HIPPO DRIVING TOWARDS A WORLD-CLASS SUPPLY CHAIN

WRITTEN BY MATT HIGH PRODUCED BY DENITRA PRICE

208

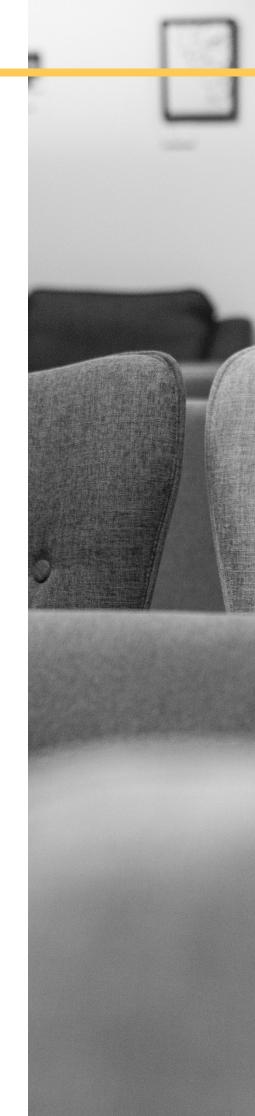


ħ

FAREEN MEHRZAI, THE ARCHITECT BEHIND GOLDEN HIPPO'S SUPPLY CHAIN TRANSFORMATION, TELLS US HER STORY

he most exciting thing about a career in supply chain is that you're never done. You're always striving to optimise, to improve, to gain an advantage and understand the opportunities that are out there in order to get better and continue learning," says Fareen Mehrzai, Director of Supply Chain at Golden Hippo. For the past year Mehrzai, a highly experienced supply chain and operations director with a proven track record for leading integrated operations programmes for globally recognised brands, has been doing all those things at Golden Hippo.

The business is one of the United States' leading direct response marketing organisations, building and marketing category-leading brands and unique, best-in-class products direct to consumers in three areas: supplements, beauty, and pet food. Each of these is driven by Golden Hippo's overarching vision of helping as many people as possible, capitalising on its unique organisational culture to provide the highest quality of service, and focusing on sustainable health and wellness.







A GLOBAL LEADER IN FREEZE-DRIED PET FOOD & TREATS

REQUEST A QUOTE

WHO WE ARE

Canature Processing Ltd. is a global leader in freeze-dried pet food and treats which allows us to create a wide variety of freeze-dried products to meet the demands of the global pet food industry. We conduct everything in house from product development to commercial production at our stateof-the-art facilities located in Langley, British Columbia, Canada.

We manufacture extraordinary products ranging from a variety of treats and AAFCO formulated diets to unique functional products geared towards particular needs - all available in a variety of custom shapes and sizes.

With our designated in-house R&D facility, Canature has the unique capability to undertake collaborative projects in the development of next-generation treats and foods allowing clients to be first-to market with a variety of leading-edge freeze-dried products.

The benefits of freeze-drying is that it removes almost all the water giving the product a long stable shelf life and is light weight, making transporta-

www.canature.ca info@canature.ca 604.856.3886 tion easy without altering the flavor, aroma, shape or bio-availability of the vital nutrients, resulting in a safe nutritious product.

All Canature products are produced and packaged in strict CFIA, GMP, HAC-CP, SQF, USDA, FDA and GACC audited facilities, ensuring the very highest GFSI quality standards and providing the highest quality freeze-dried pet food and treats.



"THE MOST EXCITING THING ABOUT A CAREER IN SUPPLY CHAIN IS THAT YOU'RE NEVER DONE"

Fareen Mehrzai, Director of Supply Chain, Golden Hippo



Since 2018, Golden Hippo has been on a significant supply chain transformation journey built around three key elements of people, service and cost, and driven to achieve a supremely strong and well-performing operational engine. Mehrzai, who joined the business in August 2018, has led this transformation, building, mentoring and leading a team that both embodies the company's culture and is resilient and agile enough to manage the change process. "The last year has been really exciting," she states. "You never fully understand what you're getting into when you take on a new role, but the opportunity to join Golden Hippo at this point in its evolution was an intriguing one. We're on a strong growth trajectory, and there is an energy and synergy rooted within the company's culture unlike any other. In many roles, you either join a business to maintain or to create – here we get to maintain the foundations we have and build for the future at the same time."

Expanding on those foundations, there is a culture of openness, collaboration and innovation that underpins every aspect of its operations and has



CLICK TO WATCH: 'GOLDEN HIPPO COMPANY VIDEO'

ensured an enviable level of strength in depth. "We have experts in every field," she affirms. "Whether that's brand ideation and creation, product development, copywriting, media buying, video production and editing, right through to reputation management and SEO, distribution and fulfilment."

The company's founders and senior management team embody the culture that has made this possible. For example, Mehrzai describes an environment that fosters ideas and a creative approach to operations, and which thrives on values such as test everything and fail fast, allowing the best idea to win regardless of its origin, being responsible for and learning from mistakes, and mentoring and educating others.

"When I was building my team, I realised relatively quickly that I could find the best technically sound and proficient individuals in whichever role I was hiring for," Mehrzai comments. "But, if they don't embody and embrace those aspects of our culture that make us so strong, then it will be really difficult for

An experience so seamless, you will feel like we're part of your company.

We are a Full-Service NSF certified cGMP Contract Manufacturer of Dietary Supplements, powders, tablets, capsules, chewables, and co-packing. Lief Labs offers the highest quality production of products following GMP standards at an affordable cost.

Lief's supply chain management is value driven, providing its customers with products that are consistent and of the highest quality. The company sources more than 100 ingredients internationally and warehouses them in the US to ensure an uninterrupted flow of product that improves lead times and provides its customers with a price advantage.





Innovative & Full-Service Manufacturer

At Lief, our passion is to collaborate with entrepreneurial firms and help our clients build premium lasting & innovative brands. You are not our customer but our partner. Lief offers a complete turn-key solution to all your manufacturing needs to better streamline your operation. With the highest quality certifications, talented product development & flavoring team, and fast turn around times, Lief will be an integral part of the success of your brand for years to come.

MANUFACTURING CAPABILITIES

Quality Control

Lief is cGMP certified and FDA registered facility. We are compliant with 21 CFR Part 111 guidelines and ensure our products are of the highest quality when they leave our facility. At Lief, we take tremendous pride in the "Quality" of our products, and always demand the very best from our team members and vendors to ensure that our standards are met.

OUR QUALITY STANDARDS

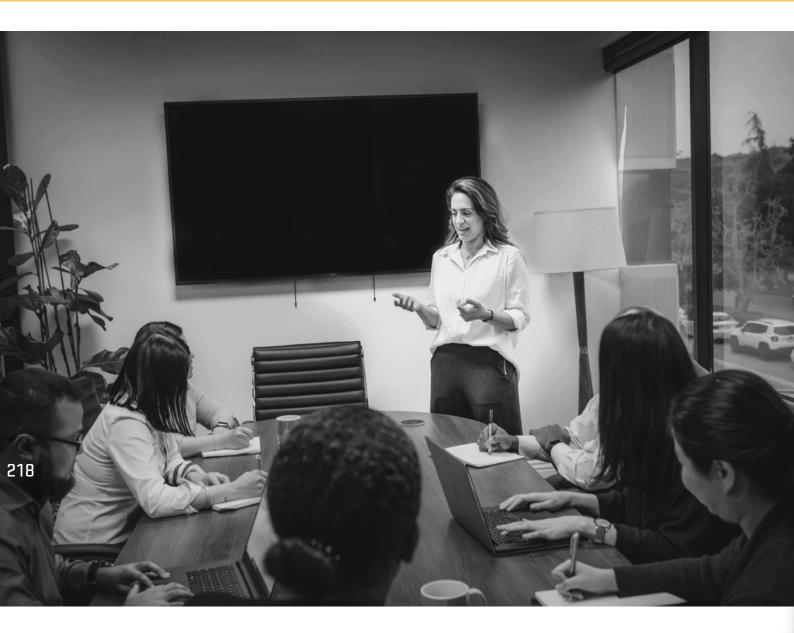






It is our mission to spread health awareness. If you're interested in a cGMP and NSF certified manufacturer, let us know how we could be of service and create a seamless partnership between you and Lief.

CONTACT US



them to thrive here. We've built a team of strong supply chain professionals who are agile and flexible, and who consistently go above and beyond to service our internal and external customers. I attribute that in part to great recruiting, a strong onboarding programme and a culture that strives to be employee-centric."

A lot has changed for Mehrzai in the 12 months since. Principally, her role

has been the driving of Golden Hippo's supply chain transformation in order to take it "from transactional to worldclass" – a task she likens to changing the wheels on a car while it continues on its journey. "We didn't have the luxury of stepping back, observing for three months and developing a plan of attack, it was all hands on deck from the very start," she explains. Initially, Mehrzai set out the key elements of

EXECUTIVE PROFILE

Fareen Mehrzai

Fareen Mehrzai is Supply Chain leader who develops and executes integrated operations programs to expand her organisations' footprint while optimising all aspects of commercial operations. Mehrzai is a strong people leader with a proven track record of mentoring and developing top tier talent. In order to ensure cost reduction, she fosters an environment supportive of continuous network optimisation, maximizing vendor and co-manufacturing relationships and financial terms for mutual benefit, driving inefficiencies out of internal and external processes and challenging norms for step function cost improvements. A staunch proponent of continuous improvement, as a matter of routine Mehrzai instills a 'Zero Waste' mindset in individuals and teams around her.

> Examples of how she has optimised costs, streamlined process flows, and led large-scale initiatives include: Strategic planning: led the re-design and re-launch of a marketing procurement operational master plan, enabling 150%+ of savings targets.

Process improvement: spearheaded the development of a framework to adopt business improvement tools and methodologies by leveraging extensive Six Sigma knowledge, leading to savings of \$60M.

Global team engagement: enhanced efficiency, transparency, and resources while leading a diverse team of directors, managers, associates, and direct and indirect reports including finance, and sales.

THERE'S ONE KEY INGREDIENT THAT SUCCESSFUL BRANDS HAVE IN COMMON

THEIR LABORATORY

AMR Laboratories is a health and beauty contract manufacturer. We provide services from idea to production and everything in between. Our expert R&D team creates formulas using the latest innovations in active ingredients for the best results.

FORMULATIONS: Anti-Aging • Hair Care • Men's Care Treatment Products • CBD Products • Eye Treatment Bath Products • Baby Products • Face & Body Care Cosmetics • Organic/Vegan/Gluten-Free Products



7922 Haskell Avenue Van Nuys, CA 91406 T. 818-787-4008 AMRLabs.com



driving towards a world-class supply chain: people, service and cost. These factors led to the forming of defined teams within the supply chain group based around planning, procurement, analytics and more.

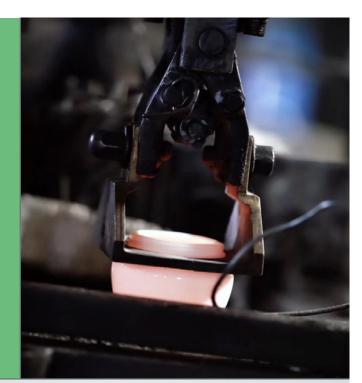
"Supply chain, in any organisation, is not a revenue driving function, it's a support function," she states. "Every day, the goal for my team and I is to provide more value to the business and always question how we are servicing every brand, team and individual." Golden Hippo's ownership of its brands provides a unique supply chain challenge, in that Mehrzai and her team's customers are all present in the same working environment. A significant part of the transformation, she notes, has been around changing the supply chain team's role in these relationships from one that was defensive or reactive to being proactive and forward looking. "The approach that we take with all our vendors or partners is 'their success is our success'," says Mehrzai. "As a result, many of the key milestones

Focus on packaging

The packaging company specialized in developing, manufacturing and delivering standard & customized primary packaging for beauty and health.

Learn More

🖂 in





in our transformation journey so far have been centered around fostering stronger partnerships, particularly for our supplier partnerships, and setting out a framework and roadmap for progressing from a transactional relationship to being more agile and forward-looking."

Mehrzai is a highly experienced enabler of change, with a proven record of strategic planning, process management and team management at companies including Nestle, where, over her tenure she held various leadership roles in supply chain, procurement and process improvement. Despite that experience, Mehrzai concedes that embarking on Golden Hippo's transformation journey has provided a new challenge. "What it takes to be successful in a 150-year old organisation is very different to the way in which you apply yourself in a younger business," she explains. "You have to be more flexible in how you approach problems, but not necessarily with regards to what you're trying to achieve. When people join our team, for example, I tell them that I absolutely don't want them

"THERE'S A REALLY STRONG STRUCTURE IN PLACE, AND AN ENERGY AND SYNERGY ROOTED WITHIN THE COMPANY'S CULTURE UNLIKE ANY OTHER"

Fareen Mehrzai, Director of Supply Chain, Golden Hippo

to go with the flow, I want them to create their own waves."

Reflecting on this aspect, Mehrzai credits her varied career experience with providing several skills that are transferable to Golden Hippo's working environment. In particular, she points to two pivotal moments: having the opportunity to build a strong process improvement mindset during her early career, and spending the next years in "one of the best supply chains in the world" at Nestle, which she describes as a great training ground. On the former, Mehrzai says that having the opportunity to earn Six Sigma Black

A Passion For Health & Wellness

and to

Delivering What's Next

In nutraceuticals and functional foods, today's Vitaquest creates and produces more than 4,000 custom formulas for more than 500 brands in 40 countries. With over 40 years of history, Vitaquest has the market insight, global reach and scale of operations to support emerging and existing consumer brands from the idea to the store shelf – with flawless execution in every phase.



vitaquest.com

"WHEN PEOPLE JOIN OUR TEAM, FOR EXAMPLE, I TELL THEM THAT I ABSOLUTELY DON'T WANT THEM TO GO WITH THE FLOW, I WANT THEM TO CREATE THEIR OWN WAVES"

Fareen Mehrzai, Director of Supply Chain, Golden Hippo

Belt certification early in her career "forever changed how I think about and approach any problems I face. It's a particularly important mindset to adopt if you work in a supply chainrelated role".

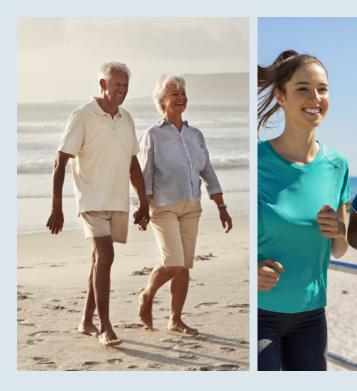
Leadership is an important skill to Mehrzai. As a strong people leader with a record of mentoring and developing top tier talent, she enjoys sharing those skills learned over her career with others at Golden Hippo. When it comes to team building, she is a proponent of continuous improvement and a 'zero waste' mindset, and always looks to foster an environment that is both supportive and collaborative. "I'm lucky that this kind of culture already existed at Golden Hippo when I joined," she explains. "Our crossfunctional collaboration, for example, has been one of the key aspects of our success. There's little bureaucracy and the timely sharing of knowledge and expertise is really important to how we operate."

GLOBAL IDEATION & PRODUCT DEVELOPMENT PARTNERS

Gemini Pharmaceuticals is a leading US-based contract manufacturer of dietary supplements pairing science backed nutrition and marketing support for leading brands. Gemini's reputation for innovation and quality excellence is unsurpassed making Gemini the go-to manufacturing partner for the health and nutrition industry.

- Science Backed Nutrition & Formula Design
- Unique Ingredients Supporting Intriguing Romance Copy
- Thoughtful Formulation to Engage Customers
- Non-GMO & Organic Manufacturing Capabilities
- Clean Label Experts
- Turnkey Manufacturing Solutions
- Connecting Science & People For a Healthier Lifestyle

LEARN MORE V O f







On a more personal level, Mehrzai enjoys the opportunity to educate and mentor new or younger members of Golden Hippo's team. Outside of her role, she is a proud faculty member of the California State University Northridge, Systems and Operations Management Department, where she teaches future operations leaders. She admits her passion for educating comes as a result of how much she enjoys her work, explaining that "the opportunity to translate even a fraction of that energy and passion to tomorrow's supply chain leaders is so exciting to me. The best leaders I've worked for in my career were not only great at producing results, but also teaching and nurturing as they progressed; we're all capable of so much if we have people around who support and educate us."

Mehrzai seeks to encourage and build relationships in an organic fashion. "Really, it should be about having people in your life that you can learn from, go to lunch with or reach out to when you have any issues. We have



QUALITY FIRST

Ion Labs is a Custom Contract Manufacturing facility that is vertically integrated and located in Largo, FL with core competencies in Capsules, Tablets, Powders, Liquids, Liquid Capsules, Capsule-In-Capsules, Gummies as well as Skin Care.

0)

LEARN MORE

🖂 in f



www.ionlabs.com



an amazing mentorship programme at Golden Hippo that I encourage everyone to be a part of. Whether part of a formal mentorship programme or not, sharing, encouraging and building advocates around you that can ignite your passion are so important, whatever level or role you operate in."

With that sentiment in mind, Mehrzai highlights how Golden Hippo's supply chain has been driven by every individual in the organisation. Top-down leadership is naturally a key facet of any change management process, she states, but empowerment across each level of the business has been key to implementing new practices. "Every idea might not always be possible," she adds, "but for an employee to really feel free to voice their opinion is part of what makes this organisation unique".

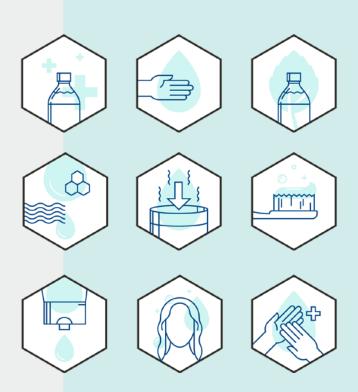
This sentiment is carried over in Mehrzai's advocacy of Golden Hippo's 'operational engine', as she explains.

GOLDEN HIPPO



Comprehensive and customizable product development

We develop and manufacture everything from skin, hair, and dental care products to nutritional supplements and OTC products. Founded in 1998, our continued goals are to provide high-quality products with outstanding service.





wasatchlabs.com



"Often you look at businesses like ours from the outside and you see the obvious success factors, which are undoubtedly impressive. What's not always seen is the work of those behind the scenes, which in many ways is the fundamental basis on which all other successes are built." Golden Hippo's operational engine, she says, is built for B2C operation. "When you already have an engine that is built with the inherent flexibility and responsiveness that ours has, you have a significant competitive advantage when exploring new

"EVERY DAY, THE GOAL FOR MY TEAM AND I IS TO PROVIDE MORE VALUE TO THE BUSINESS AND ALWAYS QUESTION HOW WE ARE SERVICING EVERY BRAND, TEAM AND INDIVIDUAL"

Fareen Mehrzai, Director of Supply Chain, Golden Hippo



Reliance Litho & Label is your printing and packaging solution. Family owned and operated, our mission is to produce exceptional products and build lasting client relationships. We achieve this by delivering excellent quality and customer service, on time, at very competitive prices. From concept to completion, Reliance Litho is your one stop solution for all of your printing and packaging needs.

CLICK TO CONTACT US

805-577-6275 scott@reliancelitho.com

- Folding Unit Cartons
- Flexo Labels
 - Digital Labels
- Product Insert Cards
- Stand Up Pouch Bags
- Zipper & Poly Bags
- Custom Shipping Boxes
- Foil & Embossing
- Spot Gloss UV
- Attention To Detail





Conu





"FOR AN EMPLOYEE TO REALLY FEEL LIKE THEIR VOICE IS HEARD IS PART OF WHAT MAKES THIS ORGANISATION FEEL TRULY SPECIAL"

> **Fareen Mehrzai**, Director of Supply Chain, Golden Hippo

opportunities. In terms of our evolution, it will play a significant contribution to our growth in 2020 and beyond."

On future growth, Mehrzai is a firm believer that a supply chain has no beginning or end and, instead, continues to be an evolutionary process. There is, she confirms, still some distance to go in Golden Hippo's transformational supply chain journey, particularly in terms of improving processes, digitising more of its supply chain and continuing to nurture its key supplier partner relationships. "We're well on the path to becoming a worldclass supply chain organisation, but we've many milestones ahead. Some examples include looking to continue building our process for scale, further developing and nurturing key supplier relationships and supporting the organisations objectives by enabling cost competitiveness. There are always opportunities to improve, to learn and to work more effectively. That's what makes the job so rewarding."





CANEFARNS THE VALUE OF EXPERIENCE

WRITTEN BY SHANNON LEWIS PRODUCED BY DENITRA PRICE

FEBRUARY 2020

236



GLENN SMITH, DIRECTOR OF FEED INGREDIENT PROCUREMENT AT WAYNE FARMS, DISCUSSES HOW LONG-STANDING EXPERIENCE CAN BE A VALUABLE TOOL IN ENSURING THE SUCCESS OF YEAR-TO-YEAR SUPPLY CHAIN TRANSFORMATION

n 1965, Continental Grain, a family company run to this day by the Fribourg family in New York, acquired a majority share of Allied Mills, breaking off a division dedicated exclusively to poultry that officially became Wayne Farms. Subsequently, Wayne Farms grew into the powerhouse it is today – the sixth largest fully integrated poultry company in the United States with seven feeds mills, seven processing plants, and US\$2.2bn in sales. With a vision of being the partner of choice for customers, colleagues, and farmers alike, its mission statement centres around executing the behaviours that lead to meaningful success, including integrity, teamwork and leadership.

Glenn Smith is the Director of Feed Ingredient Procurement. His role oversees purchasing all feed ingredients for the feed mills across the country, from corn, soy, and distillers' grains, to bone meal, bakery meal, fats and micro-ingredients like amino acids, enzymes and antibiotics. He joined









\$2.2bn Sales in US dollars

9,000 Number of employees

www.businesschief.com



TRUSTED GRAIN SUPPLIER

At Gavilon, we are honored to work with companies like Wayne Farms to provide procurement and logistical solutions to the feed mill industry. Wayne Farms prides itself on being known for quality and innovation from the farm to the kitchen and we are proud to be their top supplier of feed grains.

About Gavilon:

Gavilon has more than 100 grain locations across the U.S., as well as numerous international origins and destinations strategically located on major railroads, rivers, and ports. This vast network makes Gavilon a strong and reliable partner, allowing us to efficiently move product to the right destination, at the right time, and at the right price. Gavilon has built strategic relationships with producers and consumers of grain, oilseeds, and feed ingredients. We have the resources and infrastructure to provide competitive values across these agribusiness supply chains.

Behind every transaction is a team of experienced professionals you can count on, ensuring flawless execution at every turn.

Visit **www.gavilon.com** to learn more about how we can benefit your operations, or call us at **402-889-4000**.





CLICK TO WATCH: 'WAYNE FARMS INTERNSHIP PROGRAM'

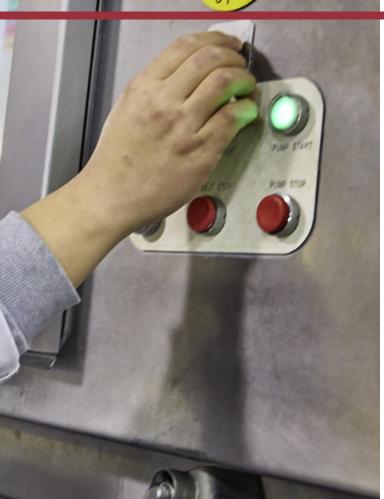
Wayne Farms in 2011, bringing with him profound industry experience. Not only has Smith been in the feed and grain industry since 1992, his father, grandfather, and great-grandfather before him were grain brokers. This deep well of experience is important in the industry, as Smith's role requires constant vigilance. "Working with live animals means there can't be a break in the supply chain," says Smith. "If the ingredients don't show up, you can't feed the animals and then they suffer. We never want that to happen, or even come close." Smith's experience has also allowed him to establish deep-rooted connections across every level of the industry. Wayne Farms was initially a client of his, buying the corn that he sold. Whether seller or buyer, good relationships are key. "It's a two-way street," explains Smith. "You have to form partnerships and really work as a team in order to both survive." Within the company, relationship building focuses on establishing close employee ties. Not being a public company gives Wayne Farms greater control over its internal operations. "Even with 9,000

WAYNE FARMS



employees," Smith says, "it still feels like a family atmosphere." Externally, strong partnerships rooted in trust are important to ensure a steady, highquality supply chain. Omaha-based the Gavilon Group is Wayne Farms' top corn supplier, in terms of both volume and service. On the soybean meal side, Wayne Farms can turn to its longstanding relationships with Cargill and Riceland Foods Inc. "These companies are the best at what they do as far as customer service and taking care of Wayne Farms," affirms Smith. "It's about working closely together every day."

Understanding different levels of the industry allows Wayne Farms to be flexible towards change. Since Smith joined, the company went from running nine to seven feed mills, an adaptation to new demands by longterm railway partner CSX corporation. Wayne Farms had three feed mills on the CSX line when the railway company announced it would be upgrading from 65-car trains to 90-car trains and offered more streamlined service and improved rates for the latter. Wayne Farms was proactive in combining the three feed mills into one that not only



"THE DIGITAL AGE HAS ABSOLUTELY MADE WHAT WE DO SO MUCH EASIER"

Glenn Smith, Director of Feed Ingredient Procurement, Wayne Farms

EXECUTIVE PROFILE

Glenn B. Smith

Glenn B. Smith is a fourth generation feed and grain executive with 27 years of experience in the industry. Glenn has been the Director of Feed Ingredient Procurement since 2011 for Wayne Farms LLC, Oakwood, GA, purchasing and coordinating delivery for all bulk feed ingredients via barge, rail, truck, tote and bag delivery for 7 feed mills as well as overseeing risk management reporting and strategy for the 6th largest fully integrated poultry company in the United States. Glenn resides with his family in Cleveland, GA. He holds a BA in European History from Washington and Lee University.

inesschief.c



Powered to Perform

CSX is redefining rail freight

CSX is creating new opportunities to partner with customers like Wayne Farms to grow their business – bringing more on-time delivery, first-class customer service and a seamless shipping experience across our far-reaching network.

With industry leading safety, reliability and efficiency, CSX is powered to deliver comprehensive supply chain solutions that keep customer shipments on track, on time and on target.





COMPANY FACTS

• Wayne Farms grew to the powerhouse it is today: the sixth largest fully integrated poultry company in the United States with seven feeds mills, seven processing plants, and US\$2.2bn in sales

• They have reduced demurrage costs by over 60% since 2012. In 2012, it was \$1.6mn; last year, it was just over \$600,000

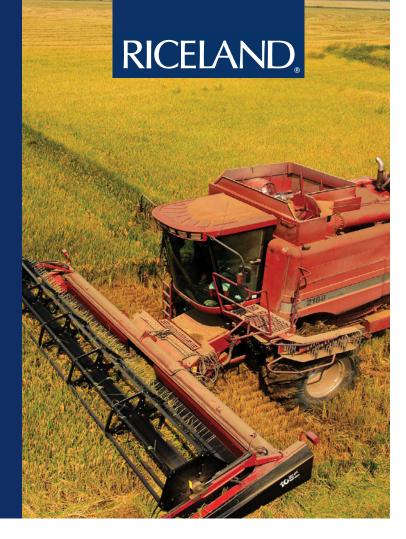
produced more than the three combined but became the largest poultry feed mill in America. A mutually beneficial decision, it is symptomatic of how experience can be valuable in understanding the future. "The year after, CSX completely pulled its 65-car train program from the rotation," explains Smith. "Other companies were left stranded, but we had already made the investment to upgrade, looking ahead at sustainability." Supply chain within the poultry industry provides a unique challenge: both cyclical and evolving. Crop prices, railway deals, weather conditions, barge costs; these can vary year-toyear. This means the ability to monitor and foresee changes is key in staying on top of the supply chain. There are maintenance costs in the industry that are unavoidable. For these, such as demurrage on barges and trains, Smith says it is about reduction not

GROWN FROM THE GRAINUP BY FAMILIES, FOR FAMILIES

Supporting local farmers and their families through carefully grown, quality grain.



Visit Riceland.com to find products at a store near you.



"WE'VE BEEN ABLE TO REDUCE DEMURRAGE OEMURRAGE OVER 60% SINCE 2012"

Glenn Smith, Director of Feed Ingredient Procurement, Wayne Farms



avoidance. "It's just the cost of doing business," he says. "Monitoring and closer surveillance can help. We've been able to reduce demurrage costs by over 60% since 2012. Back then, the figure was \$1.6mn; last year, it was just over \$600,000." One way Wayne Farms keeps costs down is by recycling everything, an industry standard. The meat is sent to be processed as food, but any indelible by-products are repurposed into meal that is sold into animal feed distribution channels. "We have a saying in the poultry business: everything is used but the cluck," says Smith. "Profitability is hard. Everything is useful. Nothing goes to waste." The internet presented a major shift in the industry in terms of monitoring capability. Back in the 1990s, much of Smith's role was monitoring train shipments, making phone calls to find out exactly where his shipment was. Now, railways have apps that let him track exactly where every element of his supply chain is anytime in the day. "The digital age



"THEY SAY YOU NEED THREE THINGS IF YOU'RE GOING TO BE A GOOD SALESMAN: A QUALITY PRODUCT, GREAT SERVICE, AND THE BEST PRICE"

Glenn Smith, Director of Feed Ingredient Procurement, Wayne Farms

has absolutely made what we do so much easier," he adds. "It's a much more streamlined role. This allows you to spend time on other more productive areas."

Despite how the industry has evolved, its fundaments remain unchanged. "They say you need three things if you're going to be a good salesman: a quality product, great service, and the best price," explains Smith. It is not enough to be the cheapest on the market, according to Smith. Long-term relationships mean communication and





the assurance for a steady high quality supply, worth a bump in price. Stability, after all, is the root of success within the poultry business. Wayne Farms processes 7mn birds a week, feeding around 80mn chickens on any given day. "It's not just cost," says Smith. "It's making sure the quality products are getting there as you need them." Continuity of service is a point of pride at Wayne Farms, particularly at its feed mill in Guntersville, Alabama, which has managed to go two years without any feed ingredient substitutions. On the whole, the industry has grown 1.5-2% over the past few years. Throughout, Wayne Farms, not being a major retail seller, has kept close ties to its customer base: restaurants and processing companies. "I think in five years' time, we'll maintain our commitment to quality and grow as the customer asks of us," concludes Smith. "The future is bright."



www.businesschief.com



TRANSFORMING MANUFACTURING STRATEGIES

WRITTEN BY WILLIAM SMITH PRODUCED BY DENITRA PRICE

250



MIKE HEGEDUS, VICE PRESIDENT OF SUPPLY CHAIN MANAGEMENT AND PROCUREMENT OF TRINITY INDUSTRIES, REVEALS THE ORGANISATION'S EVOLVING APPROACH TO MANUFACTURING RAILCARS

rinity Industries' operations extend across a broad range of railcar related services, as Mike Hegedus explains: "Trinity is a full service railcar provider. We provide leasing services, new car building and maintenance services. We're an integrated provider and it gives us a lot of flexibility in what we offer to our customers. Increasingly we're focusing on differentiating our products and our services in the marketplace."

As Vice President Supply Chain Management, Hegedus' role encompasses several key functions. "My role is leading the supply chain, which includes procurement, supplier quality, supply planning and logistics." Hegedus' attention is currently directed towards an ongoing evolution in the business. "We've traditionally been fairly vertically integrated, making a lot of sub-assemblies and parts, but that is changing. We are becoming more innovation-focused, doing more final assembly and moving more and more each year to outsourcing sub-assemblies."







1933 Year founded

\$2.51bn Revenue in US dollars

> **11,515** Number of employees

"TECHNOLOGY HAS BEEN KEY IN IMPROVING VISIBILITY, SYNCHRONISATION AND COLLABORATIVE PLANNING WITH SUPPLIERS"

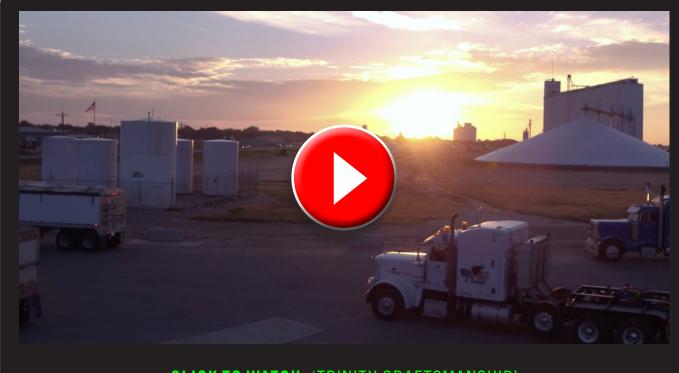
Mike Hegedus,

Vice President Supply Chain Management and Procurement, Trinity Industries



Much of that evolution has been in strategy. As with many manufacturers, offshoring is increasingly becoming a crucial part of the mix. "We segment our supply chain and certain parts make sense for offshoring such as commodity parts. We really leverage, for example, the low cost of steel and castings and forgings in China." The attendant process of nearshoring is also increasingly a focus. "The larger the parts and sub-assemblies need to be, the more efficient it is to use nearshore suppliers. We've migrated our production from the U.S. to Mexico and we continue to manufacture more in Mexico every year. We're not just nearshoring to take advantage of low cost labor and manufacturing, it's really about localising to get them near to our manufacturing plants.

"In fact, we've gone a step further, where we're now moving into a phase where we are co-locating suppliers on our facilities for even larger subassemblies – things that might not be effectively shipped on a truck. Making railcars, some of these subassemblies can be very large, so it makes sense for us."



CLICK TO WATCH: 'TRINITY CRAFTSMANSHIP'

With a finished item as complex as a railcar, individual components demand differing approaches and treatments. "Standard parts go on many dozens of different types of railcar," says Hegedus. "Every railcar has, for example, eight wheels, four axles, brakes – basically the under part of the car is fairly consistent. That is a supply chain where we can and do set up vendor managed inventory (VMI) programs so those parts flow in." Specialty parts, those specific to different car types, prove trickier. "A hopper car, for instance, will have hatches to load on the top and then gates to discharge in the bottom, totally different to a rail car that carries automobiles, which has its own specialty items. All those are very car specific and those I can't put on VMI. I just have to really monitor the lead times. Our overall supply chain lead times are defined by those specialty items." Outside of these considerations are raw materials such as steel, and the aforementioned outsourced sub-assemblies, which he describes as "probably the fastest growing segment of our sourcing supply chain."

"WE'VE TRADITIONALLY BEEN FAIRLY VERTICALLY INTEGRATED, MAKING A LOT OF SUB-ASSEMBLIES AND PARTS, BUT THAT IS CHANGING"

Mike Hegedus,

Vice President Supply Chain Management and Procurement, Trinity Industries



TRINITY INDUSTRIES



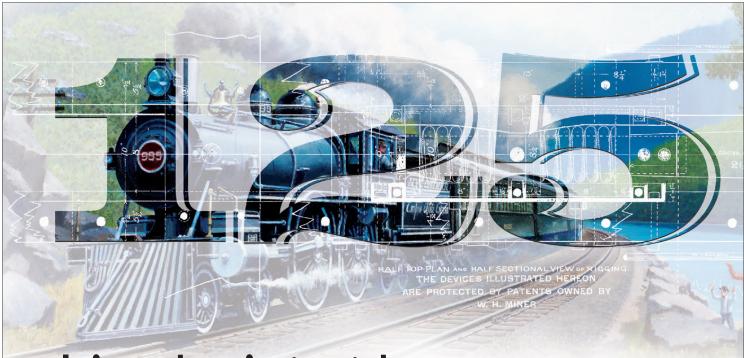
Enabling the increasing complexity of an outsourced and co-located supply chain has required the assistance of technology, as Hegedus explains. "We've put in RapidResponse from Kinaxis. There's a module within that which helps us to collaborate more closely with suppliers. That technology has also enabled all of our VMI processes. A significant part of our supply chain is on VMI, but we're still going down that path. Technology has been key in improving visibility, synchronisation and collaborative planning with suppliers." Partners vital to the ongoing transformation include the likes of Expeditors International. "They've been influential in helping us with our first foray into global logistics," says Hegedus. "Offshore Asian Business Consultants has been our partner in setting up virtual sourcing offices. I'm a believer that when you offshore sourcing you still need someone local on the ground to proactively manage the quality." The first supplier to be co-located on site was Amsted Industries. "They're providing truck assembly, the wheels,



EXECUTIVE PROFILE

Mike Hegedus

Mike has been Vice President of Supply Chain Management and Procurement at Trinity Industries since 2013. Mike helps organisations transform their supply chains to meet strategic priorities. He connects the end to end supply chain from suppliers and procurement through logistics. Mike started his 25 plus year career at IBM. Prior to Trinity, Mike was the supply chain and procurement executive at the Chamberlain Group and general manager of Sears' home delivery and repair parts business. He holds a Ph.D. in industrial Engineering from Northwestern University where is major was optimisation.



It's what's inside that keeps us at the forefront



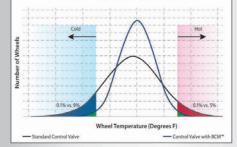
Celebrating 125 years of leadership in railcar components. Learn more at: **minerent.com**



DB-60 II[™] with Brake Cylinder Maintaining™



Wheel Temperature Variation



The DB-60 II with BCM™ preserves up to 85% of the braking force lost to brake cylinder leakage.

DB-60 II with Brake Cylinder Maintaining[™] (BCM) continually monitors, detects and compensates for brake cylinder leaks delivering real benefits to operators and railcar owners.

- Lower operating costs By increasing the accuracy of wayside detection systems, BCM enables your operation to run cars longer between service. You'll also save fuel thanks to reduced power braking, see longer wheel life and reduce brake shoe replacements.
- More control The DB-60 II with BCM preserves braking force lost to ordinary brake cylinder leaks on long downhill grades and in frigid temperatures when leakage increases.

Contact Vince Moore at 315.786.5271 to put the DB-60 II with BCM to work for your operation.



748 Starbuck Avenue, Watertown, New York 13601 315.786.5200 | www.**nyab**.com axles, side frames, completely assembled to our lines right on site. They've paved the way." Another key to Trinity's enduring success can be found in its close collaborative relationship with key railcar component suppliers such as Miner Enterprises, Inc. Founded in 1894, Miner is renowned for its product development expertise, as well as its highly responsive global supply chain.

"For Trinity and Miner, this relationship is a personal commitment on every level," explains Ric Biehl, Miner's president and general manager. "Both

"INCREASINGLY WE'RE FOCUSING ON DIFFERENTIATING OUR PRODUCTS AND OUR SERVICES IN THE MARKETPLACE"

Mike Hegedus,

Vice President Supply Chain Management and Procurement, Trinity Industries



TRINITY INDUSTRIES

21

262



companies share an innovation-driven mindset that's focused on perfecting railcar performance. And as one of the few privately owned, global suppliers of railcar components – from draft gears and outlet gates to hatch covers, side bearings, running boards, brake beams and more – Miner is able to be flexible, agile, and responsive to the changing market and customer needs. We work hand-in-glove with Trinity to make it easy for customers to do business."

The future will see Trinity continue on its journey, while also exploring new avenues. "We'll continue outsourcing sub-assemblies so that we can focus on final assembly and convert our resources to focus on other parts of the value chain such as product innovation," says Hegedus. "At the same time, our lease fleet and maintenance network has grown which has seen our aftermarket parts business become more important than ever. We're embarking on creating an integrated supply chain across all those different parts of the business. That's going to be fundamental."



CHANGING THE GAME FOR ENERGY AND RESOURCES

WRITTEN BY DAN BRIGHTMORE PRODUCED BY RICHARD DEANE

264

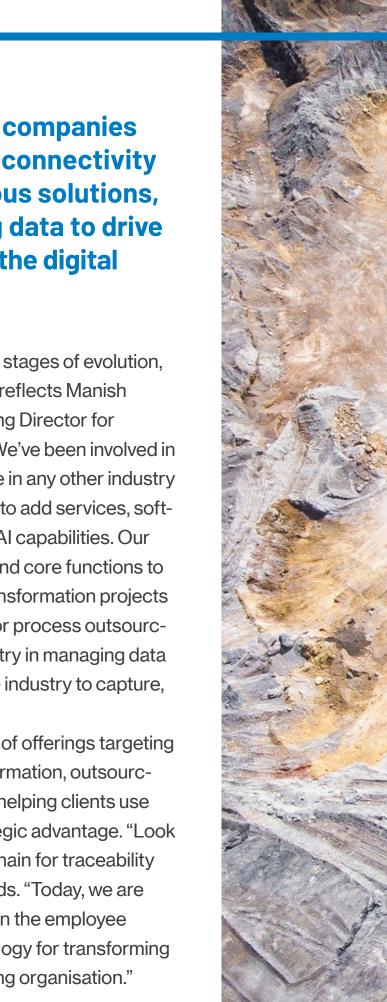
FEBRUARY 2020



IBM is helping mining companies solve problems from connectivity through to autonomous solutions, as well as harnessing data to drive the industry towards the digital mines of the future

echnology, in its various stages of evolution, is our business at IBM," reflects Manish Chawla, Global Managing Director for Energy & Natural Resources. "We've been involved in mining for decades, and just like in any other industry we've re-invented our offerings to add services, software, data handling, cloud and AI capabilities. Our focus has progressed from IT and core functions to meet the needs of business transformation projects such as SAP implementations or process outsourcing, to support the mining industry in managing data as a strategic asset; helping the industry to capture, monetise and secure it."

IBM's portfolio features a set of offerings targeting enterprise & operations transformation, outsourcing, SAP implementations, and helping clients use their data to their specific strategic advantage. "Look at technologies such as blockchain for traceability in the supply chain," Chawla adds. "Today, we are a full-service partner focused on the employee experience, while using technology for transforming various functions across a mining organisation."





Chawla notes a recognition from the mining industry that technology can now solve specific problems from connectivity through to autonomous solutions. "Now we're able to harness the data, the C-suite can see the importance of digitisation and how it will drive the business in the future," he says. "A technology-savvy and enabled mining enterprise is critical for attracting and supporting the workforce of the future. How do you get people out of the unsafe conditions of underground mines in remote areas and

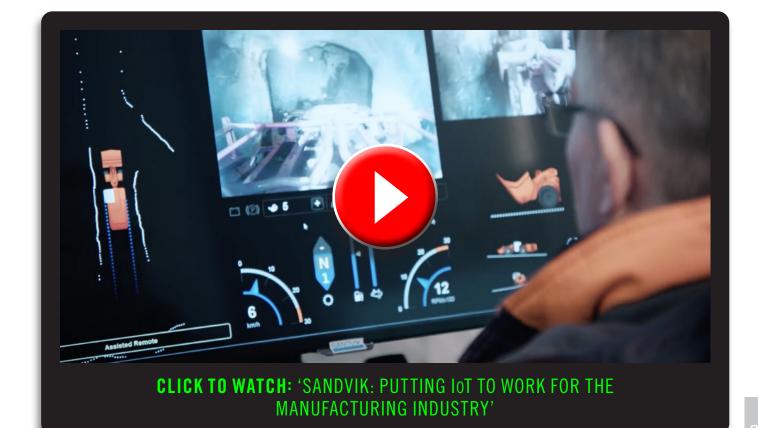
"A technologysavvy and enabled mining enterprise is critical for attracting and supporting the workforce of the future"

Manish Chawla Global Managing Director for Energy & Natural Resources, IBM make the industry attractive to a new generation? Technology holds the key."

A recent study by the World Economic Forum forecast that over the next decade the mining industry will create further value of \$190bn from additional transformational measures. "When these strategies are executed in a more integrated fashion, inside-out and outside-in transformation, we believe businesses will be at a great advantage from humans and machines working together," explains Maxelino Nelson, Senior Executive for

CIENC

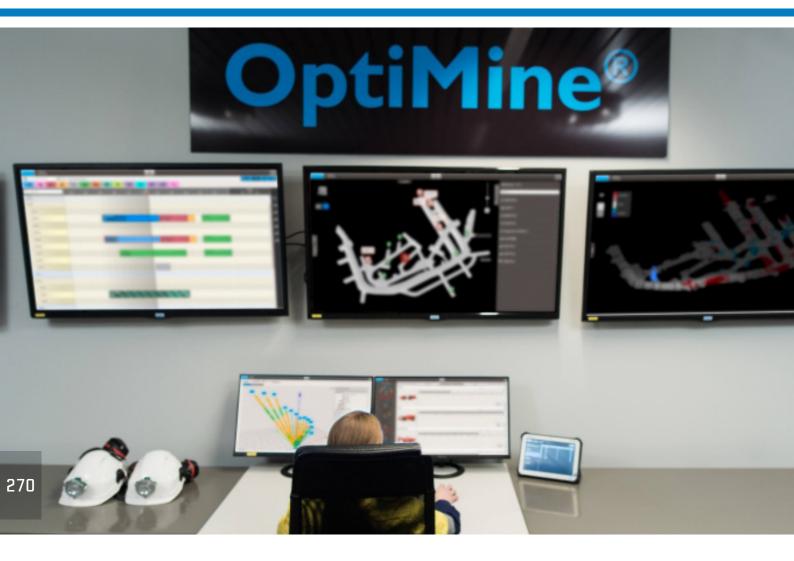
268





Industry Innovation, Global Solutions, & Business Strategy at IBM. "This will outperform humans or machines working on their own. It's a great opportunity for us and our mining clients to solve some of the societal challenges relating to sustainability while developing the mining sector's ecosystem to partner with IBM to truly transform the business in a more holistic way."

Nelson notes that over the past 5-10 years the digital transformation journeys IBM's clients have taken have been characterised by AI and



experimentation with customer-facing apps; activities that have been driving the cloud during chapter one of a digital reinvention.

What will chapter two hold? "We believe industrial businesses are ready to move towards business reinvention: scaling digital and AI and embedding it in the business. It's about hybrid cloud, moving mission critical applications from experimentation to true end-toend transformation. The key to winning is centred around what we at IBM call the 'Cognitive Enterprise'." With the initial trends of the first chapter maturing, Nelson maintains we're on the cusp of the next big shift in the business architecture. It will be driven by the pervasive application of AI and cognitive technologies, combined with data, to the core processes and workflows across mining organisations alongside important functional areas such as finance, procurement, talent and supply chain. The results of this revolutionary change will be defined as the Cognitive Enterprise. "Companies that get this journey right are on the way to being a Cognitive Enterprise," affirms Nelson. "In our experience, critical areas for natural resources industries to get right on this journey are openness and collaboration, integration, intelligent workflows and cultural skills. In a time of continued volatility and disruption, open innovation and co-creation are vital to be able to partner across ecosystems and learn from other industries to achieve fundamental transformation as 90% of the jobs in mining are changed, not necessarily replaced, through technology." How is IBM helping companies embrace Mining 4.0 and support the move towards the digital mine of the future? "We've developed a data-driven productivity platform with Sandvik, a leading supplier of underground mining equipment. This partnership has seen us connect their assets, their equipment, to our cloud to be able to pull data off. The value proposition to a mining company is not only to get data from the Sandvik equipment, but also from other vendor feeds," explains Chawla. "Interoperability as well as the open data standard is critical for

EXECUTIVE PROFILE

Manish Chawla

An ecosystem thinker, Chawla is an experienced Global Manager with a demonstrated history of leading and scaling technology-driven businesses in the energy & resources, industrial and construction, sectors. His passion is helping companies leverage exponential technologies (AI, IoT, Blockchain, Industry 4.0, AR/VR, 5G etc) to fundamentally re-imagine their enterprises in the platform economy to survive (and thrive) in the face of the three climate changes - environment, globalisation and technology



Change is hard. The truth is that many mining companies are still very hesitant about furthering their digital mining transformations in fear of cost of implementation, risk and uncertainty.

However, digital solutions from AVEVA can help mining companies reduce complexity and optimize business and operational performance.



@avevagroup

in linkedin.com/company/aveva



For more information, read our free E-Book on Digital Mining Transformation.

a mine operator. They get visibility to production information, help with equipment, maintenance analytics and improved uptime."

Built on IBM technologies, Sandvik offers a platform for underground mine optimisation, both for production and data/maintenance related aspects. "We're also the primary data analytics platform and AI software services partner for Vale for where they have an AI centre of competence," Chawla reveals. "We're doing an extensive set of use cases with them, including route optimisation for trucks, testing safety use cases and optimisation of smelters." IBM is also working with Newmont Goldcorp to help them better understand their ore body, allowing them to reduce the time spent by geologists in analysis |and data collection to determine where to guide the next drilling campaign. "We've reduced inaccuracy by 95% with the geology data platform that we call 'cognitive ore body discovery'," says Chawla.

IBM is committed to supporting the sustainability efforts of mining operations across the globe. "By using

EXECUTIVE PROFILE

Maxelino Nelson

"As a global industrial leader for mining I'm part of IBM's leadership committee that oversees the strategy and development of worldwide mining industry practice and other natural resources industries." An entrepreneurial business leader with two decades' multinational experience, including the Americas, Europe, Middle East, Africa, China, India, Russia, and Australia, Nelson is a leader in the global industry for manufacturing and resources and leverages industry ecosystem partnerships to help clients take solutions from idea to reality. intelligent workflows on the blockchain to address social sustainability in the context of the entire supply chain, miners can demonstrate social responsibility and also begin to build a culture of innovation," believes Chawla. "The work we are doing on the Responsible Sourcing Blockchain Network (RSBN) with RCS Global allows businesses to track cobalt from industrial and mining companies to ensure that they are working responsibly, whether it's in the Congo or other parts of the world, across the supply chain from mine to smelter to battery manufacturers and to automotive OEMs."

IBM are seeing many automotive OEMs joining the platform along with key industrial scale miners operating cobalt mines in Congo who wish to augment their use of OECD (Organisation for Economic Co-operation and Development) responsible supply chain guidelines. The company is looking to extend the network to other metals such as tin, tantalum, and gold, which are all important to the new economy emerging for minerals associated with electronics and EVs.





Chawla notes the demand, driven by the rise of EVs and electronic brands, for an active, working and open democratic network to ascertain responsible sourcing and support artisanal miners to be able to operate safely in a fairtrade manner.

IBM is also working with Minehub – a mining and metals trading platform – helping it streamline operations with various business partners across the mining ecosystem. "The MineHub platform is not a market-maker; it allows buyers and sellers to agree on trade. It comes to play once the trade has been set and the terms have been agreed," explains Chawla. "This helps to improve the operational efficiencies, logistics and financing, while concentrating the supply chain from the mine to the buyer."

MineHub has been working in collaboration with IBM and other industry participants across a value chain that includes the likes of ING Bank, leading precious metals firm Ocean Partners and Capstone Mining. Minehub also features clearing houses, refiners, smelters, financiers and other providers like Kimura joining along with 276

FACTS

IBM on mining trends

"Sustainability has become a crucially important vector," asserts Manish Chawla, Global Managing Director for Energy & Natural Resources at IBM. "This is allied to a bigger focus on mixing the recovery of the minerals and metals that will support the technology of the mines of the future. Meanwhile, operating them in a remote and autonomous manner will force mining companies to develop network connectivity with the ability to manage assets and equipment to move the needle, leveraging AI and data analytics in a much more profound and highly integrated way." Chawla adds that similar efforts must be made to support the culture change required to drive the benefits of innovation.

IBM are keen for mining companies to learn from the construction sector and implement digital twins. "It allows you to investigate how a mine asset is performing and functioning at any given moment," explains Chawla. "Monitoring via a digital twin reflects not only the way the mine was designed with autonomous equipment but also how it's being operated. Technology starts to guide action, and can intervene so that safe and reliable operations can continue. The expectation is that data and connectivity become ever-present and omnipresent, guiding autonomous agents to perform functions rather than humans."

Maxelino Nelson, Senior Executive for Industry Innovation, Global Solutions, & Business Strategy at IBM, sees an increased urgency from mining companies to establish an integrated road map as an important step in bringing strategy operations and IT together. "They use a road map to understand business drivers with technology requirements, all incorporated, so the entire enterprise will be moving forward in an integrated manner. It's more common now to see business and IT coming together in collaboration, trying to determine which projects can deliver the most value and can easily be scaled from the pilot site."

IBM – Cognitive Mining Solutions

Geological Intelligence

Improve Orebody discovery and geological activities to ultimately recover more ore, deliver accurate ore budgets and support rapid mine planning to optimise drill, block and blast activities for consistent fragmentation and recovery.

Supply Chain Intelligence

Mine-to-Port supply chain delivery and rapid mine planning improved plant operations can better connect the demands of the market to your supply Optimise supply chain and resupply operations by predicting and consolidating requirements across multiple locations and driving down facility operation and sustainment costs.

Production Intelligence

To improve production via managed and optimised mobile fleet operations; optimise control processes; predict and avoid process interruptions, slowdowns, stopwpages and under or overruns; and accelerate operator issue-resolution to sustain higher uptime levels of normal operations.

Equipment Intelligence

Improve maintenance planning, efficiency, and effectiveness to reduce time, effort, and cost of both scheduled and unscheduled work (e.g. implement to advanced predictive condition-based maintenance models).

HSSE & Worker Safety Intelligence

Analyse historical incident data, workforce data (qualifications, experience, performance, etc), environmental data, and work conditions to identify changes in risk profile or potential issues before they become incidents.

Optimise emergency response to mitigate risk, enhance outcomes, and accelerate return to normal operations

Enterprise Intelligence

Risk mitigation and resource allocation in capital projects, aimed at minimising impacts to production plan commitments.

Push greater efficiencies in legal and procurement functions and sure compliance to core polices, commercial practices, and legal & regulatory obligations. royalty holders and streamers such as Lincoln. A tier one miner is also set to trial the platform. Chawla notes they are all benefiting from the efficiencies of the platform, all providing key pieces of information to these transactions.

When it comes to digital innovation across the mining panorama, Chawla says it's still a challenge to ensure all parties are aligned so that everyone benefits. "It's important to get centreled IT and overall C-suite leadership both working towards the improvement of operating assets," he says. "With much of the work we do, we also think hard about the experience of

"We believe industrial businesses are ready to move towards business reinvention: scaling digital and Al and embedding it in the business"

Maxelino Nelson

Senior Executive for Industry Innovation, Global Solutions & Business Strategy, IBM



frontline employees and incorporate this into the design of the solutions to ease adoption. We've taken this approach with Sandvik where we've done design sessions at the mine site with shift supervisors, truck drivers and mine managers."

A key obstacle to overcome in order to successfully integrate digital innovation is access from a network perspective and being able to capture the data. "Many companies are upgrading their networks and 5G is



exploding," notes Chawla. Allied to this he believes measured interoperability is vital. "Mining companies operate differing fleets from a range of vendors with equipment right across the value chain. Each vendor is pitching their own solutions. Do they go with one of the vendors? Or do they go with developing their own platform? And then, will the vendors open up and share the data that the mine operators and ourselves can leverage in partnership? This complex ecosystem becomes a

challenge. If it's approached in collaboration with interoperability in mind, then you can accelerate. But that is a continued two steps forward, three steps back kind of situation."

IBM is pushing forward in 2020 to meet its goals around driving innovative solutions for the energy and natural resources industries. "We want to infuse more data and AI capabilities into their operations to take them live," pledges Chawla. "We will be continuing our work on three specific new platforms

1911 Year founded





280

FEBRUARY 2020

onthe

wer with the state of the



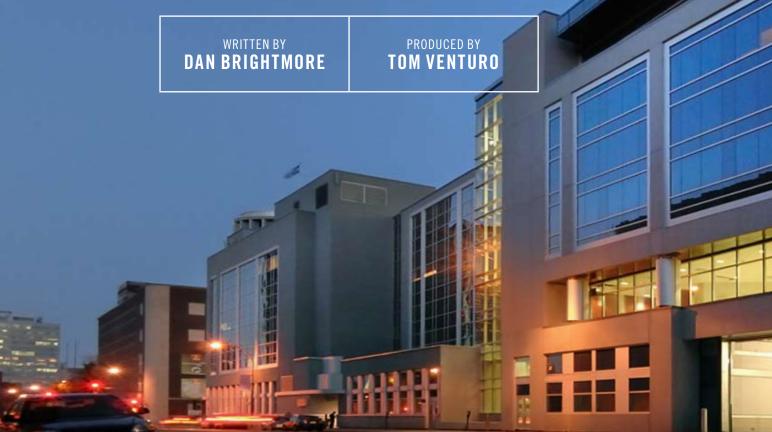
to further enhance the idea of ecosystems coming together to drive tangible outcomes for our clients in all the vectors of mining." Chawla's team also plan to nurture and scale IBM's cybersecurity offering to secure operating technology and systems. "As more plants, more mines, and more equipment get connected, the cyber threat increases, so we're pleased with the tremendous progress we're already making to secure operations as they grow."

Nelson confirms IBM is currently working with a large oil and gas supermajor for potential partnership to co-create a digital mining services integrated platform. "This platform is tendered around developing a different model for how mining companies consume digital solutions and services, and how mining providers and solutions developers can make them available to the industry. It is a game changer and it shows how upbeat and interesting the mining industry has become to wider industries."





Leveraging the power of innovation, Pomerleau frees up its people to provide added value to its clients



282



Canadian construction leader Pomerleau is leading the industry through a period of profound change and delivering unparalleled results for its clients coast-to-coast

hy try to earn a spot in a field that already exists? It's much better to be on the cutting edge and create the field." More than half a century since he established the construction business that bears its name in St-Georges de Beauce, Quebec, Hervé Pomerleau's mantra has proved successful. With a coast-to-coast presence across Canada, Pomerleau offers a host of construction services encompassing infrastructure, design-build, lean and modular approaches, public private partnerships and more.

"We have strong partnerships across the country enabling us to be a one-stop shop for our clients and assist those who want to be more involved on an open book basis," explains Eric Gaulin, Pomerleau's Executive Vice President, Canadian Building Operations (CBO). "The sooner we're involved, the greater value we can bring. We can engage partners from across our network to achieve a common goal from planning, to design and construction"





"Why try to earn a spot in a field that already exists? It's much better to be on the cutting edge and create the field"

Hervé Pomerleau, Founder, Pomerleau Inc

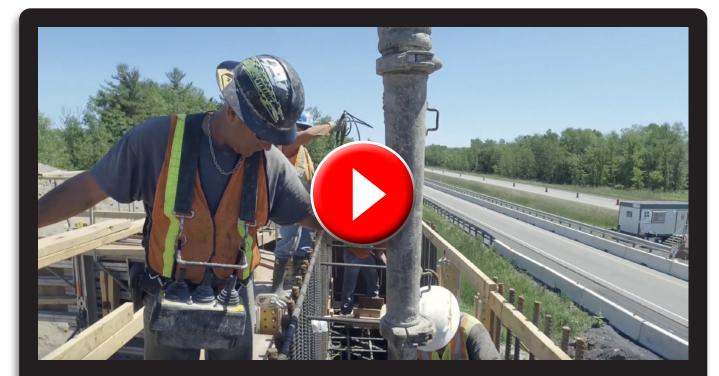
Gaulin believes Pomerleau's entrepreneurial spirit, combined with the inclusive culture of a family-owned business, has created a solid platform to innovate and achieve success. "We want our people to learn from their mistakes while ensuring they are taking the initiative to become better people and employees," he says. Pomerleau is taking the initiative to support them through its Foundation for Operational Excellence (FOX); created to keep the company agile, while future-proofing its business model. FOX helps create and maintain synergies, to standardise



practices and push boundaries. And most importantly, it is employee driven and taps into the creativity of every member of the Pomerleau family. "FOX allows us to share initiatives across the company from a central point and is the vehicle that guides our own transformation and helps us in turn transform the construction industry," confirms Gaulin.



287



CLICK TO WATCH: 'POMERLEAU IN 2 MINUTES'

Gaulin highlights the successful launch of cloud-based platform Procore across the country, as an example of how FOX has enabled Pomerleau to adapt to ultimately provide more value for its clients. "Due to ongoing labour shortages, it's becoming more important. FOX is supporting champions for this in each of our offices to draw on best practices from around the world and enhance our day to day operations. It helps us deliver better and faster."

'The Pomerleau Way' delivers best practice through collaboration, says

Gaulin. "Our job is not just to create the concrete and physical foundations, to pour concrete, build roads or put together steel structures. It's to help build communities; we are building the future."

In order to build the future, Pomerleau relies on two things: the excellence of its people and innovation. That commitment was recognised for the second consecutive year in 2019 with a CanBIM Innovation Spotlight Awards for Pomerleau's work on the Willow Square Continuing Care Centre



INTERIOR System Specialist



COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL SECTOR

Specializing in the design and installation of high performance interior systems, Humaco Acoustique obtains a Canada wide reputation. We successfully maintain quality and compliance of soundproofing, construction and finishing work on sophisticated interior design projects.

Whatever your needs and the uses of the building, our team is able to offer you innovative, high-quality and realistic solutions with your resources and deadlines.

(in) (f) (0)





十

in Fort McMurray. "We strive to implement digital technology processes and methodology in our day to day operations from project conception to delivery and beyond," assures Gaulin who is keen to see innovation become the norm on job sites. "Leveraging technology helps us to reduce costs, avoid delays onsite and, more importantly, frees up our people to do what they do best: give expert advice that's a value add for our clients." At Pomerleau. technology is not an end onto itself, but rather a means to empower the team to provide advice and create added value for the clients.

Lieu Dao, Innovation Manager, R&D and Special Projects at Pomerleau,

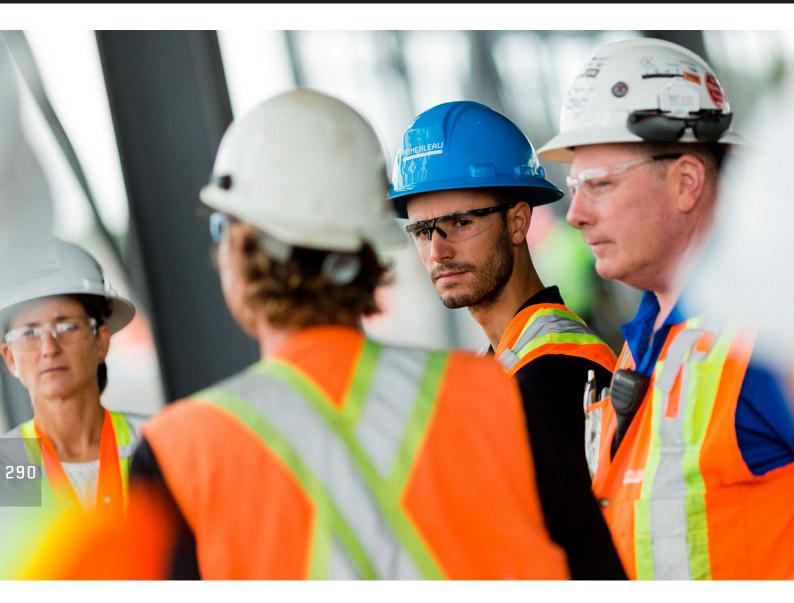
and the Innovation Team is helping leverage the potential of technologies like BIM across the company's construction, maintenance and management services. "The BIM process is being used throughout a project's lifecycle, from planning, design, and preconstruction to operation & maintenance, retrofits, expansion and even at times, deconstruction," she explains. "BIM has also allowed Pomerleau to produce a Digital Twin - a virtual version of a -job site. Using BIM helps us accelerate the integration of other technologies such as virtual and augmented reality. Integrating technology on our sites allows us to monitor progress for a higher productivity, to optimise

"Integrating technology on our sites allows us to monitor progress for a higher productivity, to optimise scheduling, to get accurate data useful for operations and maintenance and more"

Lieu Dao,

Innovation Manager, R&D and Special Projects, Pomerleau Inc

POMERLEAU INC



scheduling, to get accurate data useful for operations and maintenance and more. Ultimately, using technology helps us deliver higher quality and better value for our clients."

Gaulin's CBO team is one of three operations teams at Pomerleau which also include Quebec Building Operations (QBO) and Civil Infrastructure. CBO is making a significant contribution to the ongoing success of the business and is forecasted to deliver 28% of Pomerleau's revenue in 2020. "Our goal within the next three years is to deliver a third of that revenue through CBO," adds Gaulin. "We are seeing a lot of momentum in our Halifax, Ottawa, Toronto, and Calgary offices and are extremely proud of getting a first CBO project in British-Columbia in 2019 with the South Burnaby Arena."

十

291

CBO's expansion, alongside the work of Pomerleau's other divisions, contributes to its overall success. "In two years in Atlantic Canada we transformed our business from being 100% lump sum contractors to now being 80% design build projects," explains Gaulin. "In 2018 we also won our first P3 (public-private partnership) project outside of Quebec in Newfoundland for the Gander and Grand Falls long-term care facility; a big win for us. In Ottawa, we delivered the Science & Technology Museum with their new storage building, which altogether was a \$200mn project." Set to double Pomerleau's revenue in Toronto via forthcoming high-rise and key projects, CBO is also making headways

EXECUTIVE PROFILE

Eric Gaulin

Eric Gaulin has spent almost two decades working at Pomerleau in a variety of roles from Project Manager in Quebec to his current post as Executive Vice President, Canadian Building Operations (CBO). "I used to want to be involved in every decision. Now, because of the size of my portfolio, I've learned to delegate," he explains. Gaulin works closely with Pomerleau's regional vice-presidents and regional -directors leading CBO's offices, as well as with the leadership team from Pomerleau's other divisions. "Now I see my role as a support one, providing guidance and giving my teams autonomy to make sure they use an entrepreneurial mindset when making decisions. I offer support when they need it, while ensuring the communication across our group is open and constant," he adds. It's a vision of management that has evolved throughout Gaulin's career: "I want us to resolve issues together and learn from each situation. At the end of the day, my goal is to make sure that the members of my leadership team are ready to take my position, and that the people under them Iĥ are also ready and have the opportunity to step up."



INFINITE POTENTIAL

Janick Electric Ltd provides complete in-house electrical engineering, electrical construction and continued service in the commercial, industrial, process and residential/retirement industries.

Learn More

416-635-8989 electricalservice@janickelectric.com





Because we believe that the well-being of users lies in a sucessful project development

Feel-Good Structural Solutions

with

LAINCO

STRUCTURAL DESIGN
 ENGINEERING
 DETAILING
 FABRICATION
 INSTALLATION

OUR EXPERTISE

Specialised in Complex Building Design & Build Integrated Design Fast-track Project

www.lainco.ca

estimation@lainco.ca

(450) 965-6010

1966 Year founded

3,500 Number of employees

150 active job-sites coast-to-coast

in Ottawa, as well as in Western and Atlantic Canada. In fact, Gaulin's team won its first building project in British Colombia in 2019, the East Burnaby Arena ice sports complex.

Gaulin recognises the need for Pomerleau to stay focused on executing projects like these in 2020 while increasing the company's use of technology and innovative solutions to build better. "We are furthering the BIM process, coordination and progress analysis with artificial intelligence on building & civil project and for facility management. It will allow us to automate time-consuming tasks and optimise time and resource allocation," confirms Dao, who is keen for Pomerleau to keep pushing the envelope and lead by example as the Canadian construction industry undergoes an important digitalisation process. "Using coordinated 3D models is the key for efficient prefabrication planning and off-site construction. Using robots, autonomous drones and scans to monitor site progress and guality assurance."

Gaulin notes a significant trend: that the projects Pomerleau is taking on are getting larger and more complex, with operational responsibility being transferred to the company from its clients. "It can make a project even more challenging when we're trying to deliver in the fastest way possible," he says. "The labour shortage adds another layer of complexity and is really forcing us to innovate the way we approach construction. In summary, all our projects are mainly like a prototype; there are no two buildings that are the same and we don't





LAMARCHE

Established in 2013, Lamarche Electric Inc is a reputable electrical contractor serving the greater Ottawa area, as well as Gatineau. Lamarche Electric Inc is a true full service electrical contractor.

Learn More



lamarcheelectric.ca ECRA/ESA Lic 7002052



"Our job is not just to create the concrete and physical foundations, to pour concrete, build roads or put together steel structures. It's to help build communities; we are shaping the future"

Eric Gaulin,

Executive Vice President, Canadian Building Operations, Pomerleau Inc

want our clients to waste time and money by making mistakes on these prototypes. That's why we need innovation. We have tools that allow us to build virtually to help us anticipate problems and minimize delays. With the experience of having put the project together virtually before even stepping on site, we have already reasoned through potential challenges and have a multitude of solutions in our back pocket."

Technology also plays a key role in how the company recruits, trains and retains staff. "We are increasing

We make buildings work.

WE HANDLE MECHANICAL, ELECTRICAL, BUILDING CONTROLS, AND BUILDING SERVICES PROJECTS ON ALL SCALES, LARGE AND SMALL. WE'RE THERE TO SUPPORT YOUR INVESTMENT EVERY STEP OF THE WAY — FROM ENERGY SOLUTIONS AND DESIGN TO CONSTRUCTION AND ONGOING MAINTENANCE.



Design. Build. Service.

modernniagara.com

the support to our people by giving them the right training, mentoring and leadership," says Gaulin. "In order to leverage technology for our clients we are investing in face-to-face interaction more than anyone else in the industry, because our people have always been the key to our success. We are a people business undergoing an important internal transformation to future-proof our strategy. At the heart of Pomerleau is a spirit of entrepreneurship, which we want every employee to take part in through initiatives like FOX and PX3 so that

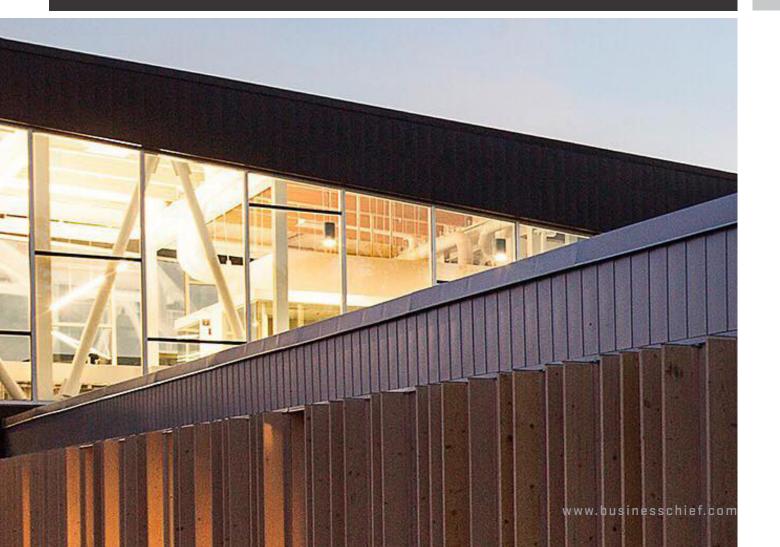


🞯 f У in

DID YOU KNOW?

SOPREMA Woodstock Plant

Pomerleau was awarded the contract for the construction of a 7,432 square metre production plant in Woodstock, Ontario. An international manufacturer, SOPREMA specializes in the production of innovative products for waterproofing, insulation, soundproofing and vegetated solutions for the roofing, building envelope and civil engineering sectors. Work was carried out between November 2017 and June 2019. Pomerleau was charged with the construction of an exterior storage area, a one-storey office building and mezzanine, and a laboratory used for quality control. Pomerleau also oversaw the installation of the production equipment. The project was rewarded with an Excellence Award in steel construction from the Canadian Institute of Steel Construction in November of 2019. These awards recognise teams (client, architect and general contractors) that collaborated to deliver unique and original steel construction projects.



POMERLEAU INC



298



Annacis Island Wastewater Treatment Plant

The Pomerleau Bessac General Partnership will oversee building a new outfall pipeline for the Annacis Island Wastewater Treatment Plant (WTP), a largely industrial island in the Fraser River, southeast of Vancouver. This outfall was desperately needed as the Annacis Island WTP could no longer service the growing population of the area. The new WTP will meet the regional growth needs for the next 100 years.

299

www.businesschief.com



CONCRETE PEOPLE. CONCRETE RESULTS.

REIMAR has built a reputation for the highest skilled tradespeople in the region. Combined with an emphasis on a family environment that encourages the growth and success of its members, the REIMAR team brings the right ideas with the abilities and resources to execute.



LEARN MORE

www.reimar.ca info@reimar.ca





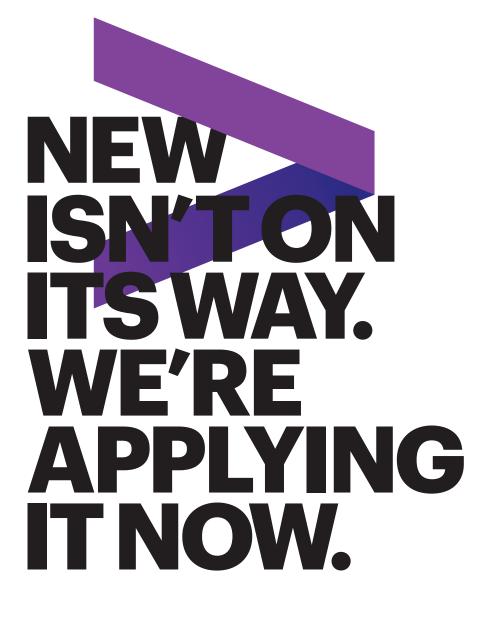
everyone in our business can bring forth an idea that will help us maintain and even surpass our high standards."

PX3, Pomerleau's new on boarding and training program, launched last August. It offers an ecosystem of initiatives to support excellence by focusing on three core principles: Pomerleau's unique corporate culture, positive leadership and exceptional strategy. It delivers personalised support for job integration and personal growth. Pomerleau's people first approach is one of the many reasons why Gaulin believes the future is bright for Pomerleau. "We are not just keeping up with the pace of change that we see in our industry, we are thinking 10-15 years ahead, leveraging innovation, and investing in our people like we've done all along for 53 years."

POMERLEAU







See how we're applying innovation and deep industry knowledge to real business challenges now at accenture.com

NEW APPLIED NOW