AUGUST 2022 biznesstransform.com

THE CHANGE TO FUTURISTIC BUSINESS

NAYEF BOU CHAAYA

Vice President Middle East and Africa AVEVA.

Control Sys

erformance

Daily Target

AVEVA

The vendor has built its digital software platforms using technologies such as cloud, digital twins, Al, IoT, analytics, big data, mixed reality.

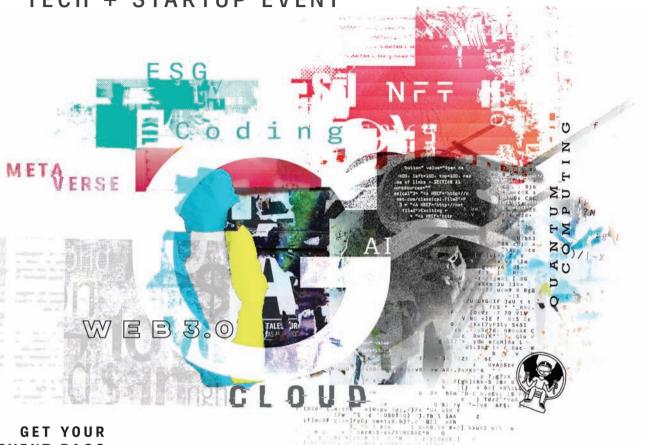






THE WORLD'S LARGEST AND MOST INFLUENTIAL TECH + STARTUP EVENT

10-14 OCT 2022 DUBAI WORLD TRADE CENTRE



EVENT PASS



Believe the hype, it's here. **ENTER THE NEXT DIGITAL UNIVERSE**

#GITEXGLOBAL gitex.com

170+ COUNTRIES

700+ STARTUPS

4000+ COMPANIES



PLATINUM & LANYARD SPONSOR

SILVER SPONSOR





















MANAGING DIRECTOR Tushar Sahoo tushar@gecmediagroup.com

EDITOR Arun Shankar arun@gecmediagroup.com

CEO Ronak Samantaray ronak@gecmediagroup.com

GLOBAL HEAD, CONTENT AND STRATEGIC ALLIANCES
Anushree Dixit anushree@gecmediagroup.com

GROUP SALES HEAD Richa S richa@gecmediagroup.com

EVENTS EXECUTIVE Gurleen Rooprai gurleen@gecmediagroup.com

Jennefer Lorraine Mendoza jennefer@gecmediagroup.com

SALES AND ADVERTISING Ronak Samantaray ronak@gecmediagroup.com Ph: + 971 555 120 490

DIGITAL TEAM
DIGITAL CONTENT LEAD
Deepika Chauhan

IT MANAGER Viiav Bakshi

PRODUCTION, CIRCULATION, SUBSCRIPTIONS info@gecmediagroup.com



UAE # 203, 2nd Floor G2 Circular Building, Dubai Production City (IMPZ) Phone: +971 4 564 8684

USA 31 Foxtail Lan, Monmouth Junction NJ 08852, Ph: + 1 732 794 5918

Printed by Al Ghurair Printing & Publishing LLC. Masafi Compound, Satwa, PO Box: 5613, Dubai, UAE

Published by Accent Infomedia MEA FZ-LLC Office No #115 First Floor , G2 Building Dubai Production City Dubai United Arab Emirates Phone: +971 4 564 8684

A publication licensed by International Media Production Zone, Dubai, UAE @Copyright 2018 Accent Infomedia. All rights reserved.

While the publishers have made every effort to ensure the accuracy of all information in this magazine, they will not be held responsible for any errors therein.



DISRUPTING INDUSTRIAL SPRAWLS

In this month's lead feature, we look at how industrial software vendors are approaching the opportunities and challenges offered by digital transformation. Cloud platforms for delivery, pay as you go licensing, open data platforms, high performance computing on demand, mixed reality experiences and simulations, that till now were not available for industrial environments are now

being increasingly integrated for industrial and production enterprises.

Operational technology, industrial control systems, SCADA, HMI platforms that were once the flagship vehicles for industrial environments are now being integrated with digital platforms through gateways and other Middleware interfaces.

Software vendors such as AVEVA have been on an overdrive to transform their solution portfolio into digital offerings that match with their IT counterparts. On the flip side, years of working with industrial decision makers who are used to extended software product life cycles, means that selling of digital technologies has been an uphill task.

However, benefits of lower capital expenses, lower total cost of ownership, faster and deeper innovation, data interoperability, real time insights, amongst others are driving the adoption of AVEVA's latest digital solutions portfolio. AVEVA is the only industrial and infrastructure software vendor to offer full portfolio coverage under subscription.

While digital transformation was the driving imperative triggered by the pandemic, the harsh reality of climate change has now brought forward the urgency of sustainability goals including emission levels 1,2,3.

Says Nayef Bou Chaaya at AVEVA, we believe that industries have a role to play in mitigating the climate crisis and we recognise our role in monitoring our impact on the environment and regulating our carbon footprint. AVEVA aims to help customers save up to 30% in energy costs and lower their emissions by up to 15%.

The importance of bringing in digital platforms into industrial technology solutions has also led to its fair share of acquisitions. For example, Schneider Electric is a majority shareholder and strategic partner for AVEVA, while AVEVA and OSIsoft merged to help industrial customers accelerate their digital transformational strategies.

In our transformation champions section, we look at how students at GEMS Metropole School are using augmented reality to better understands concepts around objects and materials. The question is, how do schools immerse students in immersive technology? The answer is simple: get students to build the technologies, according to Sophie Hunter, Digital Innovation Coach at the School.

The process, from design, to coding, to final product, demonstrates to students each stage of virtual reality and content creation. By using these skills, students can explore much more than just game development. The tools students are applying in the modern classroom are also aligned to those that educators anticipate the students will need in the workforce. Immersive technologies should not be viewed as an add on to learning, rather an essential tool that needs to be harnessed.

Turn these pages for more about business transformation in the region. As we go back to business, be open, be adoptive, be innovative.

Arun Shankar arun@gecmediagroup.com





Strategic Conference

31 October - 3 November 2022 Abu Dhabi, United Arab Emirates

Supported By















The Future of Energy: Sustainable, Affordable, Secure

Strategically taking place before COP27, ADIPEC is the global platform for leaders to reinforce commitments that will drive the industry towards reducing emissions, meeting decarbonisation goals, and providing a realistic view on short- and long-term energy outlooks.

STRATEGIC CONFERENCE THEMES:

The long-term impacts of geopolitics on the global economy and energy industry

The road to COP27 and COP28

An industry transitioning: adapting to the new fundamentals of supply, low carbon and new energy solutions

Innovation and the energy transition: pioneering a new era of technology development

The new management agenda: future workforce and the leaders of tomorrow

8 CONFERENCES AT ADIPEC:

- Strategic Conference
- Technical Conference
- Decarbonisation Conference NEW
- Offshore & Marine Conference
- Smart Manufacturing Strategic & Technical Conferences
- Forum for Diversity, Equity & Inclusion Conference
- Downstream Technical Conference





























Gold Sponsors







Decarbonisation Zone Partner













ADIPEC Brought To You By

















CONTENTS

AUGUST 2022

EDITOR'S 03 PAGE

07-09 OPINION

INNOVATION 10-13

15-17

EVENTS

BTX Road Show 2022 Asia Edition on 16 september

26-31 PARTNERSHIPS 18-20 SUSTAINABILITY 21-25 DISRUPTIVE

AND ALLIANCES

GCMF Pune rolls out plantation drive as part of sustainability initiative



TRANSFORMATION CHAMPIONS GEMS Metropole School: Preparing today's students through immersive environments	48-53 INDUSTRY COMMENTS	55-58 PEOPLE
60-61 EXECUTIVE CORNER	62-63 SOCIALLY SPEAKING	64-65 LOOKING GLASS

AUGUST 2022 biznesstransform.com

logitech

LOOK SHARP. SOUND AWESOME.



LISTEN TO THIS:



Growth of video meetings from 2019 to 20201



Information workers who use video **at least once a day**²



Rank of web and group VC solutions among enterprise digital investments³









ADVANTAGES OF RALLY BAR MINI



- Superior Performance in Small Rooms: With studio-quality audio and video and Al-driven performance, Rally Bar Mini sets new standards for video collaboration.
- Flexible Deployment Options: Run meetings in appliance mode without a computer for Microsoft Teams, Zoom, GoTo, Pexip, or RingCentral. Or, connect to a computer or laptop and use with any software.
- Simple Setup and Cable Management: Place on a table or credenza or add a wall or TV mount for a sleek space-saving set up. Integrated cable management keeps connections tight.
- Easy to monitor, manage, and support: Stay informed and ahead with Logitech Sync. Monitor status, push firmware updates, and gain insights with metrics like people

BOOSTING OPPORTUNITIES BEFORE RETAILERS GO GLOBAL

Integrated payment platforms give retailers full control of their business and make it easier to add new payment methods when needed.



SANDER MAERTENS Head of Middle East, Adyen.

lobal e-commerce sales are booming. In the UAE too, the e-commerce market is predicted to reach \$8 bn by 2025, as online retailers scale up their business and offerings following the Covid-19 pandemic. Digital payments have accelerated, with new payment technologies helping global e-commerce retailers expand to wider markets and target the right audience.

Let's look at a few strategies retailers can employ in their international expansion.

Remove barriers for purchase
Cards might be popular in the
UAE, but in some regions, local
payment methods are very
diverse. For instance, Denmark's
payment mix is dominated by
debit cards, with local scheme
Dankort, often co-branded with
Visa. Shoppers are easily put off if
their payment fails.

Retailers must therefore understand local shopping behaviours, language expectations, and payment preferences when setting up integrated payment platforms that support transactions in any part of the world.

Keep fraud in check

Most shoppers today are wary of fraud when making digital payments. Eliminate this risk by investing in a robust authentication process, while keeping the entire shopping experience seamless and enjoyable. As an e-commerce retailer, understand the risk rules of each market you operate in.

Leverage new technology

As a global e-commerce retailer, leveraging technology to increase payment performance and ease the consumer shopping experience is a must. Crossborder payments can be tedious and expensive. But intelligent payment solutions can simplify the experience.

Be agile

The retail landscape is rapidly evolving. Ecommerce is challenging brick-and-mortar stores today. To succeed as a global commerce retailer, operational and business agility is key. By consolidating operations and payments across various channels, retailers and merchants will be able to enable seamless

cross-channel experiences, whether in-store, online, or via an app.

For example, a shopper can check out with a simple click from any channel without having to re-enter payment details every time they shop.

Unified commerce

Investing in a centralised platform that connects backend systems with customerfacing channels ensures that you have all the data that you need in one place. It also means that you can deliver a wealth of cross-channel experiences, keep reconciliation simple, and capture rich shopper insights.

Research showed that 51% of businesses found their online stores were able to offset losses at physical stores during the pandemic, while 47% say a benefit of unified commerce is improved shopper experience. This aligns with previous studies, which show that shoppers spend 40% more when they shop on more than one channel.

Brands going global need to continuously improve local user operations and expand local channels. Payments are one of the most critical means to connect merchants directly to local consumers. Employing the above strategies will ensure retailers looking to expand their footprint are adequately prepared to take the plunge.

ENTREPRENEURSHIP AND TECHNOLOGY DO NOT KNOW GENDER

It would be great to see more women in technology, for every little girl to dream of getting into the technology world and actually pursue it.



SHAMIM KASSIBAWI Founder and CEO, Play:Date.

s little girls we were always told that we are princesses and queens, but never that we are astronauts or will grow up and be engineers, pilots, or tech entrepreneurs. Little girls were encouraged to do the safe thing, being an entrepreneur was never something that we were pushed towards, let alone a tech entrepreneur.

Wamda recently shared that start-ups in MENA raised over \$2B last year but just over 1% of that was invested in womenfounded start-ups. Statistics such as these are frustrating to see and hear. There are so many women who are doing amazing things and are looking for investments – yet this is still happening.

For example, a lot of people view Play:Date as a cute little business which will not grow so much, it is unfortunate, as the

family, parenting community is huge and not seeing that potential gap is simply a loss for investors. Some of the most successful brands globally have one thing in common – community. There is no power like the community coming together.

Why do you want the headache of being an entrepreneur and building a company? However, entrepreneurship and technology do not know gender, age, or race. Most creative entrepreneurs start off by telling someone an idea and are met with a mortified response such as are you crazy?

Entrepreneurs always think three or four steps ahead of everyone, their ideas are insane, and they cannot help it, they love the thrill of taking a risk – the highs and lows – everything that comes with it. Some individuals are naturally born to be an entrepreneur, some are simply not. You do not pursue entrepreneurship; you are born for it.

It would be great to see more women in technology, for every little girl to dream of getting into the technology world and actually pursue it. However, for that to happen, everyone in the ecosystem has a significant duty to ensure females are supported, that doors are open for everyone, regardless of gender, race, age.

Small changes go a long way, and that change starts with the effort of every individual. Here



Some individuals are naturally born to be an entrepreneur, some are simply not



are some of the initiatives that have been planned at Play:Date:

- 80% of employee must be women
- Internship programs for mothers getting back into the workforce as well as student internships for women
- Setting aside 2 hours a week to support other women in the ecosystem.

These are examples of what organisations can do, it does not always have to be a big MNC that initiates change. Individuals can help as well by taking out the time to advise and support women & young girls on how to navigate the tech & business world.

VC's and investment firms also have a huge responsibility, there is so much that can be done from their end to ensure women are encouraged to step into the technology world. Set aside time each week to meet different female founders and guide them. Invest time to support them.

PREPARING WORKERS FOR ARRIVAL OF AI

By assessing skillsets of employees, contributions they make and willingness to learn Al tools, team leaders can create personalised training.



DR NEAMAT EL GAYAR.

Director of the Centre of Excellence in Applied Artificial Intelligence and Data Science; Programme Director of MSc in Artificial Intelligence, Heriot-Watt University Dubai.

ccording to the World Economic Forum's The Future of Jobs Report 2020, AI is expected to replace 85 million jobs worldwide by 2025. However, the report also states that it will also create 97 million new jobs in that same timeframe.

The Bureau of Labour Statistics forecasts that several occupations will witness a growth in jobs through AI, including accountants, forensic scientists, geological technicians, technical writers, MRI operators, dietitians, financial specialists, web developers, loan officers, medical secretaries, and customer service representatives.

Since AI will impact several industries, the type of skills required may vary according to each industry. However, when thinking about skills required to manage AI, soft skills are the most underscored. Usually, the focus is on learning technical and programming skills such as Python and more. Technical requirements are undoubtedly needed for AI-connected roles; however, it is noteworthy that depending on their roles, employees will be involved to varying degrees.

When it comes to soft skills, employees can benefit from them regardless of the extent of their involvement with AI technology. According to the CEO of Skymind, an AI start-up, these skills include basic skills such as solid verbal and written communication, listening, emotional intelligence, asking questions and structuring arguments. These are indispensable skills as they cannot be performed by AI technology.

Investing in AI to automate business operations is a crucial step. However, without the right training for employees, a successful integration cannot be guaranteed. A recent study by Accenture showed that 74% of companies expect to automate their work tasks significantly over the next three years, but only 3% plan to increase their spending on training.

Since the integration of AI and its development is taking place gradually, it is important that employees are part of this and are equipped to understand and operate with AI. By assessing the current skillset of employees, the contribution they make to their team and their willingness to learn with AI tools, team leaders can use this information to create personalised training opportunities.

Automation can be a subject of concern for employees as it's usually attached to fears of being replaced. However, it's important to communicate with employees about the possible benefits of automation, which include saving time from performing tedious repetitive tasks that can impact productivity. This frees up employees' time to focus on complex and more rewarding tasks.

According to McKinsey, at least one-third of the activities that make up a specific job could be automated. Additionally, 40% of workers surveyed reporting spending at least a quarter of their week on manual, repetitive tasks. With AI collecting, storing, and analysing massive data sets in seconds, employees can utilise their time more efficiently.

As much as we are witnessing fast-paced changes in our work, disruptive effects of AI and other technologies will happen gradually. Although AI researchers are hoping they can build systems that can learn from smaller amounts of data, human labour is still essential in the foreseeable future.











ROYAL BALLROOM, THE IMPERIAL **NEW DELHI**

16th SEPTEMBER

TRANSFORMATION IN

TRANSFORMATION IN NETWORKING

TRANSFORMATION IN BUSINESS APPLICATIONS

TRANSFORMATION IN TRANSFORMATION IN

www.btxshow.com



GCMF PUNE ROLLS OUT PLANTATION DRIVE AS PART OF SUSTAINABILITY INITIATIVE

With an aim to protect the environment, The Global CIO Manufacturing Forum, GCMF completed a plantation drive at Baner Hill in Pune on 23rd July 2022. GCMF supports the environment and is encouraging the goal for humans to safely co-exist on planet Earth. The tree plantation drive is a part of GCMF's endeavour to constantly improve nature.

The Global CIO Manufacturing Forum plantation drive was joined by Pratap Pat Joshi, Executive Board Member, Global CIO Manufacturing Forum; Binita Prasad, Executive Board Member, Global CIO Manufacturing Forum with other CIOs including Shrenik Kothari, Rahul Biswas, Jagdish Lomte, Prashant Kurhade, Ajit Patil, Rajesh Tiwaskar, Nitin Patil, Pradeep Indalkar, Shashi Tripathy, Prabhakar Khairnar, Sanjay Singh Gahlod,

Ramesh Kadaganchi, Prasad Katta, and Santosh Adsul. Pratap Pat Joshi, Executive Board Member, Global

CIO Manufacturing Forum shared his experience and said, "GCMF Pune started a plantation drive at Baner Hill. CIOs participated in this drive and reached the starting point 6:30 am in the morning. A small climb to the hilltop was a trek for most of us. Plantation on a barren land with full of stones was a difficult task but gave us satisfaction. We must ensure these plants are watered with the help of NGOs who carry out these activities post the plantation for some years helping

them to become into trees."

GCMF urges the local people, communities, corporates, and government to plant as many trees as possible in their vicinity and areas.



BTX ROAD SHOW 2022 ASIA EDITION ON 16TH SEPTEMBER

The third and final leg of The BTX Roadshow and Awards will be held in New Delhi on 16th September 2022.

After two successful events BTX Saudi and BTX UAE, GEC Media Group, publishers of Business Transformation, Enterprise Channels MEA, The Titans, Cyber Sentinels and Infra Insights, announced the third and final leg of The BTX Roadshow and Transformation Awards Asia edition in New Delhi on 16th September 2022.

In December 2021, Gartner forecast that ICT spending, including communication and datacentres, inside the Indian sub-continent would reach close to \$102 Billion in 2022, an increase of more than 5% YoY, but much slower than the growth in 2021 of close to 11%.

The digital transformation trajectory that began as a pandemic response is here to stay for the next few years. India has experienced one of the fastest recoveries despite being one of the worst hit regions in the second wave of the pandemic in early 2021. In 2022, CIOs in India will build on renewed interest in technology from the business to gain funding for new IT projects, said a Gartner analyst.

Indian CIOs are likely to increase their spending towards projects that drive innovation and modernizing legacy systems. Hiring a workforce that can deliver on these needs will also be a key priority. In 2022, this year, Indian CIOs are prioritising a move away from rigid and monolithic ways of doing business to a more composable business and IT architecture where they will be able to better respond to disruptions.

In 2022, all segments of IT spending in India are expected to grow, with software emerging as the highest growing segment.

The face to face event will start with the registration of all attendees and proceed with lunch and networking. BTX Transformation Awards will also announce the winners of the BTX Top Executive Awards; BTX Enterprise Awards; BTX Women Driving Transformation and Diversity; and BTX Solution Awards, as part of the BTX Road Show 2022 Asia edition.

BTX Transformation Awards 2022 includes:

Highlights of BTX Road Show 2022 Asia Edition:

- Face to face session with attendees and networking
- Select vendor transformation road maps for business decision-makers
- Regional end users present transformation success stories
- Panel discussion between vendors and end-users on experience sharing
- Half-day hybrid event with C-suite conclave and awards

Time	Sessions
12:00 PM - 13:00 PM	Registration and Lunch
13:00 PM - 13:15 PM	Welcome Note by GEC Media
13:15 PM - 13:30 PM	Opening speech by VIP
13:30 PM - 13:45 PM	Invited keynote
13:45 PM - 14:00 PM	Technology Keynote
14:00 PM - 14:15 PM	Invited keynote
14:15 PM - 14:30 PM	Technology Keynote
14:30 PM - 15:15 PM	Panel Discussion: Managing the cost of a business transformation journey and the ROI of the project
15:15 PM - 15:30 PM	Invited keynote
15:30 PM - 15:45 PM	Technology Keynote
15:45 PM - 16:15 PM	All Women Panel Discussion
16:15 PM - 16:30 PM	Invited keynote
16:30 PM - 16:45 PM	Technology Keynote
16:45 PM - 17:00 PM	Invited keynote
17:00 PM - 17:15 PM	Technology Keynote
17:15 PM - 18:00 PM	Panel Discussion: Automating security to enable successful digital transformation
18:00 PM - 18:30 PM	BTX Transformation Awards 2022 and Vote of Thanks
18:30 PM Onwards	Networking evening and Group pictures

- BTX Top Executives Awards 2022: This award recognises top executives who have accelerated digital and business transformation and created a better future for their business. They have empowered remote teams, managed change, flattened organisational structure, made it agile and secure, managed customer satisfaction, and implemented digital tools like cloud, analytics, data integration, amongst others.
- BTX Top Enterprise Awards 2022: This award recognises enterprises that have embraced digital transformation and digital tools through the pandemic and achieved success in various areas. Such enterprises would have rebuilt customer experiences, managed customer expectations, leveraged online sales models, built forecasting models, have in-depth and ready analysis of market and demand trends, and built close collaboration and data sharing amongst teams, amongst others.
- BTX Top Solution Awards 2022: This award recognises the leading, exemplary, heroic efforts by vendors, channel partners, integrators, consultants, to manage the challenges of the end user community through their transformation journey. This part of the IT industry has helped the end user community to successfully pivot their business models by using digital

technologies and helped to create a sustainable business.

• BTX Top Women Executives Awards 2022: This award recognises women who are driving business and digital transformation and setting a benchmark in diversity and inclusion in the workplace. Digital technologies and digital platforms are transforming and disrupting businesses and industries, opening up new employment opportunities and new job roles. With this, women can play inclusive and diverse roles in innovation, disruption, leadership in the technology and IT sectors.

Going forward into 2022, for enterprises, the meaning of business continuity, disaster recovery, collaboration, virtual meetings, remote workforce, cloud, security, have changed overnight from esoteric terms into everyday work life meanings, that have a direct impact on the existence of their business.

Across 2022, businesses are looking to build on the gains made during the pandemic. The pandemic accelerated the adoption of digital solutions and the cloud ahead by many multiples. Leaders driving transformation now need to build on the foundation of the last two years and take their enterprises to the next level of efficiency, agility, scalability, productivity and customer experience. All the while ensuring that their enterprises are secure to the highest level.

Volvo Cars is first car maker to join SteelZero initiative in support of fossil-free steel ambitions

Underlining its position as a leader in climate action, Volvo Cars has become the first car maker to sign up to the SteelZero initiative, which aims to increase demand for fossil-free steel and accelerate a transition to carbon neutrality in the global steel industry. By signing up to SteelZero, Volvo Cars commits itself to stringent CO2-based steel sourcing requirements by 2030. By 2050, all the steel it sources should be net-zero steel, which is in line with the company's ambition to be climate neutral by 2040.

Steel production is a major source of CO2 emissions for the automotive industry, averaging 33 per cent of all production-related emissions for a new Volvo car in 2021. Globally, steel production is responsible for around 7 per cent of all greenhouse gas emissions.

SteelZero was launched by the Climate Group in partnership with ResponsibleSteel, a steel industrywide standard and certification body which Volvo Cars has also joined. Through ResponsibleSteel,



Volvo Cars gains access to reliable, third-party verified and audited information about its steel supply chain and relevant sustainability credentials, helping to ensure it is responsibly sourced.

As well as CO2 reductions, ResponsibleSteel also focuses on other important issues in the steel supply chain like labour and human rights, engagement with local communities, water use and biodiversity impact.

Al-Futtaim launches Volvo Car app to monitor electricity charging, consumption, remote starting

Al-Futtaim's Trading Enterprises, the official distributor of Volvo Cars in the UAE, announced the launch of the Volvo Car App for the UAE market. The Volvo Car App will give customers access to a number of useful controls and enable emergency assistance wherever they are. Controls available include, monitor charging a Volvo full electric or plug-in hybrid, the ability to track charge levels and electricity consumption, remotely starting or stopping vehicle as well as locking and unlocking doors. In addition, customers will be able to access roadside assistance and the 'Contact Us' feature directly through the app.

Particularly vital at this time of the year as the summer heat sets in, customers will have the ability to control interior climate and set a precooling timer, turning on the AC through app before they leave the house to enjoy a cool vehicle



immediately as they enter.

The Volvo Cars App is available to download now from both the Apple App store and Google Play Store, free of charge and only compatible with model year 2022 vehicles onwards.

Al-Futtaim announces partnership with TIER for e-bike services in Dubai Festival City



Al-Futtaim Group Real Estate announced a partnership with Berlin-headquartered, TIER Mobility to operate e-bike micro-mobility services in Dubai Festival City. The partnership aims to make movement throughout the area seamless and affordable as well as provide a more environment-friendly method of transport to get around the destination and community.

Dubai Festival City is a vibrant, holistic destination that brings visitors and their families together to enjoy entertainment, hospitality, and leisure offerings, one of them now being the new micro-mobility service provided by TIER Mobility. In line with Dubai Festival City's goal to invest in establishing community relationships and building innovative communities, the collaboration with

TIER Mobility presents the destination's residents, mall visitors, and tenants with a low-carbon alternative to get around the city using e-bikes.

TIER's initial fleet of e-bikes, which have pedal assistance up to 25 km/h, will be located at the Marsa Plaza promenade with plans of expanding to other locations around Dubai Festival City. TIER e-bikes are geofenced which assist with challenges like irresponsible parking and riding in restricted areas.

All residents and tourists can use TIER e-bikes by simply downloading the global app. Riders have the option to use 'pay-as-you-go' offered at a rate of Dhs1 per minute of usage or opt for a subscription model. Payments can be made through ApplePay or debit and credit cards.

UAE Ministry of Energy and Infrastructure to deploy Siemens ultra-fast chargers on highways

The United Arab Emirates' Ministry of Energy and Infrastructure, Audi Middle East, and Siemens recently signed an agreement to cooperate on boosting electric vehicle charging capacity on federal roads and increasing adoption of EVs across the country.

The agreement follows MoEI's selection in June of Siemens technology for a nationwide network of ultra-fast chargers. The discussions with Audi are expected to expand on this initiative as part of the brand's ambitious infrastructure investment plans across the UAE.

On June 8, 2022, the Ministry of Energy and Infrastructure said it would deploy ten Siemens Sicharge D 160 kW ultra-fast chargers on the highways in Ras Al Khaimah, Ajman, Umm Al Quwain and Fujairah. All are cloud-connected devices which allow operators to monitor and



manage the chargers remotely.

By 2026, more than 20 all-electric Audi models will be introduced, and the brand is investing in several initiatives focusing on the development of a high-performance charging infrastructure in order to contribute to EV readiness in the region.

TIER Mobility partners with Sela Sport to launch e-scooters, e-bikes in Saudi Arabia

TIER, the world's leading shared micro-mobility provider, operating in cities such as Paris, London, Berlin, and Dubai, has officially launched its e-scooter and e-bike service in the Kingdom of Saudi Arabia in partnership with Sela Sport Company, the first fully-fledged sports marketing management firm in Saudi Arabia. The partnership was initiated by SoftBank Investment Advisers in Riyadh following SoftBank's investment in Tier in November 2020.

The TIER e-scooter will consist of the latest model, the TIER 5. The new scooter model is designed for frequent urban use and has a service life of 5 years while effectively having an unlimited lifespan due to entirely modular, replaceable, and repairable components. Advanced safety features include three independent brakes, grippy handlebars, wide tires, and an exceptionally bright light. The turn indicators offer 360° visibility and ensure riders can show their intended manoeuvres safely.

The e-bikes have pedal assistance up to 25



kmh. Each pedelec is equipped with a practical basket for storing luggage or shopping as well as a charging phone holder for easy navigation. Residents in Jeddah and Riyadh may access TIER e-scooters and e-bikes by locating the nearest vehicle on the virtual map and unlocking the e-scooter or e-bike by scanning the QR code. Users have access to TIER's hassle-free virtual parking system, to finish the ride users can simply find a designated safe parking location and press the 'End Ride' button.

92% people in UAE believe scientific approach will help make the world more sustainable

89% of the people in the UAE are confident in the prospect of riding in an autonomous or self-driving vehicle where there is no human driver, as revealed in the fifth edition of 3M's 2022 State of Science Index SOSI. The 3M survey further revealed global attitudes toward science and technology, in the UAE:

- 88% trust scientists
- 37% of people completely agree that they defend science when it is questioned vs 23% global average
- 76% agreed on the importance of science in their everyday life vs. 52% global average

The 3M research also found that today, science is more relevant to people in the UAE than a year ago, as three-quarters 76% agree that it is essential to them in their everyday life versus 68% in 2021.

In addition, 92% of people surveyed in the UAE want to hear more from scientists about their



LASZLO SVINGER
Vice-President and Managing Director,
MEA at 3M.

work – a clear opportunity for more scientists to communicate directly on news and social media platforms.

Regarding the environment and sustainability, 92% in the UAE believe people should adopt a scientific approach to help make the world more sustainable slightly higher than the global average of 88%. The study also showed that the immediacy of the climate crisis is becoming more apparent, with 79% of people in the UAE expressing their concerns about climate change as a critical environmental issue.



UAE based Pure Harvest Smart Farms raises \$180M from global investors to fund expansion

Pure Harvest Smart Farms, a world-leading, sustainable technology-enabled agribusiness headquartered in the United Arab Emirates, raised \$180.5 Million in their latest growth funding round. The financing was embraced by a consortium of key global investors, including Metric Capital Partners, UK, IMM Investment Corp, Korea, and Olayan Group, KSA, joined

by several existing investors and management. The company will utilise the capital, together with various forms of debt financing, to invest in research and development, to expand its footprint across the GCC, and to open new markets in Asia.

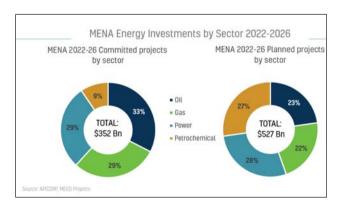
This represents the largest– ever convertible financing in the MEASA region. The funding round was vastly oversubscribed, and a few strategic investors are still in discussions for further upsizing, underscoring the strong institutional investor appetite for Pure Harvest. The growth capital cements Pure Harvest's role as the MEASA region's champion within the fast-emerging, global high-tech agriculture ecosystem.

This latest round of fundraising cements Pure Harvest's leadership position as the pioneer in CEA in harsh climates. This fundraise, together with the sizable research and development incentives secured from the Abu Dhabi Investment Office in 2020, will allow Pure Harvest to accelerate its growth plans, deploying growing systems in new markets and increasing research and development investments. The company is also investigating a number of new growth initiatives, including product extensions and waterefficient CEA solutions for fodder production.

MENA energy investments to grow 9% over five years reaching \$879B says APICORP

The Arab Petroleum Investments Corporation, a multilateral financial institution, has launched its MENA Energy Investment Outlook 2022–2026, forecasting that the total planned and committed investments in the MENA region are expected to increase by 9% to exceed \$879 Billion over the next five years – a \$74 Billion increase from the \$805 Billion estimate in last year's five-year outlook.

The report notes that the Russia-Ukraine war has led to contrasting impacts on the region's energy landscape, with net-energy exporters spearheading the increase in project expenditure thanks to the windfall of oil and gas revenues caused by the spike in prices driven by the war. However, global geopolitical volatility and macro headwinds are not curtailing oil, gas, power and petrochemicals



investment growth in MENA for the upcoming 5 years.

In the GCC, committed projects comprise around 45% of total energy investments – 50% higher than the MENA-wide average of 30%. For net-energy importers in the North Africa and Levant regions, their relative vulnerability to geopolitical risks stemming from the war compounded by the economic strains of inflation and debt burdens are beginning to show and impact energy investments.



OLE S HANSEN Head of Commodity Strategy, Saxo Bank.

Risk for long lasting cycle of rising commodity prices has not gone away says Saxo Bank

From a global growth perspective, the unfortunate risk—for a long-lasting cycle of rising commodity prices has not gone away. However, faced with the highest level of inflation in decades and with central banks stepping on the brakes through aggressive rate hikes, the everything rally seen in recent quarters has become more uneven, as its strength is driven by commodities in short supply.

The Bloomberg Commodity Spot Index reached a fresh record high during the second quarter before entering a phase of consolidation, as global growth concerns received an increased amount of attention.

The following key developments will help set the tone during the second half of the year:

- Russia's willingness to stop the war, thereby beginning the long road to normalising commodity supply chains
- China's slowing economic growth versus its ability to stimulate the world's biggest commodity-consuming economy
- The strength and speed of US rate hikes and their impact on inflation and growth
- Whether prices, especially across the energy sector, have reached levels that will see demand destruction and a more balanced market
- However, while demand destruction through high prices and lower growth through rapid rising interest rates may help pause the rally, the long-term challenge to supply remains.

API solution provider WSO2 completes Series E funding with \$93M growth capital

WSO2, announced the company has completed its Series E funding round with the addition of RedStart Labs, a subsidiary of Info Edge Limited. The move brings the total growth capital raised to \$93 Million. Info Edge joins lead investor Goldman Sachs Asset Management, which completed the first tranche of the Series E in November 2021. Info Edge, through its RedStart subsidiary, will contribute strategically to WSO2's accelerated business expansion across India.

WSO2, with more than 800 customers in over 90 countries, has already established a strong presence in India. Over 35 leading enterprises in India—including

government agencies and global leaders in financial services, communications, healthcare and technology—rely on WSO2's products and solutions to drive their digital journeys and deliver innovative experiences to customers. Additionally, over 100 Million consumers in India are interacting with these organisations using secure digital services powered by WSO2.

Since 2005, WSO2 has been delivering on its mission to democratise the development of modern applications and services with industry-leading, cloud native and opensource technologies for API management, integration, and customer identity and access



DR SANJIVA WEERAWARANA
Founder and CEO. WSO2.

management. The company is now expanding upon these offerings with a new generation of platform—as—a—service solutions that further speed customers' time to market and ability to innovate.

NymCard named Principal Mastercard Issuer in UAE offering banking-as-aservice



Mastercard has certified NymCard, a plug-and-play banking-as-a-service provider, as a Principal Mastercard Issuer in the UAE. The milestone announcement marks the first time a fintech in the UAE is licensed to issue cards by Mastercard. The license from Mastercard enables NymCard to become the UAE's one-stop provider for fintech and digital partners, removing the need for multiple vendors and payment rails by offering its clients open and modern APIs.

Now, fintech, xTechs, start-ups, enterprises, and financial institutions can plug and play into NymCard's modern BaaS infrastructure to issue

their own Mastercard cards and enable their unique business models faster than ever before. Through their Principal Mastercard License, NymCard will empower digital partners, enabling them to go live in as little as a few weeks.

MENA-based Banking as-a-Service provider NymCard have built their tech stack from the ground up and are fully regulated by the central bank of the UAE. They offer fintech and other industry innovators the infrastructure to plug and play ready finance into thew ir applications, enabling them to frictionlessly scale their payments programs across multiple markets.

Asia, UK dominate Standard Chartered's investment outlook for 2H 2022

Standard Chartered announced its investment outlook for the second half of 2022. In its report, titled Walking a tightrope, the bank highlighted key opportunities for investors to earn a high income through increasing allocation to bonds by dialling back exposure to equities; and through positioning their portfolios for outperformance of Asia ex-Japan and UK equities.

Standard Chartered said its model globally diversified income allocation basket now offers more than 6% yield following the rise in bond yields this year. The risk-reward balance for bonds have turned more attractive after the rise in yields. With equities, especially in the US and Europe, facing rising risk of central

banks tightening monetary policy too much, the bank sees an opportunity for investors to dial back exposure to equities and move to bonds. Within equities, it highlighted its preference for Asia ex-Japan on the back of a policy-driven economic recovery in China. Meanwhile, UK equities also look attractive because of the market's high dividend yields and exposure to energy, financial and material sectors.

The Bank's base case scenario has the US economy slowing down, without falling into a recession over the next 6-12 months. It expects the US Federal Reserve to slow the pace of its interest rate hikes after July as inflation peaks, but still maintain an aggressive monetary policy



DR OWEN YOUNG
Head of Affluent and Wealth
Management for Africa, Middle East
and Europe at
Standard Chartered Bank.

stance as inflation remains above 5% at the end of the year. Europe, being on the frontline of the Ukraine war, faces rising risk of stagflation. Against this backdrop, the bank sees Gold and private real estate as attractive inflation hedges. China, meanwhile, is on the opposite end of the economic cycle, with authorities easing COVID-19 lockdowns and relaxing credit, fiscal and regulatory policies to revive growth.

Saudi based AlSulaiman Group leads \$18M Series A funding for reverse logistics platform, Cartlow

Cartlow, the leading reverse logistics platform in UAE and KSA, has raised \$18 Million in Series A round. This investment will provide Cartlow with the ability to further expand its operations and services in Saudi Arabia and the UAE, optimise technology and contribute to decarbonisation in the economy.

The round was led by Cartlow's strategic partner, AlSulaiman Group, which is a Saudi Arabia-based group with investments in various sectors including omni-channel retail, logistics, and e-commerce.

Cartlow began as a re-commerce platform which then grew to become the leading cloud-based technology platform in UAE and KSA, offering Software as a Service SaaS services to major players within the reverse logistics ecosystem. Since Cartlow's inception, they have handled more than +25 Million units and saved more than 10 Million tons of e-waste.

The global reverse logistics market was valued at \$635 Billion in 2020 and is projected to reach



(Left to right) Saud AlSulaiman, CEO at AlSulaiman Group and Mohammad Sleiman, Founder and CEO at Cartlow.

\$958 Billion in 2028, with a cumulative annual growth rate of 5.6%. The MENA multibillion reverse logistics market was untapped and Cartlow is planning to take it by storm with this investment.

The investment will enable Cartlow to further mature its ecosystem in the region by combining return management, recycling, and re-commerce through its advanced technology.

Since its launch, Cartlow has significantly impacted the reverse logistics ecosystem by enabling major retailers and brands with various programs including returns management, warranty management, buy-back and trade-ins driven by its technology. In addition, Cartlow's re-commerce platform for consumers and businesses provides unbeatable prices on a range of products assuring the highest quality standards.

Cartlow is ISO certified and holds the R2 certification, demonstrating its commitment to environmentally responsible recycling practices.

Min of Industry and Advanced Technology, Emirates Development Bank, EDGE raise financing for AED IB

The UAE Ministry of Industry and Advanced Technology, Emirates Development Bank, and EDGE Group, have signed a mutual agreement to support the development of manufacturing at one of the world's top 25 advanced technology groups for defence. The agreement is in line with the UAE's Fourth Industrial Revolution program, Industry 4.0, and aims to support growth in the defence sector, one of the key industries of the future.

The agreement includes financing of up to AED 1 Billion provided by EDB to support and accelerate the industrialisation of EDGE's unique offerings. The event took place at MoIAT's MAKE IT IN THE



EMIRATES FORUM, being held in Abu Dhabi.

The signing ceremony was witnessed by His Excellency Dr Sultan Al Jaber, UAE Minister of Industry and Advanced Technology, Her Excellency Sarah Al Amiri, Minister of State for Advanced Technology, and His Excellency Faisal Al Bannai, Chairman of the Board of Directors, EDGE Group. The agreement was signed by His Excellency Omar Al Suwaidi, Undersecretary of the UAE's Ministry of Industry and Advanced Technology, Mansour AlMulla, Managing Director and CEO, EDGE Group, and Ahmed Al Naqbi, CEO of Emirates Development Bank.



Bahrain's Al Waha Fund partners with Tel Aviv's LionBird to focus on GCC healthcare start-ups

Al Waha Fund announced its participation in LionBird III, an \$85 Million digital health-focused fund. Al Waha Fund is partnering with LionBird based on the team's track record of success helping start-ups access the burgeoning US healthcare market. Tel Aviv-based LionBird is a US focused digital health fund that specialises in seed-stage venture capital and via this partnership will seek to also aid Bahraini and GCC start-ups in navigating the complex US healthcare market and connecting with the right experts and partners.

The US currently spends around 17% of its GDP on healthcare, around twice as much than most other developed countries. Following the pandemic, the US healthcare market is undergoing significant shifts, which are opening new opportunities for

start-ups.

There is a greater focus on health-tech start-ups as the sector pivots towards outpatient services and solutions such as telemedicine. It is estimated that digital start-ups in the US raised almost \$30 Billion in 2021 across 729 deals, with investment in the market nearly doubling compared to 2020.

The partnership between Al Waha Fund and LionBird could also lead to more Israeli companies choosing Bahrain as the location for their Middle East headquarters as they seek to leverage Al Waha Fund's unique platform of value creation. Al Waha Fund launched in 2018 as a \$100 Million fund with the aim of driving greater venture capital investment in the region. The fund has deployed \$80 Million to 11 venture capital funds to date.



Al-Futtaim Engineering and Technologies signs MoU with India's Redinent to secure IP devices

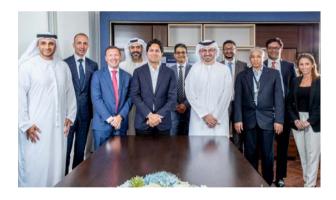
Al-Futtaim Engineering and Technologies announced a Memorandum of Understanding with Redinent to support the UAE's secure IoT ecosystem. The Memorandum of Understanding aims to facilitate future alliance for protecting the CCTV networks across the UAE. With the rapid deployments of CCTV cameras and IoT devices and increasing rate of cyber-attacks, there was an urgent requirement for an automated Enterprise

Grade CCTV camera threat scanning tool.

Redinent is one of the fastest emerging players in IoT Cybersecurity based out of Bangalore, India. Redinent provides specialised and advanced technology security solutions in embedded systems and IoT devices like CCTV IP cameras, NVRs, GNSS Receivers, Smart Energy Meters etc. Redinent's automated threat assessment solution finds vulnerabilities and weaknesses in IoT devices.

BNY Mellon, Emirates NBD partner to increase access to UAE's capital market through digitisation

BNY Mellon, one of the world's largest financial institutions, and Emirates NBD, a leading banking group in the MENAT region, have announced a strategic alliance aimed at accelerating the growth of United Arab Emirates' capital markets. The collaboration unites BNY Mellon's global footprint with Emirates NBD's regional expertise to provide clients, across the UAE and globally, access to world-leading capital markets infrastructure and technology.



BNY Mellon and Emirates NBD will work together to increase international investor access to the UAE's dynamic market through digitization. The UAE is currently experiencing an expansion of capital markets with multiple new listings and significant increase in market liquidity on both Dubai Financial Market and Abu Dhabi Securities Exchange.

BNY Mellon works with a wide range of sovereign wealth funds, financial institutions, governments, and other clients throughout the region, offering asset servicing and ancillary services, corporate trust and treasury services.



Emerson and AspenTech complete merger to create new industrial software portfolio

Emerson and AspenTech announced the successful closing of the combination of Emerson's industrial software businesses – OSI and its Geological Simulation Software business, with AspenTech to create a global industrial software leader. With the close of the transaction, Emerson owns 55% of new AspenTech on a fully diluted basis and AspenTech shareholders own the remaining 45%.



Stratez Capital partners with NewTek to offer blockchain solutions for real estate

Stratez Capital has entered into a strategic partnership agreement with British entrepreneur Safi Qurashi and his newly formed company, NewTek Holdings. The aim is to jointly develop real estate projects and commodity trading utilizing blockchain and Web3 technology. The Middle East has been identified by NewTek as a priority market, and the company is initially looking to focus on major real estate projects in Dubai.



Wonder Robotics specialising in drones receives \$4M funding through Elron Ventures

Wonder Robotics, a technology company specialising in the autonomous flight and landing of commercial drones, announced the closing of a \$4 Million fundraising round led by Elron Ventures, in conjunction with Besadno Investment Group. The funds will be used to scale up

operation and marketing efforts, while developing technology for additional applications.

Safe autonomous operation is this market's enabler and at the heart of the rapidly developing drone regulation and is being strongly promoted by the biggest industry players. Currently, the technology for operating drones beyond visual line of sight is lacking, which hinders the ability to provide safe, autonomous drone flights, making the commercialisation of drones expensive and unscalable.

As a response, Wonder Robotics developed their unique WonderLand for precise autonomous landings, that can be installed on any drone. Clearing landing zones in real-time, enables emergency autonomous contingency landings, in unprepared, uncharted, and unattended sites.

Wonder Robotics' smart safety layer includes vertical awareness and robust precision landing, permitting drone safety beyond the operator, mission manager's visual line of sight. In urban environments, this can prevent collisions with people and natural and infrastructural impediments such as trees, cables, buildings, and other dynamic environmental factors.



AIQ and Mohamed bin Zayed University of AI sign MoU for research into solutions for energy

AIQ and Mohamed bin
Zayed University of Artificial
Intelligence have signed a
Memorandum of Understanding
that will energize joint research
into AI-related technologies with
an emphasis on solutions for the
energy sector. The agreement
was signed in the presence of AIQ

CEO Omar Al Marzooqi, MBZUAI President, Professor Eric Xing, and senior management from both organisations.

AIQ is a joint venture between ADNOC and Group 42. Across the entire value chain, AIQ efficiently collects, categorizes, and models data allowing for smarter, safer, and more informed decision making. Founded in 2020, AIQ was able to rapidly grow its team of world-class professionals, including more than 15 PhDs all in Abu Dhabi, UAE. AIQ uses its own data management platform – E-Novus, which incorporates four dedicated suites of applications – Drill-Novus, Geo-Novus, Opti-Novus and Eco-Novus, covering every domain of Oil and Gas enterprises, looking to accelerate digital transformation and energy transition.

Under the terms of the MoU, AIQ and MBZUAI will collaborate on a wide range of advanced technologies as well as the exploration of a joint lab or research and development centre. In addition, the agreement will enable internships and AI training opportunities for MBZUAI students at AIQ. Both parties will also explore the potential for endowed chair and adjunct professor positions at the university.



Emerson expands manufacturing in Dammam to support procurement from Aramco, SABIC

Emerson has inaugurated an expanded facility in Dammam, Saudi Arabia to manufacture its Rosemount pressure and temperature transmitters and manifolds. The inauguration was attended by Emerson executives, as well as Saudi Aramco and SABIC stakeholders from critical teams such as procurement and local content. Emerson has a longstanding collaborative relationship with Saudi Aramco and SABIC to support localisation initiatives such as Saudi Vision 2030 and local content programs like In–Kingdom Total Value Add and

Nusaned.

The new instrumentation facility is designed to offer expanded production capacity of transmitters to support future demand from Emerson key customers in the Kingdom. This investment follows Emerson's recently launched Fluid and Motion Control manufacturing facility in Jubail and adds to its five other manufacturing sites across the Kingdom that manufacture valves, electrical products, pneumatic components, and control systems.



(Left to right) Dr Bernd van Linder, Chief Executive Officer at Commercial Bank of Dubai; Fayek Abukhadra, Deputy General Manager, United Medical Industries Co. Ltd UNIMED; His Excellency Engineer Ali AlSuwaidi, Director General of Ajman Free Zone; His Excellency Mohammed Helal Al Mheiri, Director General of Abu Dhabi Chamber of Commerce and Industry; Adnan Al Awadhi, Chief Executive Officer of the National Bank of Umm Al Quwain; Palat K Menon, Founder and CEO of AstraGene; Ahmed Mohamed Al Naqbi, Chief Executive Officer of EDB; H.E. Rashed Abdulkarim Al Blooshi, Undersecretary of the Abu Dhabi Department of Economic Development.

EDB partners with nine commercial banks to provide SMEs credit of AED 332M

In April 2021, EDB launched a new strategy to become the key financial engine of the UAE government's industrial and economic diversification agenda, with a revised mandate to empower SMEs and large corporates in the priority sectors of manufacturing, technology, healthcare, infrastructure and food security, as well as facilitate the adoption of advanced technology and promote innovation.

A key priority of these efforts has been to enhance the bankability of SMEs, which are the lifeblood of the UAE's industrial sector. EDB supports projects that have significant developmental impact on the country's economy. EDB offers eligible projects more flexible terms, including interest grace periods, longer tenors, lower financing costs and higher loan-to-value ratios.

EDB also entered into strategic partnerships with nine commercial banks to provide SMEs credit guarantees worth AED332 Million, and launched the Sanad initiative, which has allocated AED100 Million to support the recovery of Emirati-owned businesses following the impact of Covid-19.

For large companies and SMEs operating in the

five priority sectors, EDB offers flexible direct and indirect financing solutions. These include capex financing for expansion or facility upgrades, greenfield and brownfield project financing, and financial support for the integration of Industry 4.0 technologies, digitisation of operations and investments into alternative, renewable or clean energy sources.

Since the launch of the strategy, these efforts have resulted in support for more than 1,350 SMEs, the approval of AED1.52 Billion in loans to company's key sectors and, ultimately, a contribution of AED1.91 Billion to national GDP.

In September 2021, the bank launched a new digital banking platform that offers entrepreneurs, start-ups and small-business owners access to secure, comprehensive, round-the-clock banking services, leading to more than 1,000 new accounts being opened within its first six months of operation.

EDB's new services have been welcomed by both partners and customers, revealing a clear demand in the market for flexible and accessible financial support across the UAE's industrial sector and SME community.



Hub71, e& enterprise launch AI Centre of Excellence in Abu Dhabi for solutions, ecosystem

Hub71, Abu Dhabi's global tech ecosystem, and e& enterprise, part of e&, announced the launch of the region's first AI CoE. The launch highlights the importance of pursuing partnerships and collaborations with businesses, governments, investors, and start-ups to create a smarter, safer, and more sustainable world through the co-creation of industry-specific and use case-driven artificial intelligence solutions.

The AI CoE will provide a platform for Artificial Intelligence solutions to be built and scaled from Abu Dhabi. The partnership was signed at Hub71's headquarters in Abu Dhabi by Badr Al-Olama, Acting Chief Executive Officer of Hub71, and Salvador Anglada, Chief Executive Officer of e& enterprise.

As the UAE's first dedicated hub to artificial intelligence, the e& enterprise AI Centre of Excellence will support solidifying Abu Dhabi's leadership in AI innovation and adoption by creating a robust ecosystem of talent and partners by connecting start-ups, companies, and investment firms, as well as develop and scale cutting-edge AI solutions. By offering best-in-class resources and expertise, the AI CoE will transform the future of artificial intelligence, support a thriving innovation ecosystem, foster local talent, and boost the country's socio-economic growth.

Just recently, e& enterprise entered a strategic three-year alliance with DataRobot, a global artificial intelligence platform provider to launch the first AI as a Service offering in the MENAP region. This will accelerate the successful adoption of artificial intelligence in organisations, ensure continuous capability building, deliver robust AIaaS offerings and guarantee value creation by overseeing the implementation of enterprise-wide artificial intelligence projects.

DataRobot is one of the most widely deployed and proven AI platforms in the market today, delivering over a Trillion predictions for leading companies around the world, including a third of the Fortune 50. The DataRobot AI Cloud platform brings together disparate data and users, from expert data scientists to IT operators to business analysts, to enable AI–driven insights at speed and scale.

In addition to such global partnerships in artificial intelligence, e& enterprise is set to build new ventures and incubate pioneering business models at the AI Centre of Excellence. Scale-ups that participate in its innovation-led programs, such as FutureNow, will also gain fast-track access to participate in Hub71's value-add programs. In addition, start-ups will benefit from Hub71's vibrant community and growing capital ecosystem of VCs with assets under management of \$1.72 Billion.

Start-ups can apply to join the artificial intelligence CoE through Hub71's flexible menu of incentives and The Outliers, a Hub71 program that also includes e& enterprise as a partner, designed to solve challenges that corporates and government face by providing innovative solutions ideated by start-ups.



Udacity welcomed IM Arabs from 80 countries to learn through 5M hours, 76,000 workshops

Since its launch in 2017, and over the course of four years, One Million Arab Coders initiative part of Mohammed bin Rashid Global Initiatives, and led by Dubai Future Foundation, has equipped more than one Million Arab youth with digital skills, in partnership with Udacity – a global digital educational platform specialising in providing digital courses in the fields of artificial intelligence, machine learning, data science, cloud computing, and other disciplines.

Udacity, the learning platform, welcomed more than one Million Arabs from 80 countries to learn programming through five Million hours of study, and provided 76,000 training workshops. The initiative has brought about 100,000 successful graduation projects, and granted 1,500 scholarships for outstanding students, and succeeded in making a qualitative leap in the world of digital learning

and programming.

One Million Arab Coders – the largest initiative of its kind has bridged the digital literacy gap among Arab youth and empowered the region's brightest talents with modern technology, enabling them to develop future-proof skills and actively contribute to their nation's digital transformation.

During the ceremony, His Highness awarded the first-place winner in the One Million Arab Coders challenge with a grand prize of \$1 Million, while the five best projects' owners received prizes worth \$50,000 each, whereas the top four trainers won \$25,000 each. Udacity aims to train the world's workforce in the careers of the future. The platform educates individuals on how technology is transforming industries, as well as equip them with critical technology skills that companies are looking for in their workforce.

Huawei, Henley Business School complete executive development for du and partners

du, from Emirates Integrated Telecommunications Company, announced that its first batch of employees, including Emirati senior executives and members of three partners: Virgin, Mubadala and American University of Sharjah, have completed an Executive Leadership Development Programme ELDP by Huawei and Henley Business School in the UK. The course offered insight from three key perspectives – industry, business and leadership.

Led by ICT specialists from the Huawei Management Training Institute and expert faculty in transformation and leadership from Henley Business School, the intensive executive programme focused on improving the



understanding and knowledge of 5G networking technologies, while developing digital leadership competencies. Huawei experts brought together key aspects of management and operations to help participants grow into leaders that can support ICT transformation, making du more agile and improve execution capabilities.

stc's data traffic grows 40% over 2019 during Hajj season with Snapchat leading application

stc's data's traffic volume over its network in Arafat, has increased by an unprecedented 40% compared to the 2019. The fifth and fourth generation network accounted 96% of data traffic, where the Snapchat app usage headed the top applications that were frequently used.

This rise came in concurrence with the development witnessed by the Hajj season this year from a qualitative increase in technologies and expansions that contributed to raising the experience of the pilgrim, as the number of 5G network sites increased by 132% in terms of the network's resources volume. The increase was also due to the transformation and the qualitative shift in indicators, as well as the follow up processes that allowed pilgrims have a better experience, through the central control in the Digital Operations Control



Centre, in addition to the field resources within the governorate of Jeddah and the city of Makkah Al-Mukarramah.

Furthermore, stc carried out several vital expansions with service sectors by more than 33% during the Hajj season this year, in addition to establishing special high-speed points to connect several international airports in the Kingdom, in contribution to providing services to facilitate the arrival of pilgrims from their countries with ease.

Metito appointed to modernise, operate water treatment plant in Zrenjanin, Serbia

The signing of the first public private partnership project for the realisation of a water treatment plant facility in the Republic of Serbia, has been announced at an official ceremony earlier this week. Metito, a leading global provider of intelligent water and alternative energy management solutions, has been appointed by the City of Zrenjanin and Serbia's Public Water Company, as the partner to develop, modernise and operate a state-of-the-art water treatment plant in the City of Zrenjanin.

The contract was signed by Metito Managing Director, Rami Ghandour, Mayor of the City of Zrenjanin, Simo Salapura, and PWC Acting Director, Predrag Bodiroga. The signing ceremony was attended by the Prime Minister of the Republic of Serbia, Ana Brnabic, H. E. Ambassador of the UAE in Serbia, Mubarak Saeed Burshaid Al Dhaheri, Metito Vice President for Business Development, Walid



Madwar, and Metito Country Manager for Serbia, Branislav Zec.

Metito currently has two active projects in Serbia with a planned investment of approximately EUR 50 Million. Earlier in 2021, Metito launched its strategic operations in the Republic of Serbia, through investing in the Zrenjanin Wastewater Treatment Plant PPP.

The water quality challenge in Zrenjanin is a complex case and after through due diligence, Metito devised a sustainable and innovative solution that will see the company integrating state-of-the -art technology and leveraging its global resources and expertise while committing to environmental stewardship. Such strategic projects will help the Republic of Serbia achieve its Water Management Strategy in support of the country's 2020-2025 Vision and sustainable development goals.

AVEVA boosts refinery scheduling with Unified Supply Chain, Schedule Al Assistant

AVEVA, elevated refinery scheduling with the addition of the AVEVA Unified Supply Chain, Schedule AI Assistant. Using the power of artificial intelligence, Schedule AI Assistant analyses hundreds of scenarios within seconds to provide a choice of optimised schedules, doing away with the need to manually run repetitive tasks.

AVEVA Unified Supply Chain, Schedule AI Assistant, is an optimisation and AI-infused cloud-based solution. The offer is designed to enable operational schedulers at refineries and petrochemicals plants to explore and rank various scenarios for efficiency, profitability, and emissions. The new solution accomplishes days' worth of work in mere seconds, optimising decision-making and boosting business agility.

Across the entire supply chain, analytics automatically produce and assess multiple



schedules and anticipated events, offering planners a range of choices for optimised schedules. AVEVA's Schedule AI Assistant then recommends a scheduling strategy that best meets the organisation's safety, sustainability, and value chain optimisation objectives.

To increase productivity and stabilise production flows, refineries attempt to enhance their planning and scheduling operations. Management teams can take responsibility and prepare for changing situations by optimising schedules. A production scheduler coordinates the flow of crude oil through a refinery, from the point of unloading through transfer to storage tanks.





stc boosts 5G coverage across 863 sites, 141 new towers, 1000 new staff supporting Holy sites

stc Group has elevated its network to serve the pilgrims in Makkah Al-Mukarramah, the Holy Sites and Al-Madinah Al-Munawara as part of the group's preparations for this year's Hajj season 1443. His Excellency, the Governor of the Communications and Information Technology Commission, Dr Mohammad Saud Al-Tamimi, accompanied by the stc Group Chief Technology Officer, Eng. Haithem Alfaraj, and the Group Chief Commercial Officer, Faisal Alsaber, among a delegation from stc group leaders inspected the Hajj Business Centre as well as the Support and

Technical Centre in Makkah region.

The delegation was briefed on stc's services that will serve the pilgrims in Makkah and the Holy Sites, especially after strengthening its network by increasing the 5G coverage across 863 sites, adding 108 locations and increasing communication towers distributed over 141 new locations, to ensure the best performance of the network, as well as providing 72 mobile vehicles to support coverage and capacities in various locations, and increasing the number of specialised human calibres to 1,000 who will be working in the field and control centres.

stc has also developed communication towers across 1754 sites, and added 18 towers to accommodate new technologies, upgraded 940 sites with 5G services, and equipped 138 sites with critical communication network to support vital sectors.







(Left to right) Bjoern Ewers, Managing Director and Partner, BCG; Szabolcs Mihalik, Partner and Associate Director, BCG and Jean-Christophe Bernardini, Partner & Director, BCG.

National oil companies must implement lean operating models with 30-40% gains says BCG

National Oil Companies need to rethink their operating model and clearly link it with their strategic objectives to deliver the expected future production, cost, and greenhouse gas reduction impacts. The new BCG report entitled 'The Future Operating Model for National Oil Companies, observed a clear value of implementing lean operating models, as they can deliver 30–40% efficiency gains across the whole Oil and gas upstream value chain. This includes levers such as applying deeper resolution reservoir models and linking them with production optimisation that can result in a 4–6% increase in well production and 80% shorter cycle time in early design and evaluation.

International Oil Companies have already started to transform their operations. After decades of maintaining a long upward trajectory, Oil and gas companies' total shareholder return has underperformed the S&P for the past 3-, 5- and 10-year investment periods with little relief in sight.

IOCs have realised that current upstream operating models are not sustainable; oil price volatility, oversupply, and energy transition are forcing them to evolve. Individual portfolio strategies may differ, but it has become clear that success in any future model requires radically new ways of working. To a similar extent, NOCs are also in the same position as IOCs, and a transformational change is a requirement.

Transforming an Oil and gas company's operating model is a 3-step journey:

Transform the way to operate

This starts with redefining its operating philosophy – a term encompassing its vision, mission statement, principles, aims, and key business practices. NOCs

will need to build cost and carbon considerations into all aspects of their operating philosophies. This may include embracing the lean approach to continuous improvement – optimising operations, eliminating waste, and increasing customer value. It may be anchored around key operational shifts, like commitment to unmanned operations.

Streamline core processes and rationalise activities This begins with simplifying core production, maintenance, and safety processes. This simplification removes unnecessary steps and eliminates unwanted redundancies, making full use of newly available technologies and information. It includes reducing the volume of activities such as routine checks. At this stage, companies should optimise their ratio of corrective to preventative maintenance, and preventive maintenance planning and frequency. This is also the time to revisit and rationalise the integrated operational planning process, correcting gaps and cutting non-value-added work.

Develop a digitally enabled holistic operating model for the future Digitalisation — including big data and predictive analytics, robotics, Artificial Intelligence, Machine Learning, and the Internet of Things — has the power to strengthen and enable every aspect of Oil and gas companies' operations. The third step in the transformation journey is to develop a digitally enabled and holistic operating model for the future. This means building advanced capabilities and fully leveraging the range of digital tools. Companies must be able to move at pace from localised pilots to integrated large—scale implementation delivering maximum impact.

NEOM addresses data residency by selecting Oracle Dedicated Region Cloud@ Customer

Oracle announced that NEOM Tech and Digital Company, powering the first cognitive digital ecosystem at NEOM, has selected Oracle Dedicated Region Cloud@Customer to create a scalable, agile and modern platform for all mission-critical IT workloads. NEOM will be able to access Oracle's portfolio of Oracle Cloud Infrastructure public cloud services and Oracle Fusion Cloud Applications to address local data residency and latency requirements and reduce operating costs for its 36MW ZeroPoint DC data centre.

NEOM will be able to increase agility across all business processes and accelerate innovation by accessing new cloud services on–premises as Oracle makes them available in its public cloud regions. NEOM will also be able to reduce database administration costs by up to 80% and



use its resources to focus on innovations with Oracle Autonomous Database on Exadata Cloud@Customer.

Oracle Dedicated Region Cloud@Customer is a self-contained cloud region that provides all the benefits of the public cloud without hosted customer data ever having to leave the NEOM data centre. No other cloud provider delivers a fully featured public cloud with all services on-premises. NEOM will be able to securely run its entire portfolio of IT workloads on a single-tenant, flexible cloud infrastructure with the same SLAs for availability, manageability, and performance as a single availability domain in an Oracle public cloud region.

SITA launches Flex-as-a-service, Flex APIs to help develop new passenger features and apps

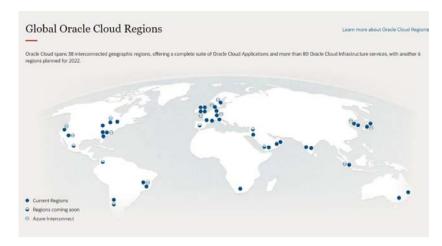
SITA announced the launch of SITA Flex-as-a-Service, a next-generation beyond common-use platform that allows airlines to provide a completely mobile experience to passengers while enabling the flexibility to rapidly respond to passenger's changing needs. With passenger numbers ramping up sharply in many parts of the world, airlines and airports have been hard-pressed to respond quickly. SITA Flex APIs will enable airlines to create new and bespoke passenger processing features and streamline their app development process, allowing them to scale far faster than in the past. Airlines no longer need to undergo lengthy and costly certification through their common-use providers to ensure smooth integration, giving them the freedom to deploy their applications how and when they like.

The speed of deployment was demonstrated in a recent hackathon hosted by SITA and Microsoft where developers were able to build a working application within 24 hours. This means airlines can



implement new services such as self-service bag tagging within days.

Building on a long-standing partnership with Microsoft, SITA Flex uses Microsoft Azure, providing users the full benefit of the cloud without the constraints of a traditional common-use environment. Airline staff can now also be completely mobile, untethered from fixed points in the airport such as a check-in counter or kiosk. Agents can use their airline's applications on a mobile device, anywhere.



Oracle to migrate European data into new Sovereign cloud regions for European Union

Oracle Cloud Infrastructure will launch a new sovereign cloud region for customers across the European Union. Cloud is not one size fits all. As companies and governments move more mission critical workloads to cloud, there is increasing demand for protection of sensitive data in public clouds that span national borders and jurisdictions. Countries and jurisdictions are placing more requirements on data within their borders, and organisations are asking their

global cloud providers for more transparency and control over how and where their data is stored, handled, and secured.

Customers want the benefits of cloud but have requirements for where data is located, the regulations they must meet, and the personnel operating the underlying infrastructure. OCI is an established leader in building cloud regions for customers who require the highest levels of security and have regulated workloads. OCI

operates government regions in the UK and North America and have deployed industry's first OCI Dedicated Region, serving customers that include highly regulated companies and governments around the globe. To better serve our European customers, Oracle has built on this experience and plans to launch new sovereign cloud regions for the European Union in 2023.

Both private companies and public sector organisations across the EU will be able to use these new OCI sovereign cloud regions to host data and applications that are sensitive, regulated, or of strategic regional importance. As a general policy, OCI already does not move customer content from the regions customers select for their workloads. OCI's sovereign cloud extends this practice by restricting operations and customer support responsibilities to EU residents. These sovereign cloud regions are also designed to further enable customers to demonstrate alignment with relevant EU regulations and guidance.

stc offers smart Dashboard for status of digital infrastructure at holy sites Makkah, Madinah

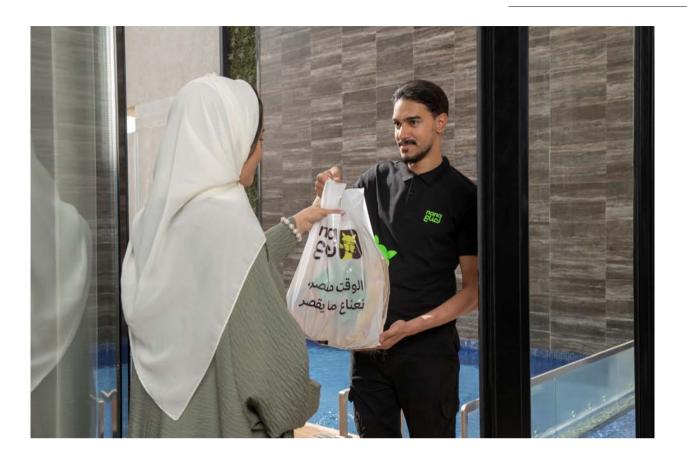
stc harnessed its innovative digital solutions to serve the pilgrims in the holy sites, Makkah and Madinah by supporting and empowering sectors operating during the Hajj season. stc provides various digital solutions and services including medical, security and innovative communication services, aimed at ensuring the highest quality of services to enable the pilgrims perform Hajj rituals with ease.

During the Hajj season 1443, stc ensures that its digital solutions are extended to pilgrims to support and empower government sectors that serve the Hajj season, including providers of digital medical services such as remote patient monitoring service and hologram doctor service, to provide remote



medical consultations by connecting the patient to the doctor directly in the Seha virtual Hospital. In addition to providing security and monitoring services such as network monitoring systems and screens, as well as the drones to monitor traffic in the holy sites.

stc also offers a smart Dashboard as an innovative solution to monitor the status of the digital infrastructure at the holy sites, Makkah and Madinah, which make it easy to identify any issues that may occur during operation and ways to solve the upcoming issues.



Saudi online grocery Nana Direct running AI and data warehousing on Google Cloud's BigQuery

Google Cloud announced a collaboration with Nana Direct, a pioneering online grocery shopping and delivery start-up, which provides Saudi households with a convenient online grocery shopping experience. Through the collaboration, Google Cloud and Nana Direct have been transforming the online grocery shopping experience in the Kingdom, connecting households with local grocery stores and supermarkets, and ensuring the delivery of handpicked and packaged fresh fruits, vegetables and groceries right to their doorstep within a 15-minute window.

Nana's on-line grocery shopping experience available through the App or on the website, is completely powered by Google Cloud. Running the entire IT backend on Google Cloud enables Nana to grow and scale their business as they continue to expand in the Kingdom. It also provides the capabilities necessary to deploy features quickly, all while running on Google Cloud's highly safe, secure and reliable global infrastructure.

Working with Google Cloud's unique AI and data warehousing solutions like BigQuery has transformed how the team at Nana analyse data and make well-informed business decisions accordingly.

Through the use of BigQuery, Nana implemented AI modules that helped enhance business forecasting, understand consumer behaviour at a much deeper level and increase efficiency levels to 69% in 2021.

With on-time delivery being a unique differentiator of Nana, the team relied on Google Cloud's Fleet Routing tool as the solution to help enhance fleet utilisation. The solution also helped in dispatching trucks for deliveries using Google Maps to identify the most efficient routes in the Kingdom, which ended up optimising fleet utilisation with better on-time delivery by 40%.

As Saudi Arabia moves into a post-pandemic world, Nana continues its expansion and growth with the introduction of Nana Express and Nana Hyper, adding pharmacies, supermarket chains and specialty stores to its portfolio of on-line services. With the support of Google Cloud's reliable infrastructure, Nana was able to scale operations at speed and accommodate the surge in orders following a recent 360 marketing campaign that introduced Nana Express and Nana Hyper to the market. As a result, the campaign successfully yielded 50% month on month growth in orders for the months of December 2021 and January this year.

biznesstransform.com AUGUST 2022 37

AVEVA

DRIVING INDUSTRIAL DIGITAL TRANSFORMATION

The vendor has built its digital software platforms using technologies such as cloud, digital twins, AI, IoT, analytics, big data, mixed reality.

VEVA empowers industry leaders to optimise value, efficiency and sustainability through our engineering, operations and data management solutions. From design to operations and analytics, industrial software has a crucial and significant role to play in the energy transition across many industries.

AVEVA is a pioneer in the value that digitisation has brought to industries. Its technology delivers data, resources, and insights that enterprises need to empower the modern workforce and yield optimal results. With tailored solutions, the vendor helps customers become more sustainable and profitable across engineering and operations, simultaneously maximising asset, production and supply chain capabilities.

Built on advanced technologies such as cloud, AI and the digital twin, AVEVA's digital innovations are supporting industrial companies in improving performance while boosting value creation and business competitiveness as they decarbonise their operations. By harmonising operational data and insight, industrial clients can predict outcomes, provide guidance, and empower workers to act faster and with precision.

The combination of assets with connected devices, and by extension, the data captured for

each of these assets, introduces the need for technology solutions to harmonise disparate data.

Due to these digital expectations, industrial companies are challenged with managing rising market complexity, disruptive technology, government regulations, and an ever-increasing demand for highly trained and skilled operators.

In an unpredictable business environment, enterprises are being forced to expedite the onboarding of solutions connected to data and automation in order to fulfil climate targets. A new operational paradigm must be adopted in order to expand connected worker capabilities.

"Our company is taking actions to embed sustainability into our operations, culture, and core business strategy. AVEVA is committed to leading on sustainable innovation and to working in partnership with others to make a more just, net-zero world a reality for the next generation," remarks Nayef Bou Chaaya, Vice President MEA, AVEVA.

"One of our main objectives is to drive sustainability goals for customers and maximise their performance in the most environmentally efficient way. We believe that industries have a role to play in mitigating the climate crisis and we recognise our role in monitoring our impact on the environment

COVER FEATURE

KEY TAKEAWAYS

AVEVA aims to help customers save up to 30% in energy costs and lower their emissions by up to 15%.

AVEVA recently launched the 2023 release of its operations control software, which is the first major coordinated release of HMI, SCADA software portfolio, available in subscription purchase.

Schneider Electric and AVEVA have jointly collaborated on hundreds of implementations for customers around the globe.

In March 2021, AVEVA and OSIsoft merged to help industrial customers accelerate their digital transformational strategies.

The combined portfolio brought OSIsoft's data management together with AVEVA's industrial software.

AVEVA Connect is an open and agnostic platform that can be scaled up or down to support business flexibility.

AVEVA Connect has been strengthened with the addition of industrial data-sharing capabilities for hybrid SaaS solutions.

AVEVA Data Hub was launched with a SaaS offering, which enables businesses to gain operational efficiencies.

AVEVA Operations Control was launched as an AVEVA Flex subscription offer.

AVEVA Operations Control delivers cloud, on-premises and hybrid solutions across AVEVA's entire industrial portfolio.

Customers are well positioned to integrate data through three core packages of AVEVA Operations Control: Edge, Supervisory and Enterprise.



COVER FEATURE

METAVERSE

AVEVA has already demonstrated customer success with the building blocks of the industrial metaverse: from the digital twin and the industrial internet of things to connecting workers and supporting them with artificial intelligence-infused analytics and simulation, multi-device experiences.

Industrial cloud platform, AVEVA Connect, gives customers a headstart on approaching the business challenges of the future and supports them to provide the best multi-experience guidance for teams.

When this data is contextualised into insightful information and securely shared with partner enterprises, it opens up an ecosystem that delivers additional value gains for every player. We call this the Connected Industrial Economy.

As the foundation of the data-sharing economy, this ecosystem leverages enterprise data across teams, borders and organisations to optimise efficiency and drive sustainability, and will constitute a key layer of the industrial metaverse – a fully-immersive environment where businesses will be able to collaborate, share data and interact in real-time

and regulating our carbon footprint," Bou Chaya continues.

As a global leader in industrial software, AVEVA is sparking ingenuity to drive responsible use of the world's resources.

Product portfolio

Some of the flagship solutions that customers are deploying in the region include AVEVA Unified Operations Centre, AVEVA Operations Control, cloud, artificial intelligence, digital twin solutions, the PI System, and end-to-end value chain optimisation solutions.

AVEVA Unified Operations Centre is the foundation for real-time operational performance management providing closed-loop enterprise-wide visibility to optimise assets and operations. It converges OT and IT systems into a single pane-of-glass that contextualises actionable information to improve decision making, enhance collaboration, and support knowledge management and sharing.

AVEVA's digital twin solution combines engineering data with real-time and transactional data across the entire asset lifecycle to deliver actionable and contextualised information for better and faster decisions, leading to improved operational and sustainability performance, increased reliability, and safer operations.

AVEVA's end-to-end value chain optimisation helps redefine processes, enables deeper collaboration, reduces value leaks, sustains productivity, innovation and ultimately makes better and more robust decisions quicker across the operations lifecycle.

AVEVA recently launched the 2023 release of its operations control software, which is the first major coordinated release of HMI, SCADA software portfolio, available in subscription purchase. It is the first of its kind in the industrial software sphere and simplifies day-to-day routines of teams by aligning workers around common digital threads of information, delivering the data and insights they need to drive growth at every level through increased efficiency, agility and reliability.

Mergers and acquisitions

Schneider Electric is a majority shareholder and strategic partner for AVEVA. Since the merger of AVEVA with the Schneider Electric's industrial software business in March 2018, customers are enabled to achieve end-to-end digital transformation across the entire value chain and benefit from improved visibility and control across the entire industrial lifecycle. Schneider Electric and AVEVA have jointly collaborated on hundreds of implementations for customers around the globe.

In March 2021, AVEVA and OSIsoft merged to help industrial customers accelerate their digital transformational strategies by driving greater efficiencies, lower costs, deeper data-driven insights, sustainability, and business resilience. The combined portfolio brought OSIsoft's data management together with AVEVA's industrial software sparking ingenuity to drive responsible use



software
enables
operations and
maintenance
personnel to be
more proactive
in their work



44

AVFVA

Predictive

Analytics

of the world's resources.

Integrating the PI System into AVEVA's comprehensive software portfolio has created a truly unique, integrated data foundation that can drive big data, cloud and AI-driven insights to create meaningful business outcomes for customers.

In the power generation industry, the PI System is integrated with AVEVA Predictive Analytics to improve asset reliability. In the oil and gas sector, the PI System is integrated into AVEVA Unified Operations Centre for

advanced visualisation to enhance collaboration and agility.

Additionally, the combination of AVEVA and OSIsoft offerings provides customers with a compelling digital twin capability. Empowering teams with easy cloud access to AVEVA's powerful industrial software applications, combined with AVEVA Data Hub's data sharing capability, delivers a powerful paradigm for utilising digital twins in both plant and remote sites.

Digital transformation

Cloud is a necessity for digital transformation that accelerates time to value, increases collaboration, and even reduces costs for regional enterprises. Through AVEVA Connect, our trusted industrial cloud platform, we help our customers drive innovation, growth and sustainability to meet the unique needs of the industrial sector.

AVEVA Connect is an open and agnostic platform that can be scaled up or down to support business flexibility while enabling a more collaborative and efficient industrial ecosystem. Customers can also leverage SaaS capabilities through the platform to create an industrial hybrid-cloud architecture that maintains the robustness of their industrial applications.

AVEVA Connect has been strengthened with the addition of powerful industrial data-sharing capabilities for hybrid SaaS solutions unlocked by AVEVA Data Hub. AVEVA now offers a common cloud-connected information infrastructure that our customers and partners can leverage to build valuable applications and meet their most difficult sector-specific challenges.

Earlier this year, AVEVA
Data Hub was launched with a
SaaS offering, which enables
businesses to gain operational
efficiencies, boost sustainability
and drive digital transformation
with data sharing capabilities.
Data is the accelerator of the
connected economy, and open
and agnostic solutions leverage
customers' existing investments
and enable a connected
community across the ecosystem.

Last year, AVEVA Operations

USE CASES



Cities in the GCC region and around the world are now growing at an unprecedented rate, hence digital twins are imperative for the successful management of the environmental impact of construction.

AVEVA works with customers by making cities smarter – Nava Raipur, Namchi and Kohima in India, for instance, where our data is powering new communities and helping these cities thrive. At Gwinnett County Water (8000+ mile network) a single source of data helps optimise water purification, and monitors and prevents outages before they happen, further maximising efficiency and improving sustainability.

AVEVA also supports global biofuels leader, Neste – who have implemented the AVEVA Unified Supply Chain in the cloud, where the team manages model-building, and production planning in one digital space, allowing them to make quick decisions from anywhere in the world. Production is optimised and Neste is simultaneously achieving their target to become carbon neutral by 2035, as emissions are reduced from the conventional refining and production of renewable diesels with this solution. AVEVA works closely with top energy companies, food and beverage manufacturers, and power and utilities majors in the Middle East, as well as on infrastructure projects, especially building smart cities and smart campuses across the region.

Many energy majors, power and utilities companies, have been using AVEVA Unified Operations Centre as their remote operations centre or a command-and-control centre. ADNOC's Panorama Unified Operations Centre, for instance, enables savings between \$60M to \$100M through optimised operations.

AVEVA also works with manufacturing, CPG, chemicals, mining and water, wastewater industries in the Middle East and Africa.

Control was launched as an AVEVA Flex subscription offer. AVEVA Operations Control delivers a game-changing mix of cloud, onpremises and hybrid solutions across AVEVA's entire industrial portfolio.

With AVEVA Operations Control, customers can increase or reduce their software licensing based on their activity levels. Customers are well positioned to integrate this data through the three core packages of AVEVA Operations Control: Edge, Supervisory and Enterprise.

AVEVA is the only industrial and infrastructure software vendor to offer full portfolio coverage under subscription.

Digital twins also forms a major part of the solution. Digital twin technology is increasingly being utilised by organisations as part of their digital transformation journey, and AVEVA provides a practical and efficient way of creating, integrating, and maintaining digital twins to facilitate improved ways of working.

"Our digital twinning, in combination with a cloud-first approach and asset performance management technology, elevates plant efficiency and performance optimisation," says Bou Chaaya.

AVEVA Predictive Analytics software enables operations and maintenance personnel to be more proactive in their work; instead of shutting down a section of the plant immediately due to a hitch, the

problematic situation can first be assessed.

It provides early warning notification and diagnosis of equipment issues well in advance of failure. For asset-intensive industrial organisations, this increases reliability while reducing operations and maintenance downtime and related expenditures.

"AVEVA offers organisations a holistic asset lifecycle view, and our capabilities are a perfect fit for industry operators seeking to digitally transform their operations," says Bou Chaaya.

Energy and sustainability

To cut carbon emissions, businesses must use energy more effectively and less frequently. Despite how simple it may seem, it can be increasingly challenging, particularly in the absence of reliable data. Artificial intelligence, big data, and digital technologies now have the potential to hasten the transformation of enterprises toward sustainability.

AVEVA has been instrumental in assisting companies in creating energy-related roadmaps and solutions that lower greenhouse gas emissions. The transition towards low-carbon energy is a growing market and this is a major business opportunity for AVEVA.

"As a leader in industrial software, we are proud to help our customers use digitalisation to build more resilient businesses and prepare to thrive in a low-carbon future," says Bou Chaaya.

Through software, AVEVA aims to help customers save up to 30% in energy costs and lower their emissions by up to 15%. Fuelling economies with clean energy and replacing coal, gas and oil-fired power stations with renewable energy sources such as wind or solar farms is another pivotal facet in our approach.

Companies must partner together on sustainability through co-innovation, complementary production across the value chain, and sharing best practices using the latest technologies. AVEVA proposes a systemic platform called the Connected Industrial Economy, a data-led network that links enterprises along a digital data thread that can drive exponential, sustainable growth across the entire ecosystem.

"Our collaboration with our partners such as Schneider Electric and Microsoft enables us to advance our sustainability outcomes; these leaders in innovation share our values, and we know that our software has the potential for a greater reach and impact because of how it is deployed," points out Bou Chaaya.

"We joined Schneider Electric and many of our customers and partners as signatories of the United Nations Global Compact, and we have also invested in membership of BSR," he adds.

AVEVA has made commitments to fighting climate change, which include achieving net-zero emissions across our operations (Scopes 1 & 2) by 2030, joining Race to Zero and committing to 1.5°C-aligned Green House Gas emission reduction targets across all scopes in line with Science Based Targets initiative (SBTi) criteria. AVEVA became one of

the world's first companies in its sector to have its net-zero commitments validated by the SBTi.

AVEVA joined 2030Vision, a World Economic Forum initiative that seeks to fasttrack technology to advance the global goals and accelerated sustainability-related R&D efforts.

Regional focus

AVEVA is proud to be a part of revolutionary technological advancements in fields such as cloud and artificial intelligence. It has a number of big projects underway in the Middle East across different industries including energy, infrastructure, manufacturing, and power.

- AVEVA signed a MoU with the UAE's Ministry of Industry and Advanced Technology to join forces with 11 other organisations to form the Industry 4.0 Champions Network, which also includes our key partner Schneider Electric.
- AVEVA will fully support the ministry's initiatives to establish 100 lighthouse businesses by the year 2031, which the World Economic Forum refers to as fourth industrial revolution organisations.
- The Initiative will concurrently accelerate the digitisation of the UAE's various industry verticals, within manufacturing in particular.
- Aramco and AVEVA

 announced their intent to
 join forces in a strategic
 partnership inside Saudi
 Arabia, that would be
 centred on advancing
 sustainability through
 digital transformation in
 the region.

- By 2030, the agreement might result in the creation of up to 300 new high-skill jobs in the Kingdom.
- Implementation of advanced predictive analytics technology across Aramco's operating facilities: This would be one of the largest deployments of such technology in the region and our main goal is to further improve the reliability, performance, and safety of Aramco's operations.
- Build the largest digital hub in the Middle East with R&D capabilities: Primary focus areas would be utilising digital technology to enable the development, implementation and execution of blue hydrogen and decarbonisation facilities in Saudi Arabia, in line with the Kingdom's energy transition strategy.
- The AVEVA Digital Twin technology, is intended to be a key offering for customers in the region through this new hub.
- The new hub would contribute to enriching Saudi Arabia's knowledge economy incorporating world-class research at prominent universities across the Kingdom.
- AVEVA also holds internal innovation events and hackathons throughout the year to foster and develop new concepts that will enable us to build sustainability into future industries.

"At AVEVA, we offer a number of apprenticeships and internships each year because we recognise that the next generation is crucial in driving sustainable innovation, and that we must support them to the best of our capabilities so that they can achieve beyond ours," reflects Bou Chaaya.





GEMS METROPOLE SCHOOL

PREPARING TODAY'S STUDENTS THROUGH IMMERSIVE ENVIRONMENTS

Embedding immersive technologies in the curriculum and pedagogy of the classroom at every stage of learning empowers students to be future ready.

ore and more young people are using immersive technologies for entertainment and recreation purposes and to engage with peers. For educators, it is increasingly important to ensure students are educated about how immersive technologies work and how they are developed using computer science.

More important, however, is that students realise these technologies can be employed for so much more than entertainment. Virtual reality and augmented reality are already at the forefront of almost every industry, and educators must prepare young people to be future-ready learners.

The question is, how do schools immerse students in immersive technology? The answer is simple: get students to build the technologies, according to Sophie Hunter, Digital Innovation Coach at GEMS Metropole School located at Dubai Motor City in Dubai.

INNOVATIVE APPROACH

The students at GEMS Metropole School use the platform CoSpaces Edu to build their own 3D creations, animate them with code and explore them in virtual and augmented reality.

CoSpaces Edu lets kids build their own 3D creations, animate them with code and explore them in virtual or augmented reality. Creating with CoSpaces Edu develops digital literacy and learning skills such as collaboration and coding, which prepare kids for their

biznesstransform.com AUGUST 2022 45

TRANSFORMATION CHAMPIONS



SOPHIE HUNTERDigital Innovation Coach,
GEMS Metropole School,
Motor City.

44

The students use the platform CoSpaces Edu to build their own 3D creations, animate them with code and explore them

77

future while empowering them to become creators.

Using the CoSpaces Edu platform under the guidance of teachers, students in year 4 have developed their own parkour-style platform game by constructing a variety of building blocks, manipulating them and precisely placing them to build various platforms for a player to navigate. Some of the blocks are unique and allow the creator to add obstacles that players need to overcome.

Wikipedia explains parkour as an athletic training discipline in which practitioners attempt to get from point A to point B in the most fluid way possible, without equipment and in the fastest and most efficient way possible. With roots in military obstacle course training and martial arts, parkour includes running, climbing, swinging, vaulting, jumping, plyometrics, rolling, and quadrupedal movement—whatever is suitable for a given situation.

Foe the purpose of coding, this involves seeing one's environment in a new way, and envisioning the potential for navigating it by movement around, across, through, over and under its features.

Once the course is created, the students use complex coding to programme objects to run in the same way as any other video game. Reaching this point requires deep problem solving and meta thinking skills to arrange the coding correctly and debug errors.

"Next comes the fun part," explains Sophie. "We have teamed up with ClassVR Technologies, a virtual reality headset, so students can send their parkour game directly to the device and play their game."

"You can visibly see the excitement in students as their creations materialise in a full 360-degree virtual environment making their design a reality, quite literally," she says.

ClassVR is a product from Avantis Systems, an educational technology company, with a history of developing solutions for the education sector. ClassVR headsets provide a safe and secure way for students to explore virtual reality and augmented reality in the classroom with the teacher keeping control over each device.

From a comfortable virtual reality experience using the adjustable head straps to the intuitive and simple to use interface and controls, ClassVR headsets have been designed specifically for students of all ages.

The ClassVR Portal ensures teachers can confidently manage students and add value to lessons when using virtual reality and augmented reality in lessons. Teachers are always in control and the real-time class view provides visibility of what and where their students are exploring in the headsets.

THE NEXT LEVEL

Immersive, technology-led lessons such as this are not restricted to computer lessons as a specialist subject in the primary phase or a focus in the secondary subject. Sophie is working to make sure these technologies at school are integrated in the curriculum and planned for effectively.

The technology can be adapted for all subjects. For example, the ClassVR headsets can be loaded with rainforest videos to allow desert-dwelling students to experience what

KEY TAKEAWAYS

- Virtual reality and augmented reality are at the forefront of every industry, educators must prepare young people to be future-ready learners.
- Students must realise these technologies can be employed for so much more than entertainment.
- Once the course is created, the students use complex coding to programme objects to run in the same way as any other video game.
- The process, from design, to coding, to final product, demonstrates to students each stage of virtual reality and content creation.
- By using these skills, students can explore much more than just game development.
- The students use complex coding to programme objects to run in the same way as any other video game.
- Reaching this point requires deep problem solving and meta thinking skills to arrange the coding correctly and debug errors.
- The tools students are applying in the modern classroom are also aligned to those that educators anticipate the students will need in the workforce.
- It is important to ensure students are educated about how immersive technologies work and how they are developed using computer science.
- Immersive technologies should not be viewed as an add on to learning, rather an essential tool that needs to be harnessed.

it is like to be in a rainforest. This gives an understanding of geography, biodiversity and climate.

Another immersive technology being used at GEMS Metropole School involves Merge Cubes, which involves a physical cube with a special graphic being scanned by a tablet to project a virtually augmented object.

The Merge Cube lets you hold digital 3D objects, enabling an entirely new way to learn and interact with the digital world. Students can explore a galaxy in the palm of their hand, hold fossils and ancient artifacts, explore a DNA molecule, investigate the Earth's core, dissect a virtual frog, hold and share their own 3D creations.

The applications allow the school's students to see a huge library of concepts in augmented reality, such as the life cycle of plants and animals – something they may never experience first-hand.

Physics, mathematics and engineering are also considerations when using these types of platforms. Using CoSpaces Edu, students can programme the trajectory of a rocket through space and then watch in virtual reality what happens. To do this, students create a 3D or 360-degree workspace using the platform, and the rocket is coded with a range of both Block and Python script.

Using the XYZ axes as well as movement and variable coding, they can plot a spaceship object's course towards a planet, all built in 3D. Understanding errors in speed or distance means they need to analyse the code to get the correct trajectory to follow a path and move at the correct angle.

The medical field is another that has been revolutionised by virtual reality and augmented reality when it comes to training students, providing something as close to real-world experience as possible, and measuring competence before operating. The technologies are creating a powerful paradigm shift for medical

practitioners.

virtual reality technology is already being used in many industries. Architects can be on the same page as their clients, which resolves problems before they arise. Where clients could previously only view 2D versions of buildings in the earlier blueprints, they can now visualise end-to-end growth and have an exploratory view of their buildings in real time.

TOMORROW'S SMART WORKERS

"Our goal is to ultimately have seamless integration of immersive technologies across the school," says Sophie. "It is really important to set the foundations through informative and progressive computer lessons, which are then built on and further applied in other lessons and classes."

The process, from design, to coding, to final product, demonstrates to students each stage of virtual reality and content creation, as well as how using this technology can enhance experiences and learning. By using these skills, students can explore much more than just game development.

More than being an immersive and gamified approach to education, the tools students are applying in the modern classroom are also aligned to those that educators anticipate the students will need in the workforce.

Embedding immersive technologies in the curriculum and pedagogy of the classroom at every stage of learning empowers students to be future ready, skilled and knowledgeable. It also allows them to gain a deeper understanding of the world around them. Immersive technologies should therefore not be viewed as an add on to learning; rather an essential tool that needs to be harnessed.

"We want to prepare our students effectively, as many of them could be using this technology in their future careers," reflects Sophie. Having virtual reality and augmented reality experience strengthens their job prospects and gives them an edge in the ever-competitive job market.

FINDING THE ESSENTIALS OF TRUTH IN LIFE

Thoughts and misunderstandings built up but not expressed, either due to anger, ego, levels, will create great gaps in relationships.

hen life is lived at a high level of honesty, life is healing. In almost all situations, resisting the truth becomes the battle we all fight.

The best way to explain this is through the workings of the modern-day washing machine. Let us say the rinse, wash and spin cycle is over. The clothes in the machine are in a semi-dry, yet damp condition. They need to be taken out for drying. Strangely,

even with the washed yet damp clothes, the longer they are kept in the washing machine, the stronger the odour.

One can safely guess that the same thumb rule applies to thoughts and emotions. The more and more thoughts, particularly misunderstandings are built up but not expressed, either due to anger issues, ego issues between two parties, or perceived level and status differences, the greater will be the gaps in the relationships.

All such thoughts formed but not clarified, all misunderstood

emotions and feelings are like the windscreen of a car which has not been cleaned regularly. It is ironical that the dirt, the dust, the soot, the scratches are not on the objects we view, but in the medium through which the objects are being viewed. The same would apply to a pair of spectacles which are being used for long without being cleaned.

The secret of good emotional wellbeing would lie in finding ways to resolve differences to the extent possible.

In hindsight, many like me now realise that in the first half of our lives, we too were making mistakes, mostly unintentionally, some intentionally, and then either unwilling or unable to





NIRANJAN GIDWANI

Consultant Director TEXUB, Member UAE Superbrands Council, Charter Member Tie Dubai.

KEY TAKEAWAYS

- Let us not wait for ideal conditions. They may never arise. Be simple.
- Create the
 environment to
 express and allow for
 freedom of expression
 from the other party.
- The same would apply to a pair of spectacles which are being used for long without being cleaned.
- The crux question what exactly is a high level of honesty?
- If one can always be in the band of 75-90 in terms of honesty, that would rate as high.

resolve issues and differences. In the latter half of our lives, for some like me, the realisation clearly dawned on those old feelings that surface repeatedly to get resolved in some form.

Emotional stress is a storage
Very similar to the tons of junk
data we all end up storing on our
various devices, without consciously
creating adequate time and effort to
do a periodic clean-up.

The same applies to sorting out issues in relationships. The key question that always arises is that, between two individuals or organisations or countries, what if one side wants to clarify to do a reset of the relationship while the other side, due to reasons, do not feel the same way. In some cases, the damage caused may be irreparable, yet maturity could allow for a level of relationship to survive.

In today's modern day, high technology world, where our generation is on the verge of transferring the baton to the generation which has grown up with technology and devices, if there is one quality that we need to impart, one area we need to seriously coach and mentor, it is to allow for others to express their thoughts and feelings and be allowed to speak.

Seek to understand before understood While, for our generation, it was quite okay to have many things left unsaid and buried under the carpet, purely due to a certain hierarchy of respect, we are dealing with a future generation who are way too open, way too accommodating, way too energetic, and wish to have a healthy debate and seek answers and resolutions to issues.

So, while many like me profess to have started inculcating this quality only over the past several decades, it has helped to a very large extent



The secret of good emotional wellbeing would lie in finding ways to resolve differences to the extent possible



in getting a clear understanding of the fact that differences can and should be only at the level of issues or topics of concern or importance.

Differences should never permeate
Let us not wait for ideal
conditions. They may never
arise. Be simple. Create the
environment to express and
allow for freedom of expression
from the other party.

In the final summary, even if we cannot be the solution, let us at least be the solace for many. Even if we cannot help sometimes, let us not intentionally harm. Even if we cannot solve the problem, let us not cause it.

The crux question – what exactly is a high level of honesty? On a scale of 100, if one can always be in the band of 75-90 in terms of honesty, that would rate as high.

The past few years have taught most of us that material parameters of success would look even more exciting if basic ground rules of co-existence are practiced in small and meaningful ways. It is not one at the cost of the either. Both can and must beautifully co-exist.

CONFIDENCE INFLUENCED BY BELONGING IN WORK ENVIRONMENT

Men as the majority group, have a big responsibility to promote inclusivity and a sense of belonging for the women they work with.

arlier this year, Red Hat conducted research with YouGov, which found that almost 1 in 20 people in have taken up some form of computer programming since the first lockdown. Of those new coders, one quarter were women. That might not seem like a lot, but if we compare it to the fact that currently only 14% of programmers and software developers in the UK are women, it points to what may be a promising development towards redressing the gender imbalance in technology.

What is more, 71% of those women were learning to code with new employment opportunities in mind compared to 66% of the men.

The results of our study suggest that there is a growing appetite among women for both coding and technology jobs where they can use these skills. This reasonably coincides with the fact that the demand for technology jobs and proficiencies has skyrocketed since the onset of the pandemic.

We have also known as far back as the early 20th Century that women make fantastic software developers, and it is a little-known fact that a group of six women programmed the first computers during WW2. However, experience tells me that competence and capability are not always sufficient to get you where you want without the confidence and self-belief to back it up.

There is an unfortunate vicious cycle when it comes to boosting women's confidence in technical roles, because confidence is influenced by the sense of belonging we feel in our work environment.

Having spent much of my technology career being the only woman in the room, I understand the heavy burden of being a minority of one. This alone can fuel imposter syndrome or feelings of self-doubt and explains why men – as the majority group – have a big responsibility to promote inclusivity and a sense of belonging for the women they work with. So where can men start on their journey to becoming better allies?

MAKING A CONTRIBUTION

Change always begins with education, and men first need to acknowledge their role in the D&I effort and take the time to learn from female peers about the specific challenges they face. There is sometimes a cultural mindset where men see initiatives dedicated to women in leadership or gender equality as women's business and something they should stay out of, when for real change to happen, the opposite needs to be true. And ironically in many of these women-led groups, one of the topics often discussed is how to encourage more male allies.

While most men want to be supportive of their female colleagues, they don't always know how to go about it. It is up to women to invite their male colleagues to attend meetings, even if just to listen to begin with and it is up to men to get curious and ask their female colleagues about what these groups are working on. By taking a more active role in women-led company initiatives and using these as opportunities to listen, men will better



JOANNA HODGSONSolutions Architect Lead,
Red Hat.

KEY TAKEAWAYS

- While most men want to be supportive of their female colleagues, they do not always know how to go about it.
- Mentoring relationships are rarely one-way, meaning it is not just the mentee who benefits.
- Most mentors will talk about what positive things they get out of that relationship.
- Ironically in many of these women-led groups, one of the topics often discussed is how to encourage more male allies.
- An open-source approach means collaborating with people willing to challenge our ideas, and championing trust and freedom.
- We also know that the more diverse the team involved in building a technology product is, the better the solution will be.

understand the dynamics at play, which may have previously gone unnoticed, and how they can support.

MENTORING

There is a lot of focus placed on women mentoring women, and rightly so, but it is arguably even more important for men to take on that mentorship role. Mentoring relationships are rarely one-way, meaning it is not just the mentee who benefits. Most mentors, in my experience, will talk about what positive things they get out of that relationship.

While men might be able to share different approaches and perspectives for their female mentees to learn from, the mentors might equally gain an insight into the barriers faced by the women. It has been proven that, rather than lacking willingness to improve things, men are more likely to lack awareness of what the barriers are. It is a logical conclusion that the more men mentor women, the more problems are brought to their attention and the more quickly things will change.

Being a good mentor also involves opening your network to your mentee and giving opportunities and introductions that would otherwise not be possible, as well as recognising the nudges they need. Early in my career, I would often wait to be nudged by my mentor before I went after certain opportunities or took on additional responsibility that I was more than ready for at the time.

Without having those mentors who advocated for me, taught me to be confident in my abilities and made me feel like I belonged in my environment, I likely would not have progressed at the same

pace. Similarly, my mentor would regularly defer speaking opportunities to me. He knew I could do a good job and that I would benefit more from those opportunities, and it freed him up to move onto his next challenge. It was a winwin – I gained experience and reputation and he was able to take on new roles knowing his old one was in good hands.

Open organisation, open leadership
From a cultural perspective, an open-source approach means collaborating with people willing to challenge our ideas, and championing trust and freedom – values that enable people to freely exchange opinions, ideas and expertise in order to inspire meaningful progress.

While these principles can be embraced by organisations to promote strong company culture in general, they can also help to dismantle the barriers and hierarchies that can perpetuate traditional gender dynamics. This isn't just important for improving diversity and inclusion; we also know that the more diverse the team involved in building a technology product is, the better the solution will be.

In an ideal world, women would proactively put themselves forward for every opportunity and role that appeals to them, and while I am hopeful that we will get there, change is incremental, and it is not yet the world we live in. Therefore, we continue to encourage those in senior positions, who in the technology industry are predominantly men, to push, prompt and advocate for women at every opportunity.

DIGITAL TOOLS CAN BOOST TRACEABILITY, ESG COMPLIANCE

While new investments can help improve the sector's overall environmental credentials, it is equally necessary to maximise value from existing assets.

he power sector is increasingly under pressure to find newer, cleaner ways of producing, storing and distributing power as environmental, social and governance, ESG regulations begin to take effect. In recognition of this fundamental imperative, utility leaders are already adjusting their business models to maintain their social license to operate while simultaneously protecting their financial outcomes.

As in other industries, digital tools offer the opportunity to reconcile these ambitions and deliver the sustainability dividend the sector so desperately needs. By 2024, it is expected that 80% of utilities across the sector's sub-industries will have embedded sustainable business models by way of digital transformation and a rearchitecting of the core business, according to IDC forecasts.

Digital transformation delivers benefits for all kinds of organisations, from reduced costs and greater productivity to improvements in safety, reliability and efficiency. For the power sector, in particular, digital technologies can strengthen the reliability and efficiency of power grids and unlock new value opportunities – underpinning sustainability across the utility.

Governments and utility companies are onboarding strategies to decarbonise their grids on the road to net-zero carbon emissions. While new investments in renewable capacity can help improve the sector's overall environmental credentials, it is equally necessary to maximise value from existing assets. Moving from power plant maintenance to asset efficiency optimisation is one



DAVID THOMASONIndustry Principal Power
Generation, AVEVA.



HOW ONTARIO POWER GENERATION IS ADDRESSING ITS CARBON-FOOTPRINT

Ontario Power Generation is one of the largest low-cost clean power producers in North America. As with its peers, supply continuity is essential to its operations. To improve efficiency across its operations in line with its goal of becoming a net-zero carbon company by 2040, OPG leveraged the power of data for decision-making to shift from reactive to predictive operating models.

The company installed the PI System and AVEVA Predictive Analytics across its renewable and nuclear fleet, thereby enabling artificial intelligence-infused condition-based maintenance.

Data from thousands of sensors throughout OPG's power plants was used to establish over 1,200 predictive and prescriptive maintenance operating models. Risk was reduced and operational efficiency increased throughout the fleet, resulting in 3,000 fewer annual maintenance hours and up to \$4 million efficiency savings within the first 24 months of implementation.

One single nuclear predictive analytics catch saved \$400,000. Moreover, OPG's teams have been able to share best practices more quickly over the cloud.

KEY TAKEAWAYS

- More data is now collected from remote assets and industrial-internet-of-things devices in a decentralised operating environment.
- By 2025, IDC expects over 50% of utilities will increase spend in automating operations with an emphasis on edge, AI, machine learning.
- Governments and utility companies are onboarding strategies to decarbonise their grids on the road to net-zero carbon emissions.
 - The experience of early movers such as OPG and Dominion shows what utilities can expect from digital transformation.
 - Moving from power plant maintenance to asset efficiency optimisation is one way to do so.

way to do so.

Digital tools offer end-toend traceability, satisfying ESG compliance requirements and even revealing new income streams. More data is now collected from remote assets and industrial-internet-ofthings devices in a decentralised operating environment, but it is of limited use without insightful and analytical tools.

When this data streamed to a cloud-based data management platform, relevant stakeholders can quickly and securely visualise it in context, thanks to the use of predictive analytics and even AI tools. One impact is that suppliers can deliver services based on real-time conditions, streamlining operating costs. Similarly, customers can access this data to verify they are being supplied from low-carbon energy sources.

Dominion Energy aims to realise net-zero carbon and methane emissions from its power generation and natural gas operations by 2050, as well as achieving net-zero for emissions outside its direct operations. Digital tools are already helping the American power and energy company attain these goals.

By integrating data gathering

and sharing into its activities,
Dominion has enjoyed a 50%
increase in speed to market for
vital environmental data. This
energy supply visibility enables
Dominion's customers to prove
their ESG compliance to investors
and auditors. And for Dominion
itself, the certified data stream
has opened up new revenue
sources among customers
that favor environmental
sustainability.

The experience of early movers such as OPG and Dominion shows what utilities can expect from digital transformation. In fact, by 2025, IDC expects that over 50% of utilities will increase spend in automating operations with an emphasis on edge, AI and machine learning technologies, thus doubling the penetration of predictive and prescriptive maintenance.

As in other sectors, utilities that embed digital solutions at the core of their organisations will reap the greatest benefits, whether these are in terms of streamlined operations, superior value or sustainable efficiency. Successful transformations could very well deliver the next S-curve of business performance, while also improving environmental outcomes.



27TH JUNE

KSA

RIYADH BALLROOM A, VOCO RIYADH HOTEL, RIYADH - KSA

GLIMPSE OF BTX RIYADH NOW ON









BROUGHT TO YOU BY















Andrew McLaughlan moves from INFINITI AMIEO to INFINITI Middle East as MD

INFINITI Middle East, previously part of INFINITI AMIEO, announces the appointment of Andrew McLaughlan as its new Managing Director. McLaughlan moves from his role as Aftersales Director at Nissan Middle East and will be reporting to Thierry Sabbagh, President of Nissan Saudi Arabia and Managing Director of Nissan Middle East.

With over 25 years of experience in the industry, McLaughlan has represented several automotive brands in the Middle East, United Kingdom and Africa. He brings to this new role at INFINITI Middle East extensive experience in various facets of the business, including sales, aftersales, customer service and network development.



Transformation expert, Rajeev Chalisgaonkar joins Mashreq as Head of Business Banking

Mashreq Bank, one of the leading financial institutions in the UAE, has appointed Rajeev Chalisgaonkar as its new Head of Business Banking and NEOBiz, a full-service digital bank exclusively for small and medium enterprises, start-ups and young entrepreneurs.

Rajeev, who boasts over 29 years of Corporate, SME and Retail Banking experience across Asia, Europe, the Middle East and Africa, will help define the go-to-market strategy and build on the overall delivery and experience for Business Banking customers. He will closely work with other business segments to capitalise on growth opportunities as well as help drive a strong value proposition through cross sell and strategic partnerships to further strengthen the Mashreq SME ecosystems and in turn enhance the offering for our SME customers.



Chestertons MENA promotes Simone Dobson to Chief Services Officer delivering value

Chestertons MENA, a provider of Real Estate Management, Agency and Professional Services Solutions, announced the promotion of Simone Dobson to Chief Services Officer. Dobson will now have primary responsibility for ensuring maximum value to stakeholders through the efficient deployment of people, processes, and technology, thereby providing a strong foundation for implementing the company's strategic business plan.



Bedu appoints Alexis Christodoulou as Creative Lead for 2117 Metaverse project

Bedu, the Dubai-based leader of Metaverse and Web3 technologies in the Middle East, announced the appointment of renowned digital artist Alexis Christodoulou as creative lead on the company's pioneering Metaverse project, 2117.

As a self-taught 3D artist, Christodoulou has spent the past 12 years building a collection of works focused on imaginary architecture. Having become frustrated with the lack of modern aesthetics represented in digital spaces, he set about building his own, concentrating on modernist and utopian concepts.

Kabir Lumba elevated to CEO Landmark Retail, Chairwoman Renuka Jagtiani to remain involved

Landmark Group, the UAE-based retail and hospitality conglomerate, has appointed Kabir Lumba as the new CEO for Landmark Retail. Kabir will spearhead the Group's retail business growth in key markets in Middle East and South-East Asia. Former CEO and Chairwoman Renuka Jagtiani will remain closely involved in the business in her capacity as Chairwoman for





(Left to right) Kabir Lumba, New CEO of Landmark Retail and Renuka Jagtiani, Former CEO and Chairwoman, Landmark Group.

the Group and will focus on developing the overall vision, strategy and strengthening governance.

Kabir joined Landmark Group in 2004, heading its business operations in India. In 2018, he moved to Dubai and held several senior roles, including Group Director for the retail conglomerate in the Middle East and CEO of the Group's largest fashion business, Max Fashion, which is now one the leading value–fashion brands in the region. Under his leadership, Max recorded sustained growth milestones, including increased online sales, entry into the South–East Asian market, and reigniting the business in Egypt.





(Left to right) Adnan Erriade, Chief Commercial Officer of Tarabut Gateway and Nino Ocampo, Chief Product Officer of Tarabut Gateway.

Nino Ocampo Chief Product Officer, and Adnan Erriade Chief Commercial Officer join Tarabut Gateway

Tarabut Gateway, the largest Open Banking platform in the MENA region with a market presence in Bahrain, the United Arab Emirates and Kingdom of Saudi Arabia, announces two new appointments to its senior executive team, Nino Ocampo and Adnan Erriade. Nino joins as Chief Product Officer and Adnan as Chief Commercial Officer.

Nino is a renowned innovator with over 20 years of experience in the financial services space across global organisations such as HSBC, TransUnion, and FedEx. He spent most of his career at HSBC, over 17 years, exiting the company as HSBC's Global Head of Open Banking and Customer Preferences. During his time at HSBC, he transformed the bank's ability to exchange data and

partner with third parties in a growing Open Banking ecosystem in key markets.



VFS Global elevates Sukanya Chakraborty to Chief Communication Officer

VFS Global, an outsourcing and technology services specialist for governments and diplomatic missions, appointed Sukanya Chakraborty as the Chief Communication Officer. With the company entering a new growth chapter and under new ownership, Sukanya will bolster brand advocacy and reputation management through the 360-degree global communication mandate of the organisation.

Sukanya joined VFS Global in 2018 as Head of Corporate Communications & CSR. She has been in different communications and marketing roles in global organisations before joining VFS Global. In her 23+ years of experience, she worked extensively on building B2B & B2C communication strategies and integrated campaigns focused on building an offline and online presence, creating narratives to enhance corporate reputation and brand perception.



Upgrade Your Office With Smart ICT Devices

Stocks Available, Delivery In 2 Weeks



Please Scan for More Information

Contact Us:

P

enterpriseME@huawei.com



e.huawei.com/ae







Investcorp appoints Mashaal AlJomaih as Managing Director for Private Wealth in Saudi Arabia

Investcorp, a global alternative investment firm, announced the appointment of Mashaal AlJomaih as Managing Director of Investcorp's Private Wealth for the KSA market, who will be based in Riyadh.

Prior to joining Investcorp, AlJomaih held senior positions at BNP Paribas Investment Company, JP Morgan Chase. He also co-



(Left to Right) Mashaal AlJomaih as Managing Director of Investcorp's Private Wealth and Yasser Bajsair, CEO of Investcorp KSA.

founded a UK based real estate consulting company. He holds a BSc in Business Administration from King Saud University, KSA. He also holds an MBA, Finance and MIS concentration from Clark University, Worcester, Massachusetts. He also attended the Young Managers Program at INSEAD, France.



Pablo Martinez elevated to lead Boston Consulting Group's Middle East system

Boston Consulting Group has named Pablo Martinez to head its Middle East system starting May 2022. Martinez will lead almost 800 employees from 76 nationalities across four offices located in: Riyadh, Dubai, Abu Dhabi, and Doha, making this region one of the firm's most diverse systems. The firm has seen strong

growth in the region, driven by increased demand for digital transformation.

Martinez is a global citizen who has worked with clients all over the Middle East and Europe. In 2002, he joined BCG in Iberia, where he supported the development of the firm's European consumer and airline clients. Nine years ago, he transferred to the Middle East to launch its Consumer practice, focused on travel and tourism. Martinez has since built a strong practice with an excellent team and leading clients in the public and private sectors across UAE, Saudi Arabia and Qatar.

Martinez has worked extensively with travel and tourism clients on projects related to strategy, network development, fleet design, cost optimisation, commercial development, and program management office, addressing fundamental strategic, operational, social, and cultural challenges along the way.



Transformation specialist Corey Thompson joins Mashreq as EVP and Head of Digital for Retail

Mashreq Bank appointed Corey Thompson as the new Executive Vice President and Head of Digital for its Retail Banking Group. In his role, Corey will manage and execute Mashreq's digital strategy for the Retail Banking Group, including its Personal Banking, Mashreq Gold, Private Banking, SMEs, Islamic and Emirati segments. More importantly, he will deliver a sharp focus on enriching Mashreq's digital ecosystem, partnerships and next generation capabilities in both Mashreq's Neo, Neo Biz segments and payment solutions – Neo Pay.

Corey is a seasoned digital transformation expert having played numerous leading roles in the realm of digital strategy. Before joining Mashreq, he led banks to top quartile in terms of their digital offerings and strategy for organisations going through IT transformations, revamping e-commerce platforms and more.



29TH JUNE

UAE

AL NOJOOM BALLROOM, SHANGRI-LA DUBAI, SHEIKH ZAYED ROAD, DUBAI-UAE

GLIMPSE OF BTX UAE NOW ON









BROUGHT TO YOU BY













EXECUTIVE CORNER 60 **AUGUST 2022** biznesstransform.com

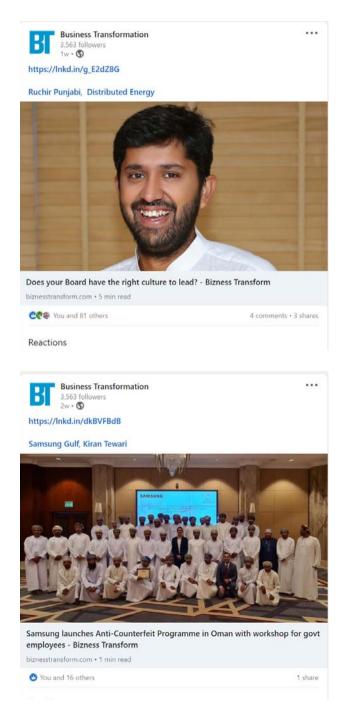


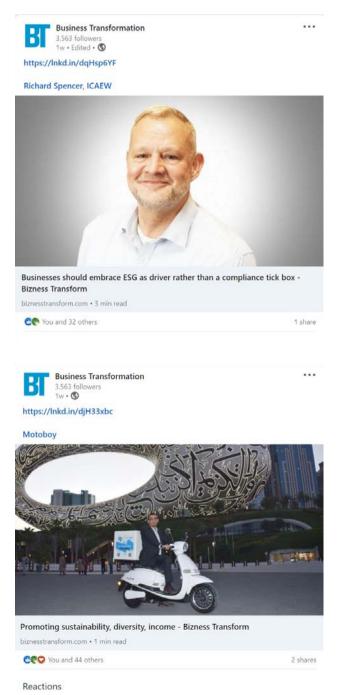
Dubai Marina, Select Group has partnered with Jumeirah Group to bring Jumeirah Living residences to Business Bay, as part of the master community development - Peninsula. Inspired by the maritime lifestyle and nautical elements of the location, the tower's design combines art and architecture, with the shimmering light and sparkling waters of the Dubai Canal.

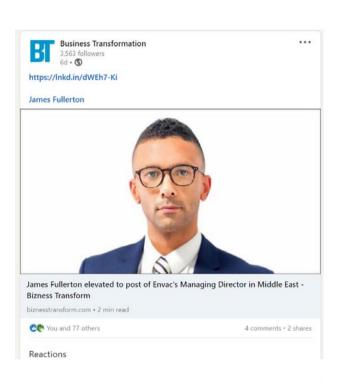
The 35-storey tower includes 82 premium branded residences, including two, three, four and five-bedroom units, along with a unique full-floor five-bedroom penthouse located on the top floor. Jumeirah Living Residences Business Bay is expected to be complete in Q4 2025.













DC Aviation Al-Futtaim

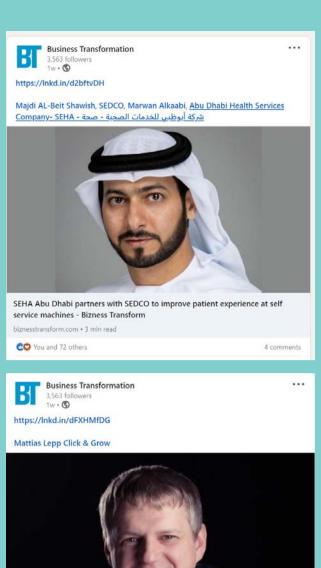


Special FIFA World Cup charter flights, Dubai to Doha - Bizness Transform biznesstransform.com • 1 min read

3 shares

Reactions

biznesstransform.com









AUGUST 2022 63

ENERGY SECURITY, SMART MOBILITY, AUTOMATION, ROBOTICS ARE LONG-TERM INVESTMENTS

UBS Investor Sentiment



Key findings

Challenges to investing | Interest rates and risk of recession key barriers

Continuing inflation | UAE investors feel the impact

Business owners optimistic | Hiring plans remain strong

Top investor concerns

Inflation among top investor concerns



77%

Geopolitical risk (e.g., Russia/Ukraine) 76% Global trade conflict

76% Recession

75% Inflation

74% Cybersecurity

UAE investors feeling the impact of inflation



Short-term

45%

Holding off on big purchases



Long-term

72%

Highly concerned about retirement savings



Future generation

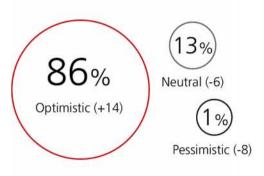
70%

Highly concerned about value of what I will pass on

With investor optimism waning, nearly three out of four investors are now worried about making bad investment decisions in the current environment and are holding onto cash. Despite this, they see potential investment opportunities if markets decline further, and are highly interested in energy security, smart mobility, automation, robotics as long-term investment themes.

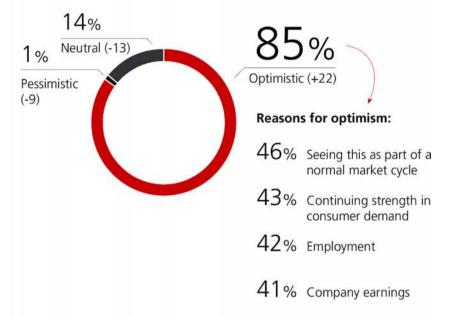
Optimism among high-net-worth investors dipped to early-pandemic levels on continuing concerns about the economic and market impact of inflation and the war in Ukraine, according to UBS.

Optimism up on own region's economy for next 12 months*

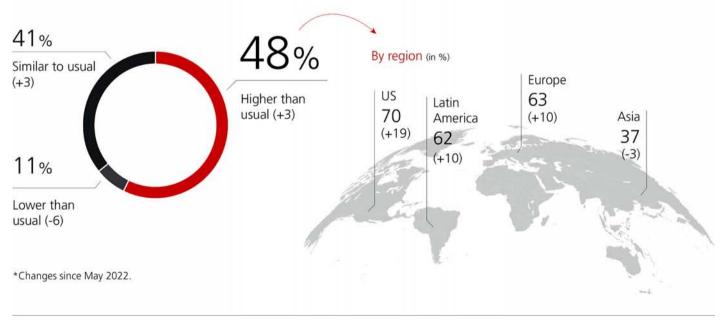


*Changes since May 2022.

Outlook also up on stock market for next 6 months*



Some UAE investors see volatility as higher than usual*



Strong interest in longer-term investment themes



85% Energy security (e.g., new and alternative energies)



Smart mobility
(e.g., electric cars, autonomous driving, new car-sharing concepts)



82%
Automation and robotics
(e.g., innovation in industrial and IT processes)



2022 ROADSHOW

AUGUST-NOVEMBER 2022

World's largest technology • excellence program



WHERE TECHNOLOGY IS BORDERLESS, AMBITIONS ARE FEARLESS, AND LEADERSHIP IS LIMITLESS

Algeria
Bahrain
BOTSWANA
Canada
China
Egypt
Estonia
France

Germany

Ghana Hong Kong India Indonesia Italy Ivory Coast Japan KSA Kuwait Mauritius Malaysia Morocco Nigeria Oman Pakistan Phillipines Qatar Russia Singapore Slovenia South Korea South Africa Spain Srilanka Switzerland Tanzania Thailand Tunisia Turkey UAE Uganda UK USA Vietnam

40 COUNTRIES

4000 c-level execs 300+

200+
EXHIBITORS

