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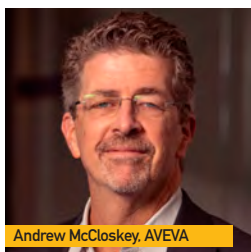


Lothar Hohmann
Precise Group



Bill Largent, Veeam

VEEAM ACT II
ALIGNS WITH
TRANSFORMATION



Andrew McCloskey, AVEVA

DIGITAL TWINS CAN
IMPROVE EFFICIENCY IN
CONSTRUCTION



Vinayak Mahtani, bnbme

YOU MAY NOT BE IN AS
BAD A POSITION AS YOU
THINK



Kenny Ingram, IFS

CHALLENGERS WHO
DISRUPT CONSTRUCTION
INDUSTRY



Ektaa Sibal,
Inner-Self Transformation Specialist

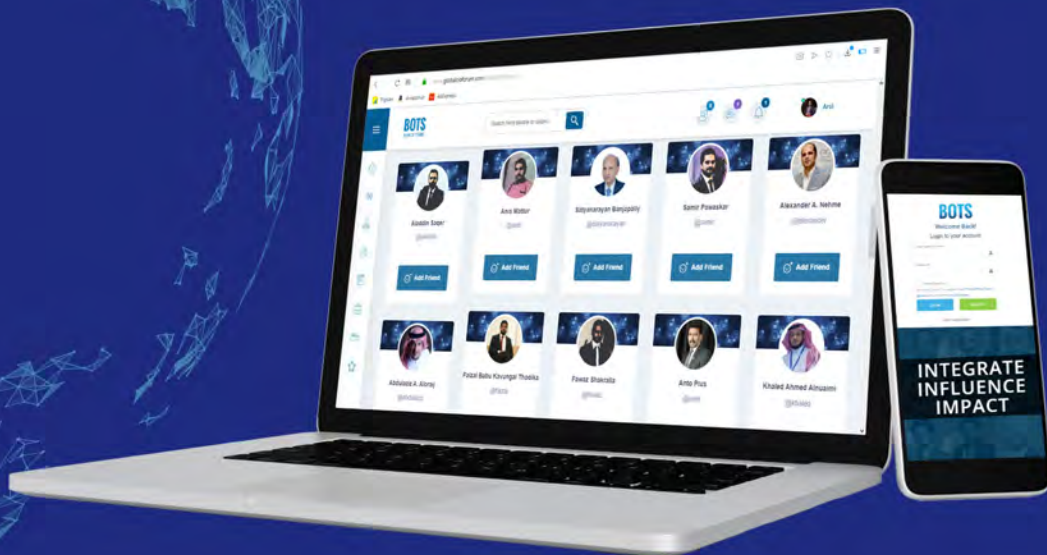
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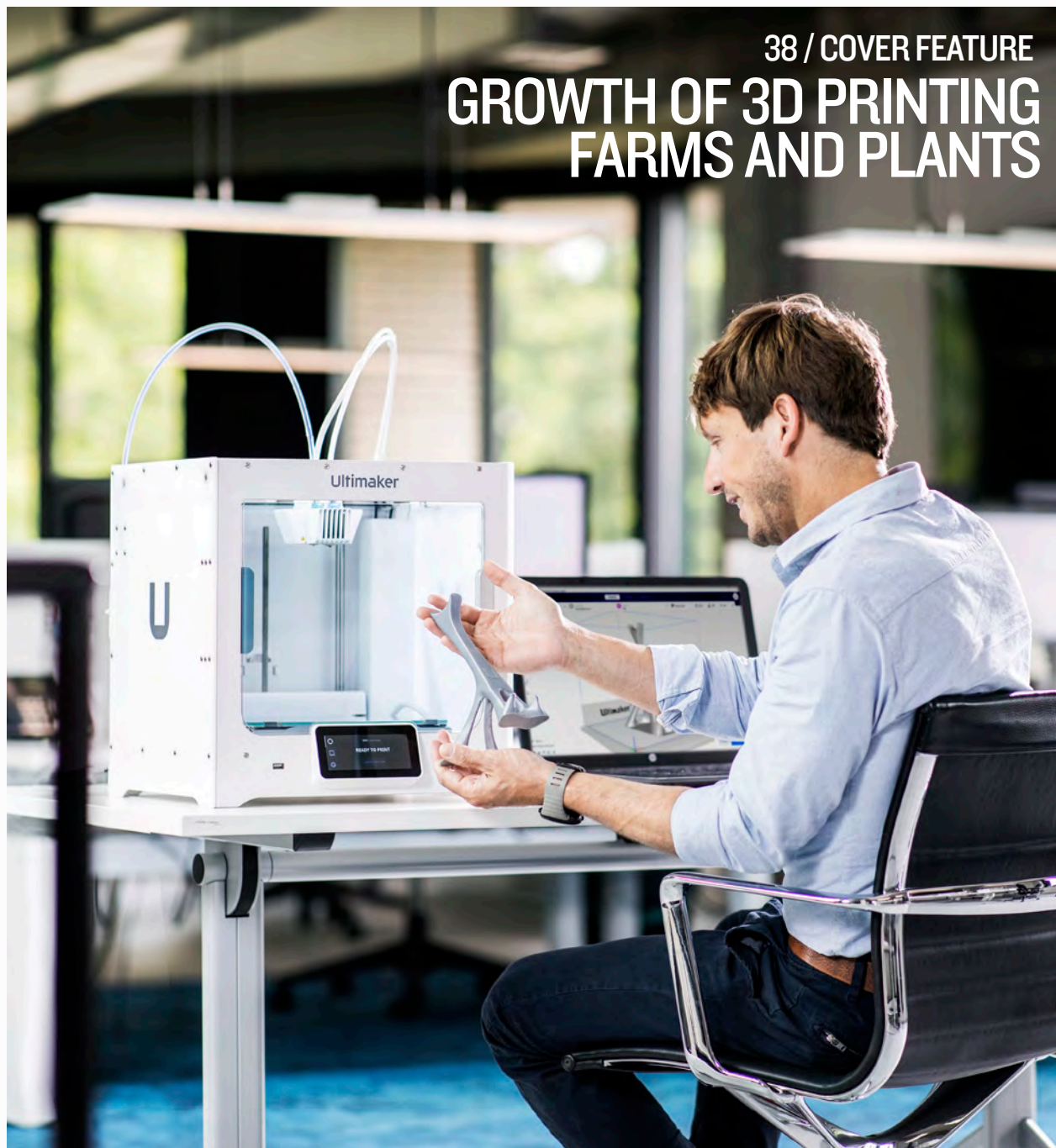
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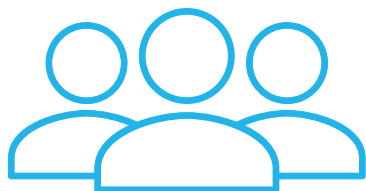
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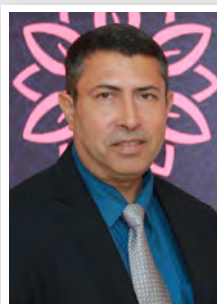
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DOMINATE THE CLOUD, YOU DOMINATE EVERYTHING.

Hyper scalars have global SLAs and deliver cloud services globally. They distribute their compute capabilities through multiple cloud regions that are located based on distribution of cloud activity. Hence capacity distribution in a region is mapped to maturity in the usage of cloud services.

Typically, the US and Europe have multiple primary and redundant cloud regions. In the Middle East we are beginning to see hyper scalar activity in Bahrain, Dubai and Abu Dhabi, with Riyadh as the next target region. The hyper scalar names are familiar and include AWS, Google, Microsoft, followed by Alibaba and IBM. With the recent live broadcast from Larry Ellison, Chief Technical Officer and Chairman of the Board, Oracle's second-generation cloud infrastructure, is now market ready to aggressively challenge AWS. Ellison's game plan is two-fold. Focus on speed coupled with server elasticity to compete with AWS in terms of cost-performance ratios. The second is to go all out with autonomous services, thereby reducing cost of skilled resources and the cost of human error.

Some of Ellison's takeaways during the live broadcast last week:

Eliminate human labour, you eliminate human error. No autonomous use case is autonomous until the human is taken out of the equation. There is nothing to learn and nothing to do with Oracle's autonomous services.

So strong is Ellison's conviction of taking on AWS, that Oracle has now a publicly broadcasted invitation for any AWS customers to cross over to Oracle Cloud Infrastructure and cut their AWS bill in half. Gartner put Oracle in the same group as IBM and Alibaba in its quadrant reports of 2019. But clearly Oracle is rapidly moving its position into the higher group of AWS, Google, Microsoft.

In an exclusive briefing with BT, Business Transformation, Veeam's CEO Bill Largent, describes how the vendor has begun its Act II which includes aggressively aligning with global hyper scalars, key amongst them being Microsoft. Veeam's backup product released in late 2019, built for Microsoft Office 365, is amongst its best-selling ever.

Strategic realignment of Veeam in Act II also covers Containers, Kubernetes, and partnership with Kasten.

In addition to Kasten and Microsoft, Largent also mentions the importance of relationships with HPE, NetApp and Cisco, in addition to other infrastructure OEMs.

In the rest of the pages of this month's BT, we cover the importance of indoor air quality in the post pandemic workplace. Industrial experts including Pradeep Viswanathan at Schneider Electric; Barun Aggarwal at BreatheEasy; Mansoor Ali at Amfah India; and Girish Bapat, formerly at Unilever's Life Essentials, share their thoughts on the subject.

Also do turn the pages for our expert blogs and columns.

Happy working.

Arun Shankar

arun@gecmmediagroup.com

YOU MAY NOT BE IN AS BAD A POSITION AS YOU THINK

Experienced entrepreneur Vinayak Mahtani of bnbme, states that while the pandemic has devastated all businesses, the CEO entrepreneur needs to find the way forward.



VINAYAK MAHTANI,
CEO of bnbme.

KEY TAKEAWAYS

- Remember to do some physical activities every day to ensure you keep your mind busy and your body active.
- You must interact with people who report to you directly every day and the rest of the team on a weekly basis.
- As an entrepreneur, you need to be a problem-solver.
- If revenue is a problem, find a way to fix it.
- There is always a way to generate revenue, all you need to do is consider creative ideas.

The world is in chaos, with the biggest and most influential economies falling. Arguably, the sector that has taken the hardest hit are hospitality and travel. If you are a small business owner, you need to remember that this is where you need to step up as an entrepreneur. After all, successfully running a business is no easy feat, and you will always have to face challenges that are not in your control.

At such times, it is essential to remember that you cannot control what is happening around you. This does not mean that your business is not working; it simply means that every company is facing certain financial issues at this point. Just remember to stay level-headed. All your competitors and small businesses in other niches are facing the same issues.

Your office or workshop is likely shut and you are working from home. Just remember to do some physical activities every day to ensure you keep your mind busy and your body active.

Your team and you could you still be carrying out day-to-day operations through work-from-home, or all operations have ceased entirely, you must still engage with your team on a daily basis. At least, you must interact with those people who report to you directly every day and the rest of the team on a weekly basis.

These meetings can help you project some confidence in them,

thereby ensuring they are capable of carrying out their work optimally. Keep your team busy, regardless if they are working on are on unpaid leave.

At this point, your entire focus should be on ensuring your business can survive this period and be stable for the next five years, at least. To make this happen, you might have to take some hard call, including layoffs.

While it is important to give your team a reassurance that the company is strong, you also need to ensure that there is a company in the first place. So, take the hard calls if that is what you need to do to keep the business safe.

As an entrepreneur, you need to be a problem-solver. So, if revenue is a problem, find a way to fix it. There is always a way to generate revenue; all you need to do is consider creative ideas.

As a business owner, you are surely always on the run. This time, however, comes as a unique opportunity wherein you can spend time with your family. Watch all your favourite movies together or organise a games night. Catch up with your friends and extended family via Zoom. Do whatever your otherwise busy life would not allow you to.

Lastly, be grateful and have gratitude, as you could have been in a worse situation than you are in currently. ■

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THE END OF THE TRADITIONAL WORKPLACE

The first chapter has come to an end, we are in the second, with a third to go leading to a new workplace concept, writes Chris Bedi, and Pat Wadors.



CHRIS BEDI,
CIO ServiceNow.

As this first chapter comes to a close, we are beginning the transition into the next normal. Chapter two of the journey, is no longer work from home, but work from anywhere. This opens the door to opportunities for more collaboration and innovation, as well as access to new talent pipelines.

The pre-Covid workplace no longer exists. The CIO is interacting with every C-suite member to figure out how to navigate the next normal using technology and workflows. CIOs are insisting that digitisation efforts accelerate.

Around the world, customers who are furthest along on their digital transformation journey are better equipped to manage and emerge from this crisis.

In the next normal, the office will become a more fluid destination and there will be new policies in place to protect the health and safety of workers, including where and when to work in shared spaces.

There is a great debate happening now around whether to shrink the physical size of the office or maintain existing footprints to allow for social distancing. Leaders are also thinking about everything from office sanitisation to ensuring a safe commute.

In the next normal, we will see a wave of technological innovation. Biometric tech will become more commonplace in the office. Translation tools will also become ubiquitous, enabling diversity in how people learn and speak.

Similarly, technology will facilitate

collaboration, regardless of location. Teams will be able to hire without worrying about geographic location, as they can do everything – onboard, train, manage – in a remote setting. This will open the door to a more diverse and distributed workforce.

Employees love choice. It helps reduce anxiety. And if you do not know exactly what your return to the office will be like, make sure that employees know they are at the center of your universe.

At this stage, leaders will start thinking about what talent, facilities and supply chains look like and how organisations can continue to innovate to improve the employee and customer experience in the long term.

The goal will be to increase accessibility, so that employees can get to the tools and services they need, whether they are at home, in the office or out in the field.

Hiring will also change fundamentally because employers will realise they can hire the best talent without regard to location. The winners of the talent war will be companies that use digital solutions to provide employees with more flexibility in terms of where and when to work.

21st century companies will be increasingly tech-enabled and digitally transformed. Businesses that provide their employees with the right digital experiences will see increased engagement, higher productivity, and better business continuity. ■



PAT WADORS,
Chief Talent Officer, ServiceNow.

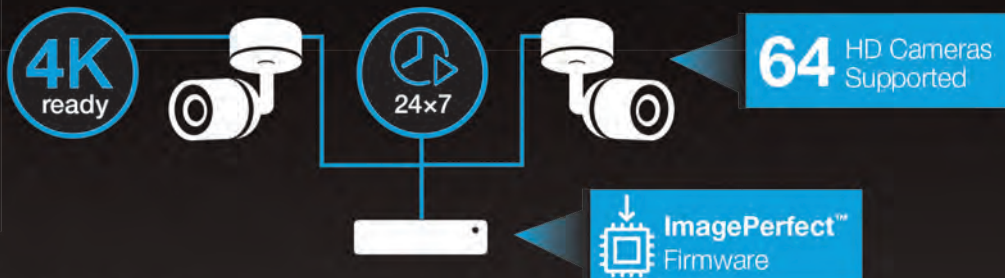
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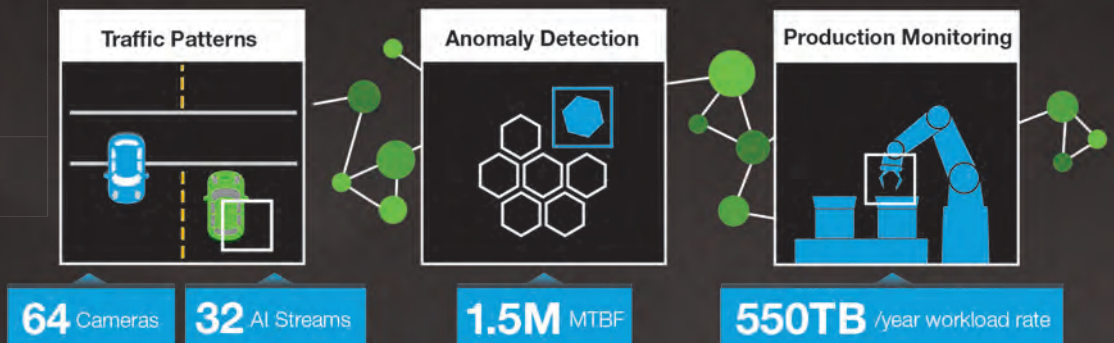
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CHALLENGERS WHO CAN DISRUPT THE CONSTRUCTION INDUSTRY

A stagnated construction industry with little innovation is allowing nimble companies to leverage technology and disrupt the market, writes Kenny Ingram at IFS.



KENNY INGRAM,
Vice President for Construction,
Engineering and Infrastructure
Industries, IFS.

KEY TAKEAWAYS

- Challengers can be small companies, new entrants backed by aligned industries.
- Major construction giants who are focusing on disrupting their own operations to drastically increase productivity.
- Challenger status is really more about a mindset—of wanting to either gain market share or protect territory.
- For smaller and middle market companies, it is about the size of your ambition rather than the size of your annual turnover.

One interesting thing about the construction industry is that it is extremely anecdotal. While smart contractors are seeking to move more of their revenue from the initial project to long-tail opportunities like maintenance and facilities management agreements, most contractors still rise and fall on their book of business. There is little durable intellectual property or overarching advantage the largest firms have to give them staying power in the market.

IFS conducted a study of 600 business decisionmakers globally and found that the construction industry—and field service, a lucrative expansion sector for many contractors—are the most attractive industries for challengers.

These challengers can be small companies today, new entrants backed by aligned industries or existing major construction giants who are focusing on disrupting their own operations to drastically increase productivity.

Challenger status is really more about a mindset—of wanting to either gain market share or protect territory through proactive, business process and product innovation—than it is about revenue. For smaller and middle market companies, it is about the size of your ambition rather than the size of your annual turnover.

For larger businesses, it is about the realisation that it is very easy to inadvertently become a smaller company if you do not regularly reinvent yourself on a fundamental

level in response to changes in the world outside your four walls.

While these challengers view themselves as capable competitors to the market leaders in their space, they may not be as proactive when it comes to planning to use technology to truly disrupt the industry.

According to IFS's study data, market leaders are more likely to plan to use artificial intelligence to add value to their market offering rather than just make workers more productive or replace existing workers. What this means is that challengers may make investments focused only on productivity, and find they are leapfrogged by market leaders who offer new information-based services that give them an almost insurmountable advantage.

The need to exploit BIM and other digital technologies is going to accelerate. Imagine a design and building team helping a project owner predict and model risk over the life of the built asset or forecast asset lifecycle cost as the projected cost of various inputs change. Imagine a contractor who can use an optimised project scheduling engine collaboratively with their subcontractors to radically collapse the construction timeline to mere days.

A shrinking construction sector means that engineers and contractors will need to double down on their investments in transformational technology and processes. Then, they can out-compete other contractors because they can profitably offer project owners a lower total cost, faster project delivery and higher quality ■

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SIX WAY TO MANAGE STRESS IN THE POST PANDEMIC WORLD

The impact of stress on our mind and body is multifold and can be managed through using six recommended practices, prescribes Ektaa Sibal.



EKTAA SIBAL is India's number one Inner-Self Transformation Specialist, International Meditation Expert, Speaker and a Gifted Energy Healer with inborn intuitive abilities.

In the current times of the Covid-19 pandemic, stress which was prevalent in the pre Covid-19 era has become even more prevalent now. There has been an inevitable increase in the ailments caused by stress. I do feel that while we give importance to building our IQ Intelligence Quotient and learn EQ Emotional Quotient and Social Quotient SQ, subsequent importance needs to be given to Adaptability Quotient AQ as well.

By familiarizing ourselves with Adaptability Quotient AQ, we can empower and create excellence in our lives by expelling stress and anxiety. Mental Health can get affected in many ways and the most common is stress, which is a condition, usually experienced when a person is going through a crisis, it can be physical crisis, emotional, professional or even a personal loss.

Hence, we can say that stress is caused when our life goes through any kind of disruption or any challenging situation. The major reason that stress comes into existence is because of overthinking and overanalyzing of any situation which causes an overload on our brain, thus activating the stress hormone Norepinephrine. The hormone is released when the brain perceives that an arduous or a challenging event has occurred. And the brain reacts to it with uncertainty, anxiety and stress.

Unlike physical conditions like a

headache or a stomach ache, where we immediately feel the pain and we address it instantly; stress or other mental or emotional conditions do not have an instant reaction. Stress is something that keeps building up in our body and if we do not address it on time, it then starts affecting our overall wellbeing.

When we are aware of the above signs that our body gives every time there is a stress overload, we become better equipped in addressing and managing it. To manage stress, it is important that we create certain practices in our daily lives which can help us in never letting stress getting over loaded in our system.

We need to accept that life will have its own discomforts in the form of difficult situations, crisis or even losses personal, financial or social. There is always a choice for us to either remain in the problem statement of asking why is it happening to me –but the other choice is that we accept and say yes, it is happening but what can I do for it.

It is all about inculcating the habit of being solution focused and adaptable to manage the situation – find solutions and be adaptable to improvise your solution if it doesn't work in the first place.

The following habits of self-care and self-improvement will help you to strengthen your body and mind to equip and empower yourself in managing any crisis.

SYMPTOMS OF STRESS

- *Cognitive issues such as memory problems, inability to concentrate, constant worrying, racing thoughts.*
- *Emotional issues such as general unhappiness, irritability, anger, anxiety which leads to Depression.*
- *Physical symptoms such as Aches and Pains, low immunity, Chest pain, rapid heartbeat, constipation or diarrhea and even loss of libido.*
- *Behavioral symptoms such as overeating or loss of appetite, insomnia or excessive sleeping, procrastinating, loss of focus, excessive use of external stimulants like drugs, alcohol.*

memory and manage stress. These exercises include breathwork or Pranayama, walking in the nature, learning something new such as cooking, singing or playing a musical instrument or even painting.

#4 MEDITATION

Meditation is a practice that is being regarded as a powerful medicine. Unaddressed stress can wreak havoc on your wellbeing and by adopting meditation as a way to address and manage stress, can prove to be beneficial. Imbibe meditation as a daily routine in your life and start with short duration of 5 minutes which with time can be increased. However, in order to really see the benefits of meditation, one needs to do it on a regular basis consistently.

#1 HYDRATION AND SLEEP

Hydration is essential not just for physical health but also for mental health. In fact, dehydration can impact your cognitive abilities, while proper hydration helps in increasing your energy levels. Similarly, not getting enough sleep also has a long-term deep impact on your mind and body. So at least 4-5 litres of water during the day and at least 6-8 hours of sleep is essential to keep your body and mind equipped to manage any difficult situation.

#2 NOURISHMENT AND DIET

Food is the fuel that runs our body. So, providing the body with the right kind of food which is nutritious and healthy is extremely important to keep your body and mind strong enough in managing and handling any crisis that you may encounter.

Exercise for your Mind

#3 EXERCISE FOR YOUR MIND

While many of us exercise to lose weight or to build muscles but when you exercise for your mind, you increase mental abilities, improve

#5 SOCIAL INTERACTION

Lack of social interaction also affects the mental health. While everybody is practicing social distancing at this time, it is important to remember not to create social disconnection or emotional distancing at this time. In fact, in any crisis situation, it is important to keep up with healthy social relationships as it helps in building emotional support that reduces the damaging effects of stress.

Gratitude Practice

#6 GRATITUDE PRACTICE

Keeping a gratitude journal has a deep impact in remembering and recording the happy moments of life. Gratitude helps in putting our focus on what we have, appreciating it and being thankful for it rather than focusing on things that we lack. This lack of focus creates stress, however when we change our focus on to something positive while being grateful for it, we create opportunities to strengthen our mental state and build immunity towards stress. ■

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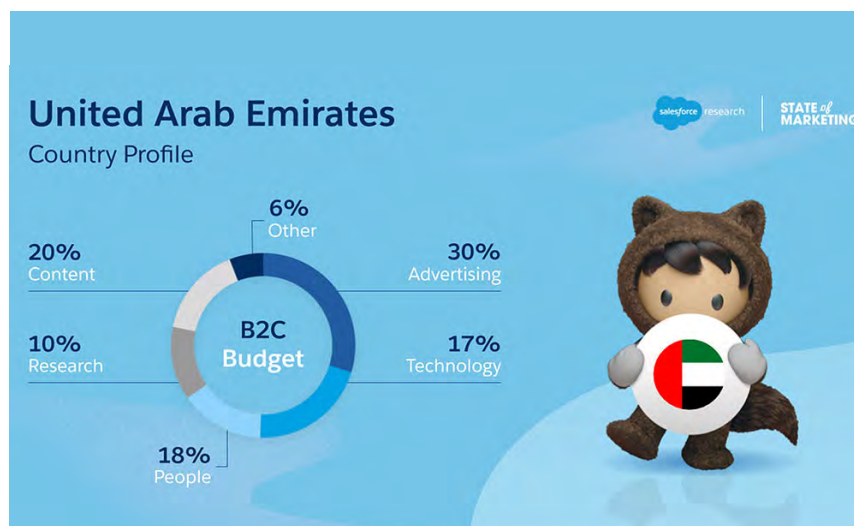
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THIERRY NICAULT,
Regional Vice-President for Enterprise
Business Unit, Middle East, Africa, and
Central Europe, Salesforce.

Salesforce report finds UAE marketers struggle with measuring ROI and attribution

Salesforce has released the sixth edition of its State of Marketing report which revealed that as technology drives customer expectations to new heights, UAE marketers have emerged as not just messengers, but engagers who foster meaningful customer relationships well beyond the first purchase. The research also found that standards of customer engagement are shifting again, and UAE marketers are finding new ways to innovate in a radically altered landscape.

Today, marketers along with the rest of the world are facing a crisis.

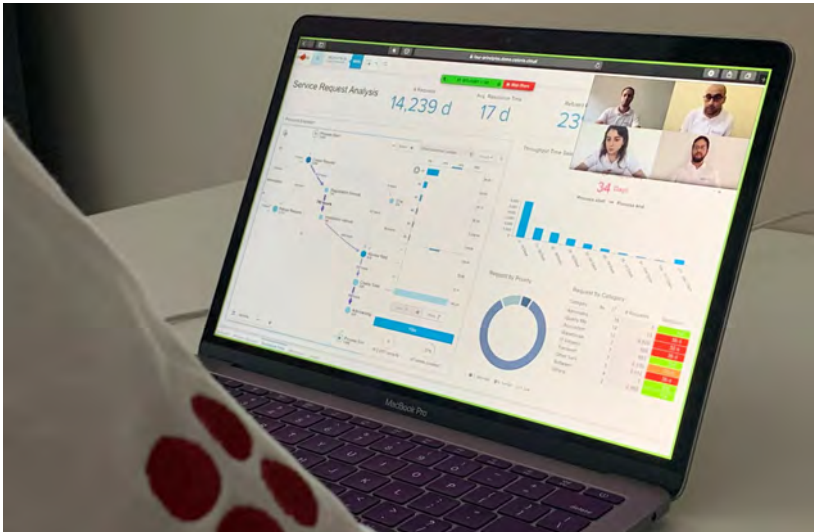
But as time goes on, business will recover, confidence will increase, and a newfound appreciation for innovation will take root. In addition to expanded online populations, marketers in the UAE also expect that virtual reality and new regulations will also bring transformational impacts by 2030. However, nothing is anticipated more than the new customers and prospects brought online as digital life permeates the global population even more than now.

For this 6th edition of the State of Marketing report, Salesforce collected data from nearly 7,000

marketing leaders across the globe, spanning six continents, just as the Covid-19 crisis emerged. After carefully dissecting the survey results, Salesforce Research deemed that the insights in this report provided significant relevance, value and a helpful guide to marketers as they navigate through these uncertain times.

The trends revealed in the State of Marketing report were collected from marketing leaders from B2B, B2C and B2B2C companies across 30 countries, including 200 respondents from the United Arab Emirates.

Four Principles partners with Celonis to improve usage of process-mining technology



Four Principles, a Lean Management consultancy and part of Abdul Latif Jameel, has announced a partnership with Celonis, which makes AI-enhanced process mining and process excellence software. This partnership will enable Four Principles to efficiently identify, analyse and monitor critical business processes in real-time and optimise client operations. Celonis' process mining technology delivers significant business value by allowing companies to discover inefficiencies, identify actions to streamline processes in real time and continually monitor them to ensure

optimal performance and improved customer experience.

Combining its operational process expertise with Celonis' proven process-mining technology, Four Principles will enable a transformational discover-enhance-monitor approach to performance improvement. With the Celonis technology Four Principles can rapidly uncover root causes of challenges in business processes, enhance operations with AI-driven actions, and continuously monitor developments with digital visualisations.

Today, big data, artificial

intelligence, IoT and automation are business-critical, as organisations of all sizes undergo digital transformation programs. However, successful business transformations are heavily dependent on selecting and analysing the right processes and implementing the right solutions with world-class technology. Celonis' innovative solution will allow experts from Four Principles to help clients realise wide-ranging benefits, including delivering revenue growth, enhancing customer experience, improving regulatory compliance, driving working capital, lowering operating costs and reducing losses.

As one of the leading homegrown consulting firms in the GCC, Four Principles is a pioneer in the transfer of Lean Management disciplines from the automotive industry into other business sectors. By successfully partnering with multiple renowned businesses and brands across the region, Four Principles continues to demonstrate a commitment to digitisation and streamlining operations, in line with region-wide strategies, including Saudi Arabia's Vision 2030.

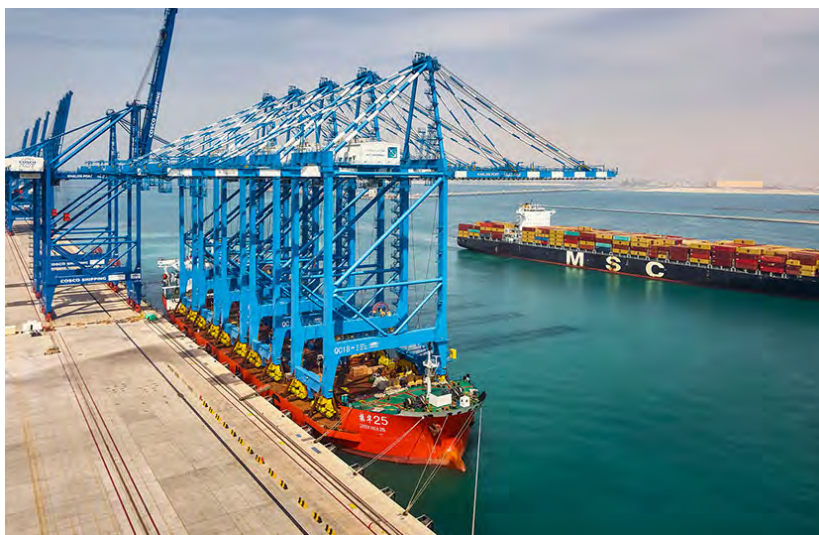
Four Principles supports a range of organisations in Saudi Arabia, and announced a partnership last month with Saudi Customs to improve their operational performance.

Global Aerospace Logistics partners with Etihad to support local jobs and training



Global Aerospace Logistics, GAL, a regional provider of integrated aircraft sustainment solutions for military and civilian customers, has announced that it has signed an agreement with Etihad Airways, the national airline of the United Arab Emirates, to support local jobs and training, enabling Etihad staff to be seconded to GAL. Initially for a six-month period, the partnership will enable GAL to leverage the expertise and experience of Etihad staff from a range of functions including maintenance, operations, supply chain and commercial departments to enhance several of its major aviation projects. The deal will also extend Etihad's specialised career training and development.

The bipartisan agreement was initiated under the patronage of His Excellency Sheikh Mohammed Bin Hamad Bin Tahnoon Al Nahyan, Vice Chairman of GAL and Chairman of Abu Dhabi Airports Company, ADAC, in partnership with Tony Douglas, Chief Executive Officer of Etihad Airways.



Abu Dhabi Terminals moves to semi-automation with largest ship to shore cranes

As part of its ongoing expansion efforts, Abu Dhabi Terminals, ADT, has announced the delivery of its latest batch of ship to shore, STS, cranes. Abu Dhabi Terminals is the Management Company and operator of Khalifa Port Container Terminal,

KPCT, the region's first semi-automated terminal and one of the most technically advanced.

The five new cranes each with a 73 metre reach, 52 metre height and a lifting capacity of 90 tonnes are integral to ambitious plans that

aim to increase capacity at KPCT to 5 million TEU by the end of 2020. The STS cranes are among the largest in the world and will play a key role in ADT's technologically advanced operational ecosystem at Khalifa Port, the flagship semi-automated deep-water port owned by Abu Dhabi Ports Group.

ADT purchased the ultra-modern cranes from Shanghai Zhenhua Heavy Industry Co, ZMPC, in China. This milestone follows the recent arrival of a batch of Automated Stacking Cranes which are also part of the expansion project, taking the total number of cranes at the terminal to 22. The final phase of ADT expansion will see the Terminal linked to the Etihad Rail network providing direct rail connections across the UAE and regionally.

The expansion at Abu Dhabi Terminals is part of AED 4 billion development projects underway at Khalifa Port including an AED 2.2 billion development of its South Quay and Khalifa Port Logistics which will expand overall capacity and boost container capacity to 9 million TEUs over the next 5 years.

Batelco launches Global SD-WAN built on Nuage Networks' orchestrated platform

Bahrain's Batelco has launched its Global Software-Defined Wide Area Network, SD-WAN, service, an end-to-end networking solution that seamlessly blends MPLS, Internet and LTE technologies into a single communication channel and delivers improved visibility, agility, control and cloud integration with greater ease of use. SD-WAN enables business customers to gain superior visibility of applications with the capability to dynamically route network traffic across the best available links to maximise throughput.

Global SD-WAN offers a seamless approach to customers that need to balance their dependency on

MPLS and internet connectivity coupled with the demand for cloud computing, mobility and digitisation governed by customer defined Service Level Agreements.

Batelco's Global SD-WAN is based on an orchestrated platform from Nokia's Nuage Networks that leverages Batelco's Global Network coverage and partnerships to enable customers to utilise the superior capabilities of SD-WAN whilst defining their own levels of control from a service offering that is fully managed or self-managed model. The Nuage Networks SD-WAN service helps to strengthen digital offerings that meet enterprise requirements driven by virtualisation



Batelco's Chief Global Business Officer, Adel Al-Daylami.

and cloud. By leveraging these SD-WAN capabilities, Batelco has the opportunity to expand its portfolio to deliver new age micro-services and IoT-driven business applications to its global enterprise customers.

Al-Futtaim enables remote contact centres using Genesys Cloud, Genesys Premises

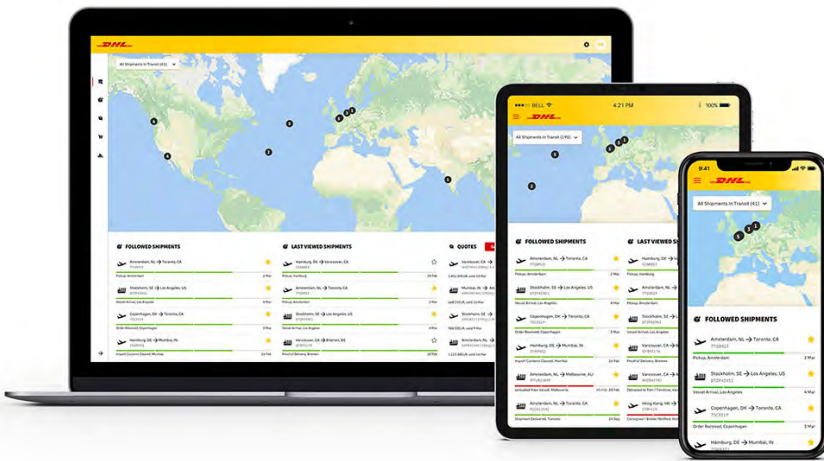
Al-Futtaim Technologies has implemented mission-critical mitigation strategies for its contact centre customers. In collaboration with Genesys, the global leader in customer experience and contact centre solutions, Al-Futtaim has enabled customers service agents to work remotely, ensuring they continue to provide important business functions during the global Covid-19 pandemic.

Al-Futtaim Technologies has put into place secure and seamless remote

working solutions using Genesys Cloud and Genesys Premises solutions. Customers across vital sectors including government, healthcare, financial services and aviation in the UAE have taken advantage of Genesys Rapid Response offer and Al-Futtaim's #BeAloneTogether programme to enable remote working capabilities for contact centre agents. As a result of its early intervention, over 500 contact centre customer service agents are remotely ensuring they continue to provide important business functions.



MURALI S,
Managing Director of Al-Futtaim Engineering and Technologies.



DHL Global Forwarding launches myDHLi platform for freight forwarding suppliers

DHL Global Forwarding has launched myDHLi, a fully integrated online platform for freight forwarding customers. myDHLi's highly intuitive user interface makes it easy to use and ensures that customers have all relevant information at hand. Reflecting already well-established social media functions like follow and share, relevant information can be easily accessed across organisations and trading partners.

Completely transparent management of freight rates, offers, transport modes, carbon emissions, and all other relevant shipment data is readily available with just a few clicks and can be displayed in detailed analyses and reports. One of the most unique aspects is the

benefit of full visibility and control over all shipping and transport modes, 24 hours a day, 7 days a week.

The platform merges existing online services like myDHLi Quote + Book and myDHLi Analytics with new services and features, and incorporates them into one innovative platform. Services like a very efficient search capability enhance the user experience. On top, developed completely in-house, the new tracking service uses end-to-end information to make shipments across air and ocean visible nearly in real-time. This gives users complete control, from pick-up to final delivery. The service also offers raw data Excel extracts.

Another new feature is myDHLi

Documents, which offers quick and easy access to downloadable shipment documents. All documents, quotes, commercial invoice, packing list, house bill, invoice, proof of delivery, are stored in one place. The designers adapted a mobile-first approach for seamless use on all devices. Built-in popular social media features like follow and share functions simplify communication along the supply chain by enabling customers to exchange information with colleagues, customers and suppliers. Furthermore, data can be easily analysed and exported or directly integrated to own systems, based on a suite of APIs.

myDHLi features a modular build-up. Users can individualise their portal by selecting the specific services they want. Thanks to the single sign-on registration process, all services are available from the beginning. No additional registration or sign-in processes are needed. myDHLi is free of charge for all DHL Global Forwarding customers.

The launch begins with a pilot phase including selected customers from five continents of North America, Europe, Asia, Australia, Africa. myDHLi is being rolled out in waves to ensure a smooth region-by-region transition. Interested customers can register for onboarding to myDHLi. Regular updates based on customer feedback will be shared. The previous customer portal, DHLi, will be available until the myDHLi roll-out is complete.



Abu Dhabi Power approves lab for testing low voltage switchgear, control gear

UL's Abu Dhabi electrical laboratory has been approved by the Abu Dhabi Power Corporation, ADPower, to help test low voltage switchgear and control gear equipment. Awarded with a five-year qualification, UL's Abu Dhabi laboratory has been listed

on ADPower's database for Abu Dhabi Distribution Company, ADDC, and Al Ain Distribution Company, AADC, projects until March 2025.

Since its launch as an independent entity in 2019, ADPower now owns and manages all assets previously

under the Abu Dhabi Water and Electricity Authority, which had been responsible for overseeing the water and electricity sector in the Abu Dhabi Emirate. As part of their work, UL's experts will conduct the mandatory safety procedures for low voltage switchgear and control gear assemblies for manufacturers that are working with ADDC or AADC.

Accredited by ILAC MRA member DAkkS Germany for low voltage switchgear and control gear assemblies under ISO IEC 17025, UL's Abu Dhabi laboratory is the first dedicated electrical laboratory in the Middle East. It is also the only and largest capacity independent switchgear laboratory in the Middle East and North Africa region.

It has helped play an integral role in the organisation's operations by offering advanced capabilities and equipment to support the testing of power switch gear and control gear assemblies as well as distribution boards.

STC launches cloud based virtual clinic, EMI service for storing, displaying images

STC has launched four digital initiatives to assist Saudi Arabia's healthcare providers in preventing the spread of Covid-19. The initiatives effectively contribute in facilitating the work of medical staff in hospitals and health facilities and ensuring the continuity of work remotely. These efforts come in line with the precautionary measures taken to reduce the spread of the virus to protect the lives of Saudi Arabia's citizens and residents.

Eng Riyadh Saeed Muawad, Senior VP of Enterprise Business Unit at STC, explained that the four digital initiatives that were launched by STC include the Virtual Clinic service which provides communication between patients and doctors, and the EMI service for managing, storing, and displaying medical images easily and remotely to achieve the highest quality in health facilities. The two remaining initiatives are Tari' and Fawran.

The Virtual Clinic service, which is provided through cloud computing solutions in STC, offers a medical bag to measure the patient's vital signs at their place of residence. Through this service, doctors would be able to view and interpret a

patient's results and provide medical advice to the patient seamlessly and accurately through a video call.

The EMI service organises the collection and retrieval of medical images either across departments of the same healthcare facility or between several healthcare facilities in an integrated manner and with the right information systems. This leads to improving the patient's experience and reducing the time needed by medical staff to issue medical imaging reports in a way that helps them make medical decisions effectively and flexibly. The service also serves several geographical locations using cloud computing to provide data transfer and security to all beneficiaries.

Tari' service improves sending notifications and enhances reliability. The service operates through a range of notification channels that can be customised and activated. These include the e-application, SMS messages, e-mails, machine communications, and Tera SDS. All of these channels save time, increase effectiveness, and assist medical facilities accelerate the time needed to provide healthcare for emergency cases.



ENG RIYADH SAEED MUAWAD,
Senior VP of Enterprise Business
Unit at STC.

Taibah University provides single sign-on for students using Oracle Gen 2 Cloud



Taibah University, based in the Holy City of Medina has adopted a cloud-first strategy with Oracle's Gen 2 Cloud Infrastructure to deliver secure, convenient and integrated digital learning and administrative services that can be remotely accessed by thousands of university students, faculty and staff.

The implementation has also helped Taibah University integrate and centrally manage its vast IT infrastructure, besides also enabling a crucial Single Sign On function to access the Universities' core systems. Furthermore, the provisioning identity for newly joined students and faculty members has been completely automated. This programme was formalised in 2019, with the implementation now complete in collaboration with P systems, an Oracle Partner.

Oracle's Gen 2 Cloud is the only infrastructure built to run on Oracle Autonomous Database, the industry's first and only self-driving database. With this alignment, Oracle is paving the road to becoming the world's first complete and truly autonomous cloud.



Aston Martin Lagonda selects SentinelOne's Singularity using cloud, AI, ML

SentinelOne, the autonomous cybersecurity platform company, has been announced as the official cybersecurity provider to British luxury car manufacturer, Aston Martin Lagonda, deploying the next generation endpoint protection platform to secure its manufacturing, headquarters, supply chain, and field offices against the ever-evolving threat landscape. Founded in 1913, Aston Martin has been creating exceptional automobiles built with their values of beauty, craft, and art for more than a century and has become the epitome of luxury British heritage.

Challenged by the escalating threat landscape, Aston Martin made a significant investment revolutionising its cybersecurity programme with cloud-delivered Artificial Intelligence to replace legacy antivirus. Legacy antivirus was no longer fit for purpose in protecting against modern malware and the growing prevalence of ransomware attacks. In addition, legacy antivirus required too many employees to manage while obstructing Aston Martin Lagonda's end user computing experience.

With a complex IT landscape, including Windows, Mac, Linux, and Cloud Workloads, as well as high-specification CAD, CAE, and design production workstations, Aston Martin Lagonda needed a technology solution that would seamlessly perform across different operating systems and have robust APIs for seamless integration across the tech and cybersecurity stack.

SentinelOne's Singularity platform is a product-first approach, powered by award-winning patented AI and machine learning. The solution is able to not only prevent attacks, but also autonomously reverse any threat, freeing up technical staff and giving peace of mind that no threat slips through. Aston Martin Lagonda were able to take this peace of mind to the next level with SentinelOne's Vigilance MDR, managed detection and response service, delivering global 24 by 7 by 365 SOC scalability and protecting against even the most advanced threats.

Aston Martin Lagonda joins a raft of recent customers who have selected SentinelOne to replace legacy and next-generation antivirus. The company has seen exceptional growth in the UK and across EMEA, among others securing tens of 50,000+ endpoint enterprise wins from leading financial services, retail, manufacturing, and governments in the past few months.



ADELE TROMBETTA,
Vice President Customer
Experience, Cisco Middle East and
Africa.

Connecting 2,000 active Expo staff now Cisco's largest Webex roll out in UAE

Cisco, the Official Digital Network Partner of Expo 2020 Dubai has completed its largest deployment of Webex in the UAE, connecting 2,000 active Expo users through the company's advanced collaboration software. The achievement comes in response to the UAE government's mandate, requiring a transition to remote working practices in an aim to curb the spread of Covid-19. To comply with new regulations, ensure employee safety and maintain business continuity, Expo 2020 Dubai worked closely with Cisco to further streamline its businesses communications and maintain seamless connectivity.

Cisco's relationship with Expo 2020 has seen the two entities

collaborating since 2018, achieving a number of technological milestones, including successful wide-scale deployment of the company's revolutionary intent-based network at the Expo 2020 site in September 2019. The network, which will enable visitors, exhibitors and organisers to connect securely, wirelessly and seamlessly, is already empowering employees working behind-the-scenes to better communicate, exchange ideas and create unforgettable memories for millions of visitors to the next World Expo.

Solutions already in place at the Expo site include a smartphone application which can help securely search, locate and reserve meeting rooms, an AI voice

assistant for automated note-taking and videoconferencing, and collaboration via Cisco's renowned Webex platform. As the transition to remote working began, Cisco focused on advancing its technology infrastructure to help Expo 2020 Dubai employees continue working normally. At the heart of this progression was Cisco's record-breaking deployment of security technology, enabling remote working, while also providing assurance and greater peace of mind.

Cisco enlisted its local Customer Experience team to commission and test a new remote-access VPN system, which was used to upscale VPN capacity from 300 to 8,000 concurrent connections. Within a week, the majority of users had already been migrated to the newly enhanced system.

Coupled with this was Cisco's wider rollout of Webex, already providing around 1,000 connections daily at the Expo site, and now affording unlimited access to all employees from the comfort and safety of their homes. With 2,000 active Webex users in the Expo 2020 Dubai team, this achievement signifies a new milestone in digital communications and collaboration for the UAE.

Cisco's Customer Experience team provided support for Expo's employees via tutorials and on-ground assistance, streamlining processes and ensuring each individual could maximise their potential for remote working. Since March 15, Webex has enabled over a million virtual meeting minutes between Expo 2020's teams and their respective stakeholders. Of the 28,000 individual meetings, which have featured more than 143,000 participants, an estimated 19,000 were video-enabled and the remainder were Webex voice calls.

To further empower and uplift Expo 2020 Dubai's employees during unprecedented times, Cisco has extended the use of Webex to all employees' friends and families, ensuring that human connections can continue to flourish, regardless of circumstance.

American Hospital, Cerner to use clinical AI, analytics on pandemic and home health

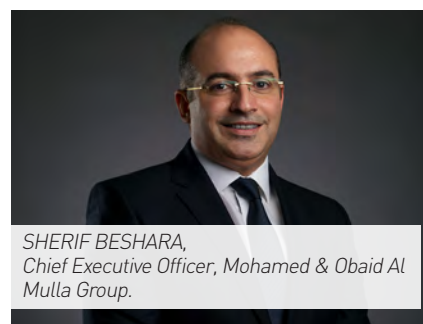
American Hospital Dubai, AHD, part of Mohamed & Obaid Al Mulla Group, has announced the launch of the first artificial intelligence research centre in the region in partnership with global health care technology company Cerner. The AI research centre aims to leverage Cerner's electronic health records, EHR, data along with its clinical AI and advanced data analytics tools to ultimately create centres of excellence for oncology, infectious diseases, and bariatric medicine.

The AI research centre is set to use big data analytics and machine learning capabilities to support data-based clinical research activities and data-driven operational improvement projects. Moreover, the AI research centre will focus on two

key projects: enabling home health experiences and enhancing care management related to the Covid-19 pandemic.

Innovative use of data through AI is a promising approach for making significant progress in the areas of virtual medicine, population health management, innovative use of data analytics and visualisation as well as advanced clinical decision support. These developments may have significant positive influences on the individual's health journey.

As part of enabling new and improved home health experiences, the virtual medicine concept will provide smart and convenient services to patients, such as telemedicine, video, and phone visits, from anywhere. Remote



SHERIF BESHARA,
Chief Executive Officer, Mohamed & Obaid Al
Mulla Group.

patient monitoring using connected devices that are integrated with the patient's health portal and accessible by caregivers will further enhance this experience.

The AI research centre will also allow American Hospital Dubai to leverage big data analytics to better understand the healthcare needs of the UAE population. This will empower American Hospital Dubai to create personalised care plans, predict disease courses and intervene earlier using risk assessment models incorporated into the EHR.

Real estate to gain by joint Honeywell Forge and SAP Cloud Real Estate platform



Honeywell and SAP have teamed up to create a joint cloud-based solution based on Honeywell Forge, the company's enterprise performance management offering, and SAP Cloud Platform that will streamline and combine operational and business data to support better decision-making and drive greater efficiencies. The companies' first area of focus will be the real estate industry, where building owners often need to pull data from disparate sources that are not normalised. This makes it extremely difficult to determine the true efficiency and utilisation of their portfolios.

Drawing on the power of the

Honeywell Forge autonomous buildings solution and the SAP Cloud for Real Estate solution, the new offering will enable facility managers and building owners to reposition their portfolios through cost savings and newly identified efficiencies, while also helping to improve tenant experience. Honeywell Forge powers a new AI-driven autonomous control capability that makes automatic adjustments to maintenance, comfort and sustainability.

As buildings come back online in the midst of the Covid-19 pandemic and economic crisis, owners are expected to focus on key performance indicators tied to enhanced occupant safety and

reduced carbon footprint along with energy savings. By providing real-time access to these KPIs, the joint offering will help building owners optimise their operations to meet aggressive energy savings targets and substantially reduce maintenance hours. For example, in the HVAC operation alone, which is known to account for 35% of total energy consumption in commercial buildings, an AI-automated system such as Honeywell Forge can save up to 23% in energy costs.

The solution from Honeywell and SAP will provide customers with easy access to a wider range of pertinent real estate data, including energy performance, security, maintenance, rent, taxes, location, regulations, lease terms and other costs. The solution will include:

- Predefined extensible dashboards combining information technology and operational technology KPIs, leveraging artificial intelligence
- Monitoring and reduction of annual energy spend, resulting in reduced carbon footprint and greater energy efficiency, even as maintenance hours decrease
- A harmonised data architecture that connects building data from Honeywell with real estate and financial data from SAP
- Combined human comfort KPIs with measured experience KPIs

Zebra MotionWorks Proximity offers sensing, contact tracing, alerts, inside workplace



Zebra Technologies has launched Zebra MotionWorks Proximity. The solution offers proximity sensing with user-level alerting and contact tracing to enable employers to help protect their employees' health while in the work environment. Governments around the world have issued guidelines requiring employers to develop and implement

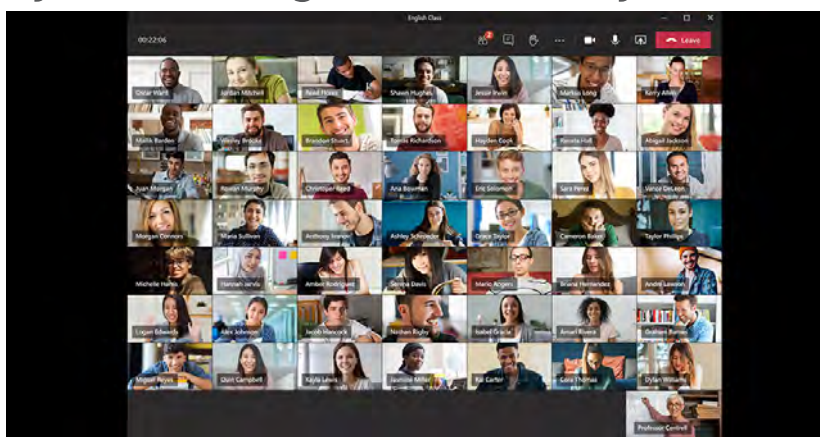
appropriate policies such as, but not limited to, social distancing, contact tracing and disinfection. Zebra's MotionWorks Proximity solution meets the requirements outlined in the guidelines and the needs of many enterprises looking for a viable option to enhance their reopening strategies.

Zebra's solution provides

proximity and contact tracing insights, dashboards and reports to employers as well as individual proximity alerts for the employees. The data is tied to an employee ID or anonymised user ID, allowing for actionable insights by the employer while allowing for the privacy of individuals, unlike other public contact tracing solutions. Accurate, automated contact tracing can help companies quickly identify exposed employees for testing, potentially limiting widespread facility closures.

Leveraging Bluetooth Low-Energy and WiFi, the software solution is hosted in the cloud, implemented quickly and managed remotely by Zebra, eliminating on-site professional services. It doesn't require new infrastructure and can be leveraged on existing supported Zebra Android devices or new devices available in different form factors and price points depending on customer requirements.

Microsoft finds 61% educators will use hybrid learning in next school year



New insights reveal a continued surge in use of digital tools for distance learning, according to a global survey by Microsoft. More than 500 members of the Microsoft Education community, representing teachers and institutional leaders from around the world, shared learnings from remote teaching this year; how they're preparing for the fall; and the new ways that will reshape the next school year.

The findings reveal that 61% of

respondents expect to begin the next school year in a hybrid learning environment, a mix of remote and in-person learning, and 87% said they expect to use technology more than before once in-classroom teaching resumes.

New remote learning formats require new thinking to create compelling, engaging, and inclusive content. To ensure strong student engagement across different activities and maintain secure digital

classrooms, educators are turning to a central hub of digital tools for remote learning. In fact, more than 150 million students, faculty, institutional leaders, and teachers have been actively using Microsoft Education products, with Teams for Education as that hub, to engage students in remote learning. For example, the UAE enriched its smart learning ecosystem by announcing distance learning initiatives that brought over 650,000 students online within the first two weeks of the programme.

Microsoft also announced new features in Teams for Education, including an expanded audience view of up to 49 participants, custom backgrounds, and virtual breakout rooms, among other new features, that will help support learning in the upcoming school year. This comes in addition to the previously announced additions that are already available, where students can Raise Their Hands during class meetings, and educators can view Attendance Reports and Class Insights, a breakdown using intelligent data analytics that analyses how students are engaging with class meetings, assignments and more.



GLOBAL CIO FORUM, ROSETTANET HOST WEBSUMMIT ON POST-LOCKDOWN STRATEGIES

On July 2, RosettaNet Singapore and Global CIO Forum, GCF, hosted the APAC and Middle East Chapter of the Post Lockdown Strategies: CIOs Rethink, Reset and Restart WebSummit. In the prevailing conditions created by the Covid-19 pandemic, the GCF WebSummit series with RosettaNet Singapore offers insights across diversified industries, countries and geographies, for CIOs to analyse and adapt them to specific market segmentations on the road to recovery.

As a keynote, the Global CIO Forum Technology Research Insight 2020 for APAC was launched by Manoj Saxena, Chairman of RosettaNet Singapore GS1 Digital Standards. It's first in a series of technology 360-degree market research to provide in-depth insights into digital trends and drivers for innovation. The research is a part of Global CIO Forum's continued efforts to reinforce the vision of One industry, One Voice.

The findings from the research will be used to deliver actionable programmes by technology thought-leaders and consortiums globally through webinars, round-table discussions, training programs,

and others. The research will set priorities for the short- and long-term, driven by the thought-provoking industry leaders, evangelists, government agencies, and educational institutions.

The welcome note for the Post Lockdown Strategies: CIOs Rethink, Reset and Restart WebSummit was delivered by Malavika Shanker, President South East Asia GEC Media Group. She said, "In the pandemic storm, as we navigate the deep dark ocean of business, it is our endeavour to create a series of GCF Websummits, bringing together tech leaders across geographies and industries to discuss problems and look for solutions for the greater good of the community."

Loh Sin Yong, Director, Trade Sectoral Transformation Group, Infocomm Media Development Authority, IMDA, talked on the topic of Trade Trust: A Cross-border Blockchain Digitization Initiative. He said, "Covid-19 has brought about disruptions to businesses and our lives on a scale we've never seen before. The disruptions have shifted our attitude and elevated our priorities in relation to the need for digitalisation, especially in international trade that relies heavily

on paper-based processes. The solution cannot be just a technical one, but needs to be an embodiment of business needs, standardisation, law, and technology."

The WebSummit then moved on to an engrossing discussion featuring a distinguished and cross-border panel of industry and government leaders, who also shared their post-Covid recovery strategies. The panel included Loh Sin Yong, Manoj Saxena, Ajay Rath, Director IT, Dubai Healthcare City Authority; Eng Mohammed Mahnashi, Consultant at Ministry of Foreign Affairs, Saudi Arabia; Atul Gaur, Director, Savex Technologies; and Khang Nguyen Trieu, CIO Asia Pacific at Accor. The Post Lockdown Strategies: CIOs Rethink, Reset and Restart WebSummit concluded with a Q&A session.

Atul Gaur discussed how many companies in distribution and supply chain are facing acute drop in demand for products and services, albeit some products are also getting impacted by shortages. This disruption has resulted in significant inventory imbalances while slowing sales have also resulted in revenues getting adversely impacted. Compounded effect of

slowing collections and liabilities of payments to suppliers, have resulted in massive working capital stress and negative cash-flows.

He added, "It is therefore critical for companies to take measures to shift focus on products, with higher sales velocity and better inventory predictability. Manage working capital issues by renegotiating payments terms both with suppliers and customers and invest in areas which can automate processes which will not only help in cutting manpower costs but also improve agility."

Ajay Rathi observed that every crisis is an opportunity to pivot. Digital transformation to a new way of life will evolve at a speed we have never imagined. "We are at the right

juncture to Reset-Rethink-Restart a new world of opportunities and happiness for a better tomorrow."

Mahnashi pointed out that an agile and comprehensive plan will help to mitigate all risks and give a healthy recovery after the lockdown. There are many lessons to be learned from this pandemic:

- Do not underestimate any case.
- Be ready with plans for future pandemic and lock downs.
- Do not refuse new ideas. What was impossible in 2019 is the saviour in 2020. This includes work from home, e-learning, virtual stores, virtual meetings.
- Reprioritise is a must.

Khang noted that with heavy lasting business downturn, sustainable cost savings will be key

to preserve cashflow. Being lean will be key to be able to create margin to invest on preparing the future. To manage a context with enormous uncertainties and very short visibility, having different reversible options which can be implemented progressively depending on how the situation unfolds can be very helpful. In hospitality, domestic markets are the current focus as international travel will probably take a long time before becoming fluid again.

He added, "People and companies usually change only when they have hit the wall. In this case, Covid-19 has been the wall and it has accelerated digitalisation of many companies significantly as well as showcasing whole new ways of working and this will probably continue." ■

GCF UNITE WebSummit 2020 AFRICA

LIVE WebSummit on

DIGITAL AFRICA

Leapfrogging Technologies to Drive an Impeccable Digital Africa

01 JUL 2.00PM - 3.00 PM Greenwich Meridian Time

Speakers

Aisha Addo
CEO/Founder, DriveHER

Kojo Choi
Business Entrepreneur, PayBox

GLOBAL CIO FORUM, STRATEGIC PLUS HOST WEBSUMMIT ON DIGITAL AFRICA

On July 1, Strategic Plus in partnership with Global CIO Forum, GCF, flagged off the GCF Unite WebSummit, Africa. The event is set to unfold with one session a week, every Wednesday, for three weeks in a row. The theme

for the WebSummit was Digital Africa. It presented a platform for conversations about technology and how Africa can leverage global standards in meeting its own technological demands.

The ability to create, acquire

and adapt new technologies is a critical essential for competitive growth in the global marketplace. Covid-19 and the striking effect of social distancing and lock-downs have presented the opportunity for Africa's CIO's and entrepreneurs to transform and elevate commerce, health, education, finance, governance and creative culture in order to sustain the economy.

The topics covered during the GCF Unite WebSummit, Africa included:

- Leapfrogging technology to drive an impeccable digital Africa. The role of techpreneurs and digital transformers.
- Transforming businesses today and into the future by driving high-velocity growth through forging cross-border partnerships and cutting-edge technologies.
- Re-imagining business in Africa. A leader's outlook on how innovation and technology are the only way forward to develop enterprises and economies.

The speakers for the first session of the GCF Unite WebSummit, Africa were Aisha Addo, CEO and Founder of DriveHER and Kojo Choi, Business Entrepreneur at PayBox. The WebSummit was moderated by Kwaku A Ofosehene, Founder and Executive Director of Strategic Plus Solutions, and Cassandra Tawiah, a leading entrepreneur in the region.

The GCF Unite WebSummit, Africa brought together attendees from across Africa and rest of the world. It was sponsored by Strategic Plus Solutions, GEC Media Group and the Global CIO Forum. ■

EXCLUSIVE



DATA

VEEAM ALIGNS WITH DIGITAL TRANSFORMATION THROUGH ACT II

Fueled by direction from Insight Partners, Veeam is aggressively aligning with hyperscalars and building solutions for cloud and Kubernetes platforms.

In January 2020, Insight Partners entered into a definitive agreement to acquire Veeam Software, a vendor in backup solutions that delivers cloud data management. Under the ownership of Insight Partners, Veeam has become a US company, with a US-based leadership team, while continuing its global expansion. The acquisition will enable Veeam to accelerate its Act II - Veeam's evolution into hybrid cloud. As part of the acquisition, Bill Largent was elevated

to Chief Executive Officer and Danny Allan to Chief Technology Officer.

Following an investment from Insight Partners at the beginning of 2019, Veeam has worked alongside Insight Partners' business strategy and ScaleUp division, Insight Onsite, to expand its software-defined Veeam Cloud Data Management Platform. The company launched a number of new innovations in 2019, including Veeam Backup for Amazon Web Services, Veeam Backup for Microsoft Office 365 v4,



*BILL LARGENT,
CEO at Veeam.*



IN A WORLD WHERE A BUSINESS'S MOST VALUABLE ASSET IS CONSTANTLY ON THE MOVE, DATA MANAGEMENT HAS NEVER BEEN MORE CRITICAL.

Veeam Universal License and Veeam Backup for Microsoft Azure. At the core of Veeam's strategy is flexibility and reliability. According to the IDC Software Tracker, Veeam has the lead market-share in EMEA and #4 worldwide, after DellEMC, Veritas and IBM.

Veeam operates in delivering backup solutions that enable cloud data management, and has recently launched cloud-native solutions that will enable customers to orchestrate data across AWS and Microsoft Azure environments – core elements of its Act II. In a world where a business's

most valuable asset, its data, is constantly on the move and being created at unprecedented rates, data management has never been more critical, and more complex.

Legacy solutions cannot keep up. Veeam's software provides holistic coverage for the modern business. A major focus has been the criticality of data to business success as customers undergo rapid digital transformation. 44% of global enterprises are being hindered in their digital transformation journeys due to unreliable, legacy technologies, according to the Veeam 2020 Data Protection Trends Report.

ACT I TO ACT II

For Veeam, moving from Act I to Act II is about the transformation it is going through. When Veeam started in 2006, it was about VMware, VMware virtualisation and later HyperV. Act II is more about building a single platform for cloud, virtual and physical. Act II essentially builds an end to end solution for the modern virtual data centre. Veeam is now moving from VMware deployments and pure backup and recovery to reducing risk and helping to accelerate digital transformation in its customer base.

As part of Act II, Veeam is also expanding the scope of its business from the channel. Other than its value-added resellers and other channel partners, Veeam plans to leverage on its OEM relationships and alliances. This includes HP, NetApp, and Cisco, amongst others. Act II also involves the transition

LEGACY SOLUTIONS CANNOT KEEP UP, VEEAM'S SOFTWARE PROVIDES HOLISTIC COVERAGE FOR THE MODERN BUSINESS.

KEY TAKEAWAYS

- 44% of enterprises are being hindered in their transformation journeys due to unreliable, legacy technologies.
- For Veeam, moving from Act I to Act II is about the transformation it is going through.
- In the months ahead, Veeam expects to improve its relationships with the global hyperscalers.
- Veeam is deeply into cloud strategy with Founder Andrei Baronov driving the innovation, along with other key architects.
- Largent regards Veeam's vendor alliances and relationships as important with HPE, NetApp and Cisco leading the pack.
- Kasten is a new one for Veeam over the last 12 months and Veeam believes containers need to be there.

from socket licensing, followed by VMware, to user and licensing portability.

As part of Act II, CEO Bill Largent, also points to the changes with the Veeam founders as being significant, having closely worked with the founder team since 2001. Following the closure of the acquisition by Insight Partners, in January 2020, Co-Founders Andrei Baronov and Ratmir Timashev stepped down from the Veeam Board. "It is really a transformation of their day to day activity out of the business to consulting activity for the next 12 to 18 months as they transition their roles," reflects Largent.

The focus is all about helping customers navigate their move to hybrid-multi-cloud for data protection and how organisations are looking to embrace new data management models for on-premises, hybrid and multi-cloud. Since the start of 2020, Veeam has reported annual recurring revenue increase of 21% year-over-year for Q1 2020 and that it is experiencing success in market adoption of its subscription offering, Veeam Universal License, reporting 97% YoY increase in bookings across more than 375,000 customers.

In the most recent IDC Semi-Annual Software Tracker for Data Replication & Protection 2H 2019, Veeam had the fastest revenue growth, both sequentially, 9.8% and year-over-year, 20.5%, outpacing the overall market average by 3x. Veeam recently launched a solution for data management and protection for hybrid-cloud environments –

Veeam Availability Suite, VAS v10. With more than 150 new features and enhancements – including modern NAS support, Multi-VM Instant Recovery and heightened ransomware protection – unique downloads of VAS v10 have already exceeded 200,000 since general availability.

DIGITAL TRANSFORMATION 2021

In the months ahead, Veeam expects to improve its relationships with the global hyperscalers. "They need a lot of maturing," says Largent. To make this happen, Veeam is doubling the size of its research teams and co-founder Andrei Baronov is driving the innovation here, according to Largent. Veeam is also expanding the list of its cloud service providers, which now amounts to 25,000+.

Veeam's latest SaaS offering that it has built around Microsoft Office 365 is also one of Largent's hot spots for 2021. "This SaaS offering, which we have not had historically, has been our fastest growing single feature product offering, we think because there are hundreds of millions of users out there using licenses for Office 365," he explains.

The runaway growth around Veeam Backup for Microsoft Office 365, means that the vendor is almost running it as a separate business line. "But we really don't do that, the way you might think of other entities doing that," Largent point out.

On software development, Veeam is deeply into cloud strategy with Founder Andrei Baronov driving the innovation, along with other key architects.

Another important Veeam development that Largent expects will drive digital transformation is its licensing portability. "We started that change a little bit ago. So that is a big piece of our digital transformation. You can take that license with you in the cloud, on-premises, or the hybrid cloud. We believe that is a significant step for us, how we have done the licensing," he explains.

A MAJOR FOCUS HAS BEEN CRITICALITY OF DATA TO BUSINESS SUCCESS AS CUSTOMERS UNDERGO RAPID DIGITAL TRANSFORMATION.

KEY TAKEAWAYS

- Kubernetes takes away the pain of high availability and scalability but these benefits do not extend to data.
- Data management of Kubernetes applications is a critical priority.
- Veeam's latest SaaS offering built around Microsoft Office 365 is also one of Largent's hot spots for 2021.

While cloud and hyperscale is a key focus area for Veeam's growth and innovation, Largent stresses that the vendor is not refocusing. "Our core business is backup and recovery and that still drives innovation coming along, that moves us further into the enterprise world," he points out.

VENDORS, ALLIANCES, PARTNERS

Largent regards Veeam's vendor alliances and relationships as important with HPE, NetApp and Cisco leading the pack. "We are working with probably 30-40 different storage platforms and have those kinds of relationships. We have also expanded into Kubernetes and other areas with some of the different software vendors."

Veeam has emphasised its

partnership with Kasten over the last 12 months, the leader in backup solutions for containerised workloads, using its K10 Data Management Platform, purpose-built for Kubernetes, providing enterprise operations teams easy-to-use, scalable, and secure system for Kubernetes backup and application mobility. "Kasten is a new one for us over the last 12 months now and we believe that containers need to be there. We think that is still out several years – two years before heavier deployment," he explains.

While Kubernetes takes away the pain of ensuring high availability and scalability of application services, these benefits do not extend to data, making data management of Kubernetes applications a critical priority. Kubernetes-based environments are fundamentally different from those based on earlier technologies and accordingly, require a different approach to backup, one that Veeam describes as a Kubernetes-native backup.

On the channel and sales activities, Veeam continues to focus on commercial markets with 500 to 5,000 employees, and enterprise markets with above 5,000 employees. Till date, Veeam has not experienced delays in payment collections through the channel. "We have not seen that yet, does not mean it will not happen, because we are now you know, only 60-90-100 plus days into it. We have not seen significant issues," points out Largent.

While across US, Australia, New Zealand, Veeam sees much more of push to the cloud; across Europe,

Middle East and Africa, EMEA the move to the cloud is less aggressive. However, order sizes are larger from across EMEA and Asia Pacific. Largent emphasises that going forward, partners must realise that it is going to be a hybrid cloud world – with on-premises, off-premises, private and public cloud. "That is what we have seen so far," he indicates.

MOVING FORWARD

Following the closure of the acquisition by Insight Partners in January 2020, Veeam co-Founders Andrei Baronov and Ratmir Timashev have stepped down from the Veeam Board. Veeam's CEO Largent, points to the transition ahead of moving from a Founder led business to one driven around P-E.

Across the years from 2001, the Founders and Largent have managed the double-digit growth of the global company, focusing and frequently repositioning at the same time. According to Largent, while the team will remain the same, the Founders will move to a less prominent position. "So, we have kind of handled things, the three of us, I would say, on a communal basis, have done our own thing."

Largent says it is his style to pick up the phone and talk to alliance partners directly, in the normal course of operations. "Because I am pretty direct and open, it is always good to make sure you get good facts and always good to hear some things firsthand. But in the last three months since I have taken responsibility, my whole focus has been on the internal transition."

Largent's role historically, starting in October of last year, was all about deal closing, getting sales accomplished, talking to customers, as well as vendors in the Veeam partner community. All that changed when Largent moved into the CEO role in January this year, where he is now steering Veeam through the turbulent months ahead and into 2021. ■

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to help you make success sustainable.



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GROWTH OF 3D PRINTING FARMS AND PLANTS

COVER FEATURE

Top executives from the industry explain how 3D printing technologies, materials, and applications, have evolved making print farms and plants a reality.



Lothar Hohmann,
Precise Group.



Gautham Raj
Jumbo Group



Mathew Thomas,
HP Inc.

PRECISE

BUILDING AN ON-DEMAND 3D PRINTING AND PRODUCTION FARM

Precise is amongst the biggest 3D printing farms in the region, and is creating products required for the pandemic as well as showcasing technology.



LOTHAR HOHMANN,
President Precise Group.

With the pandemic affecting supply chain systems worldwide, the value of 3D printing with its ability to produce on-demand has been appreciated by more people enabling Precise to activate opportunities previously untapped.

With the bottlenecks of supply chain in the current pandemic times, 3D printing has proven that it can serve as a cost-effective option to produce spare parts on-demand.

Home to innovations in 3D printing and complementary technologies, Precise has been a one-stop-shop solutions provider for additive manufacturing experts and enthusiasts. With more than 70 printers in its facility in Dubai

Investment Park 2, it has become the biggest print farm in the region where patrons come for its expertise and solutions-oriented approach.

By customising each solution to a client requirement, from middle-school 3D printing laboratory to a government agency 3D hub, Precise caters to clients' needs.

With Precise 3D printing experience, it is able to provide expert advice and solutions to clients – avoiding challenges for the customers in printing and purchasing printers.

Challenges arise when clients require 3D printing education to manage their expectations. Additive manufacturing is still to achieve cost effectivity and production volume to compete with traditional factory lines.

Clients with less experience with the technology often come back for technical support. This is where Precise educates the users to the best and updated modules from manufacturers to empower the operator to further optimise 3D printing experience.

Manufacturers regularly update Precise with retraining and use cases to present to a wider audience. The variety of applications of 3D printing creates better demand and understanding for more sectors who may not know its benefits now but will decide to incorporate it in its operations in the future.

Creating awareness and demand

for 3D printing in sectors who are new to the technology is a challenge in itself. The investment value is intimidating, added to the fact that additive manufacturing is technical and is still hard to grasp for some audiences.

Product demonstrations where clients require to bring machines to various locations can be another challenge, as it requires more time and effort to set up the machines than the presentation itself.

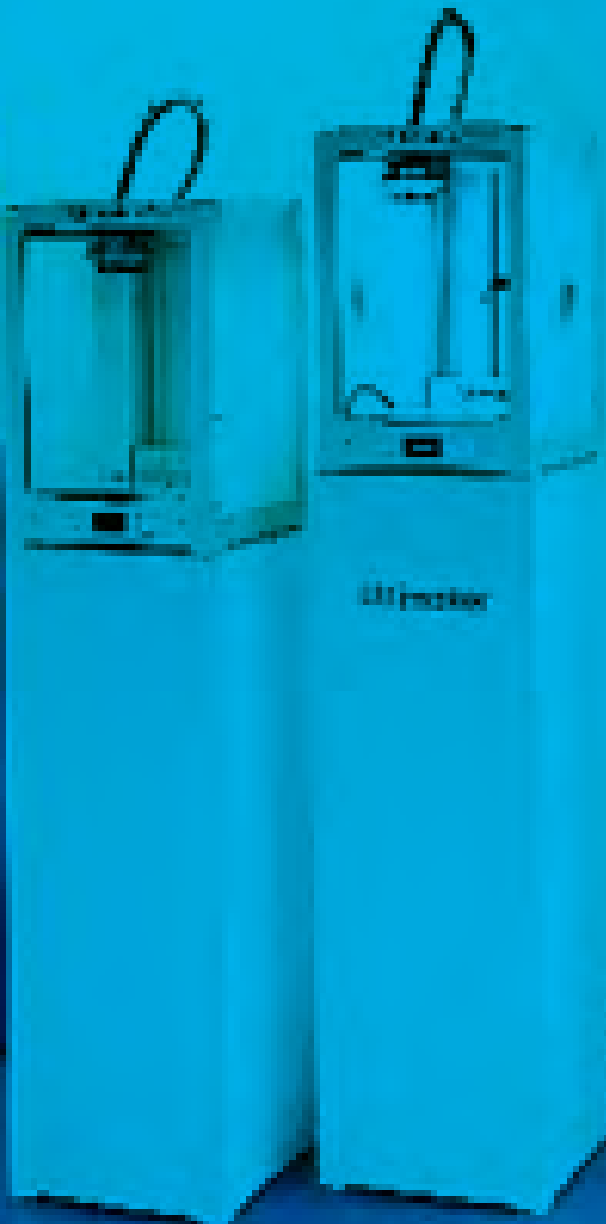
By introducing 3D printing techniques and application into industrial settings, Precise is able to spread a campaign for technological industrial revolution – where on demand manufacturing of spare parts is made possible, reducing the need for importing or relying into external suppliers which in the end, reduces costs and improve timeliness and productivity to the inhouse team of the end-user company.

Precise is continuously educating various sectors of the untapped opportunities with 3D printing. By educating companies about different types of print farms, end users gain operational independence by being able to create on demand materials they need as opposed to relying to a third-party provider.

By empowering companies to operate their own print farm, they become independent of supply chain bottlenecks, especially during these times of uncertainty when things will go back to normal. ■

KEY TAKEAWAYS

- Challenges arises when clients require 3D printing education to manage their expectations.
- Additive manufacturing is still to achieve cost effectivity and production volume to compete with traditional factory lines.
- Clients with less experience with the technology often come back for technical support.
- Manufacturers regularly update Precise with retraining and use cases to present to a wider audience.
- By introducing 3D printing into industrial settings, Precise is able to spread a campaign for technological industrial revolution.



THE PRECISE 3D PRODUCTION PLANT

Precise is a one-stop solutions provider for additive manufacturing experts and enthusiasts. With more than 70 printers in its facility in Dubai, it has become amongst the biggest print farms in the region.

With a diverse line of 3D printings, ranging from fused deposition modelling which mainly uses plastic materials, to selective laser sintering using powder materials for more industrial use, to clay printing for artists and the construction sector, Precise is able to offer a range of solutions for various applications.

Precise has the biggest print farm in the UAE using brands in the industry such as Ultimaker. The printers are using fused deposition modeling technology utilising a wide range of materials from recycled plastic to antimicrobial NanoCopper additives that inhibits viral activity on printed items.

The inhouse team is certified and qualified by European standards to operate and troubleshoot the printers, at the same time, work with clients in developing print files from the most unique to the most practical.

As machines still require maintenance and troubleshooting, the Precise team continuously equip each solution consultant with the most advanced technical know-how in optimising designs and making sure prints run smoothly into the printers, avoiding any error costs and issues with clients.

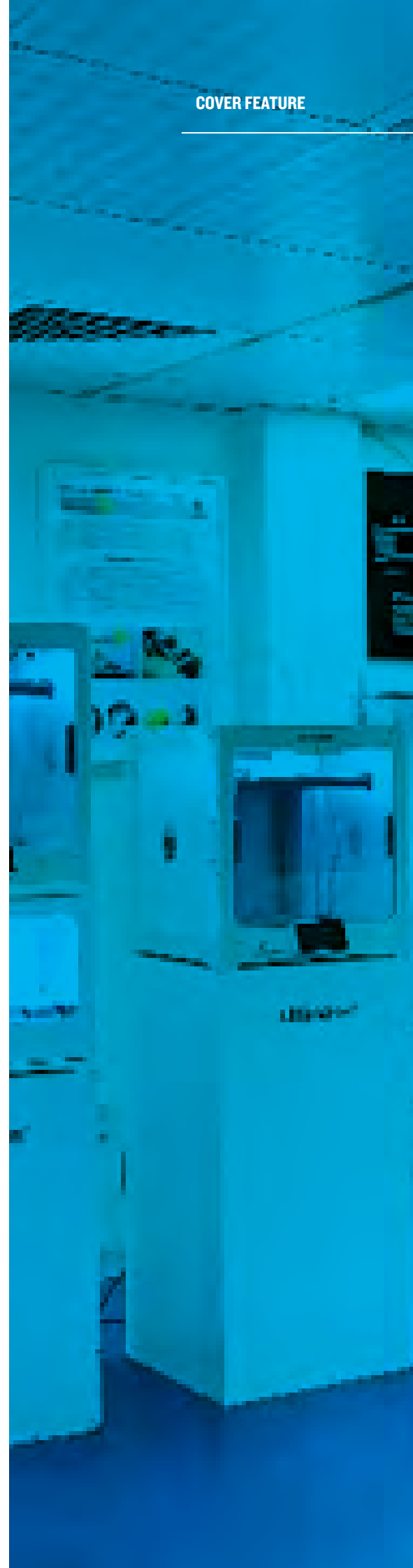


PRODUCTS FROM 3D PRINTING

To respond to the pandemic, Precise reinvented itself into making personal protective equipment such as face and eye shields, and mask strap hooks. It had also pioneered in the manufacturing of anti-microbial surface covers which has an additive tested to successfully destabilise bacterial cellular membrane, reducing the transmission rates for the Coronavirus.

Precise has printed thousands of items supporting frontline from retail, hospitals and clinics, airline staff and passengers, as well as hotel and wellness centre team members and patrons.

It is in the last stages of introducing the highest performing reusable face mask that will protect more and more people adjust to the new normal.



JUMBO GROUP

DIVERSE AND SPECIALISED PRODUCTS FROM 3D PRINTING

Printed products include prosthetics, orthoses, spare parts, jigs and fixtures for automotive, oil and gas, engineering, contracting, tooling companies.



GAUTHAM RAJ,
Head Enterprise Systems and
Services, Jumbo Group.

The Jumbo Group established a separate company Jumbo 3D Manufacturing Co in the last quarter of 2018. The company offers 3D products, designing services, consultancy and additive manufacturing services across the value chain of the 3D printing business.

Jumbo 3D Manufacturing partnered with HP Inc to market and distribute their range of production

and engineering printers using Multi Jet Fusion technology. Jumbo 3D Manufacturing facilitates industries to understand the power of additive manufacturing and help them in designing parts and assimilate these machines into their production processes and leverage the full value of additive manufacturing in the business.

One of the challenges is the mindset of traditional manufacturing costing along with production capacity and material specification requirements. Another challenge Jumbo 3D Manufacturing has is the understanding of the technology and material or product test requirements, material certification and warranty of product.

Since Jumbo 3D Manufacturing have set up the center, they have focused on making the market. Jumbo 3D Manufacturing have invested in developing use cases across different sector. As a result of which Jumbo 3D Manufacturing has seen significant increase in the

adoption of technology by various industry.

The reason for success has been the ability to address challenges that were faced by the industry in adoption of 3D, which were high investment cost of setup, a lack of trained resources for designing and production, lack of awareness and production capacity.

Jumbo 3D Manufacturing not only have customers from the various Emirates of UAE but also customers in other countries in the Middle East and Europe.

THE JUMBO 3D PRODUCTION PLANT

Amongst the printing equipment and 3D printing products available at the facility are HP Jet Multi Jet Fusion 4200 for manufacturing, HP Jet Multi Jet Fusion 580 for full color prototyping and engineering, Sindoh FDM Machines for basic design and prototyping, Envisiontech DLP for medical and dental design and prototyping, bead blasting unit, paint booth and 3D scanner.



KEY TAKEAWAYS

- Jumbo Group established a separate company Jumbo 3D Manufacturing Co in the last quarter of 2018.
- Jumbo 3D Manufacturing partnered with HP Inc to market and distribute the Multi Jet Fusion technology.
- Jumbo 3D Manufacturing has customers from other countries in the Middle East and Europe.

The Jumbo 3D Manufacturing facility in Dubai houses a variety of 3D technologies, post processing and finishing units. Jumbo 3D Manufacturing has also invested in design engineers who work with customers to study their current processes and help in converting their designs for printing in 3D machine.

The primary changes Jumbo 3D Manufacturing has seen over the past 12 months are in speed, cost of production and a larger gamut of material, besides improvement in speed, cost of production.

Jumbo 3D Manufacturing have invested significantly in various technologies and post-production processing units. Jumbo 3D Manufacturing does not see any limitations in capacity to produce parts. Jumbo 3D Manufacturing is constantly looking at upgrading the facility to offer better technology and services to our customers. ■



PRODUCTS FROM 3D PRINTING

The various products that have been printed at the Jumbo 3D Centre include more than 50 prosthetics and orthoses real parts, more than 100 different architecture models and a significant number of custom-designed spare parts along with designing of jigs and fixtures for automotive, oil and gas, engineering, contracting, tooling companies.

The 3D Centre also helps customers across different industries to utilise the investment that made to produce parts, prototypes, architecture models, products designing, prosthetic, medical models.

Depending on the way people are using the technology, manufacturers are coming up with specific targeted materials such as TPU, silicon, high temperature plastics, unique rapid curing material that are used for medical industry and just in time production requirement.

The medical industries and PPEs are among the sectors that have increased usage of 3D printing.



HP INC

USING 3D PRINTING TO SAFEGUARD SUPPLY CHAIN DISRUPTION

Companies are developing strategies for risk mitigation to address pandemic crisis and volatile global economic trade cycles using advanced 3D printing solutions.



MATHEW THOMAS,
Managing Director, Middle East,
Turkey and East Africa, HP Inc.

KEY TAKEAWAYS

- HP has been able to print 2.3 million parts including face shields, nasal swabs, mask adjusters, 3D printed face mask.
- HP has announced an expansion of its strategic partnership with BASF.
- HP has looked at the delivery of a first of its kind Polypropylene for industrial additive manufacturing.
- The new Polypropylene provides HP's customers with a sustainable solution.
- HP is looking at industries that want to use 3D printing to produce parts at large scales.

HP began its journey with the HP Jet Fusion 4200 Series, which is designed for short runs and production. Next it introduced the 500-300 for prototyping. And, last year it launched HP Metal Jet for production of production-grade metal parts.

HP has announced an expansion of its strategic partnership with BASF. Under the partnership it has committed to working closely with chemicals company and innovators from across various industries to develop materials that would accelerate the development of 3D printing and digital manufacturing through materials that are highly compatible with HP's Jet Fusion line.

Jointly HP has looked at the delivery of a first of its kind Polypropylene for industrial additive manufacturing. Polypropylene has historically been a highly desirable material in industrial manufacturing due to its low cost, colorability, chemical resistance and UV stability, with nearly unlimited use in the world's leading industries including consumer appliances and the \$2 Trillion automotive market.

The availability of a new additive material that replicates a traditional material used for a wide variety of auto parts found in vehicles' interior, exterior, and under-the-hood offers significant advantages for auto makers for example.

The new Polypropylene provides HP's customers with a sustainable solution, reducing waste by enabling up to 100% surplus powder reusability. It delivers high productivity and minimises waste for industrial-level manufacturing.

From a commercial viewpoint, HP is looking at industries that traditionally want to use 3D printing and digital manufacturing solutions to produce parts at large scales. The more firms produce, the higher its profits.

Industries that have long started to embrace those new technologies are the automotive and industrial sectors, where one can see mainly the production of interior- and welded parts, but also machinery parts, tubes, piping, and fluid systems.

Other applications are mainly seen in the consumer goods and medical sector, where household appliances and cosmetic applications are produced, as well as medical devices and orthotics.

Now as companies develop new supply chain strategies for risk mitigation, not only to address the current pandemic crisis or future pandemics, but to guard against volatile global economic trade cycles, advanced 3D printing solutions can help them accelerate this transformation.

Distributed manufacturing will enable local production, providing what you want, where you want, in the quantities you need. For example, on-demand production can be applied to dynamic spare parts initiatives, giving companies more flexibility. Instead of having to reallocate capital to manufacture spare parts when the initial good is delivered, parts can be produced on demand later in the product lifecycle.

Since the pandemic outbreak began, together with 30+ partners, HP has been able to print 2.3 million parts including face shields, nasal swabs, mask adjusters and the world's first 3D printed face mask. ■

TOP PREDICTIONS IN 3D PRINTING

PREDICTION #1

Automated assembly will arrive, with industries seamlessly integrating multi-part assemblies including combinations of 3D printed metal and plastic parts. There is not currently a super printer that can do all things intrinsically, like printing metal and plastic parts, due to factors such as processing temperatures.

PREDICTION #2

Data payloads for 3D printed parts will be coded into the surface texture. It is a competitive advantage to be able to build interesting things onto surfaces. By encoding information into the texture, itself, manufacturers can have a bigger data payload than just the serial number.

This is one way to tag a part either overtly or covertly so that both people and machines are able to read it based on the shape or orientation of the bumps.

PREDICTION #3

3D printing and digital manufacturing is driving a world with less waste, less inventory and less CO2 emissions with a potentially profound impact on the planet given nearly one-third of CO2 emissions stem from manufacturing. Engineers and designers will further rethink design throughout the product lifecycle to use less material and reduce waste by combining parts and using complex geometries to produce lightweight parts. This further reduces the weight of vehicles and aircraft to improve fuel efficiency which can reduce greenhouse gas emissions and energy consumption

PREDICTION #4

Universities and training programs will build a new set of thought processes to liberate designers from old thinking and allow them to tap into technologies of the future. 3D printing's biggest impact to manufacturing job skills lie on the design side.

PREDICTION #5

The consumer health sector will fuel digital manufacturing growth and adoption, as footwear, eyewear and orthodontics applications leverage 3D printing technologies.

There is a massive application space around footwear that is very lucrative for the 3D printing industry. Eyewear and orthodontics fit alongside this growth opportunity as well, given there is a lot of value for the customisation capabilities that 3D printing brings.

PREDICTION #6

Automakers will continue to unlock the capabilities of metal and plastic 3D printing systems to accelerate electric vehicle production.

The large volumes of parts the automotive industry produces annually combined with the fast prototyping and production capabilities of 3D printing create the perfect match allowing automakers and manufacturers to produce car parts that were previously impossible to create.

PREDICTION #7

The geography of digital manufacturing operations will be driven by both supply chain efficiencies and proximity to end users. The capability to deliver things digitally and produce things locally has not always won out. At the end of the day, manufacturers must analyse where in the supply chain it is the most efficient to root production – whether that's near the end users or near the source of material production.

PREDICTION #8

Advancements in software and data management will drive improved system management and part quality leading to better customer outcomes.

Companies within the industry are creating API hooks to build a fluid ecosystem for customers and partners.

By Mathew Thomas, Managing Director, Middle East, Turkey and East Africa, HP Inc.



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LIMITLESS,
YOUR DEFENSES MUST
BE BOUNDLESS.

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1 Million

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Secure
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Secure Remote
Access



Virtual
Firewall



Endpoint
Protection

INDOOR AIR QUALITY IN POST PANDEMIC WORKPLACE

Leading specialists prescribe changes that workplaces and buildings need to go through, bringing in best practices for maintaining indoor air quality.

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**Impact of Indoor
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**11
JUNE**



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SPEAKER
PRADEEP VISWANATHAN
Global System Architect,
MEA & India, Digital Energy Division
at Schneider Electric

PRADEEP VISWANATHAN,
Global System Architect, MEA and India, Digital Energy Division at Schneider Electric.

IS YOUR BUILDING MANAGEMENT SYSTEM POST PANDEMIC READY

Monitoring, control, remote management of buildings with predictive maintenance will be the new normal to automate processes and reduce human errors.

Technology will become common in building spaces. In hospitals, telehealth for example was just over 1% at a hospital in the USA. Now it is 85% of the interactions. That number will come down, but it will not drop back to 1%. Likewise, monitoring and control of buildings with Integrated Building Management Systems iBMS, and remote management of buildings coupled with predictive maintenance will be the new normal to optimise resources, automate processes and reduce human errors.

Air quality is about monitoring and control. Many systems are designed to a standard but we find their performance can fluctuate. Providing constant

monitoring and performance evaluation of the air quality and building systems is important. An audit and re-commissioning of HVAC system may be necessary in existing building.

Some buildings will have monitoring sensors as part of their Building Management Systems, but this is not yet commonplace. One good approach is to install IoT-enabled sensors combined with predictive analytics to provide greater insights into air quality metrics and improve wellness and wellbeing.

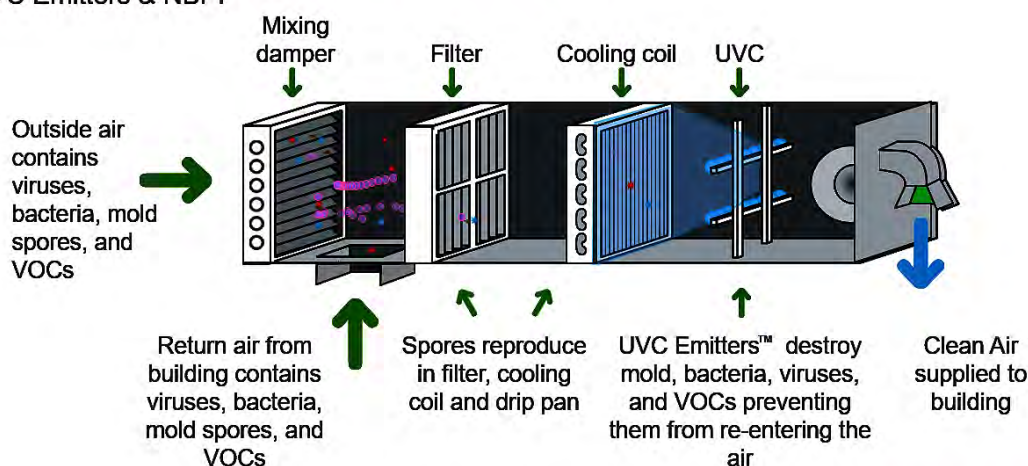
The key here is monitoring and

adapting to conditions in a closed loop to keep the building healthy. It is not just air quality alone; wellness and well-being matter. We need to make sure lighting, noise and other variables in the buildings are monitored and controlled.

With predictive maintenance and continuous commissioning of the HVAC system, building owners can get a sense of their building's health in terms of energy efficiency, system performance, occupant comfort, safety and wellbeing. Monitoring building performance is the first step to optimising that performance, which will lead to productivity gains. ■

Ultraviolet Germicidal Irradiation (UVGI)

UVC Emitters & NBPI



Page 11

Life Is On | Schneider Electric

MANAGING YOUR BUILDING IN THE POST-PANDEMIC PHASE

CHECKS

- Audit and re-commissioning of HVAC system.
- Ensure indoor air quality and comfort condition are maintained.
- Maintain the required air changes per hour at all times.
- Maximise outside air to maintain comfort inside.
- Implement indoor air quality control systems.
- Maintain a positive building pressure compared to outside.
- Adapting ventilation system for increased air changes per hour.
- Scheduled flush mode, pandemic or isolation mode.
- Occupancy monitoring and control of people flow.

PROCESSES

- Use predictive analytics, predictive maintenance, HVAC performance, indoor air quality management, analytics-based, management of building pressure, social distancing flows, contactless access.
- Making the building space capable of converting positive pressure room to negative pressure rooms easily and adaptable
- Installing MERV and HEPA Filters and monitoring of filters in building management systems.
- Monitoring outdoor and indoor air quality PM 2.5, PM 10 and volatile organic compound measurements with IoT sensors
- Use Ultraviolet Germicidal Irradiation, UVC emitter and NBPI to purify the air.
- Ensure the required pressure regime is maintained in the building along with proper airflow direction.

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LIVE WebSummit on
Impact of Indoor Air Quality: Now and in the post-Covid world

SPEAKER
BARUN AGGARWAL
CEO
BreatheEasy

BARUN AGGARWAL, CEO of BreatheEasy.

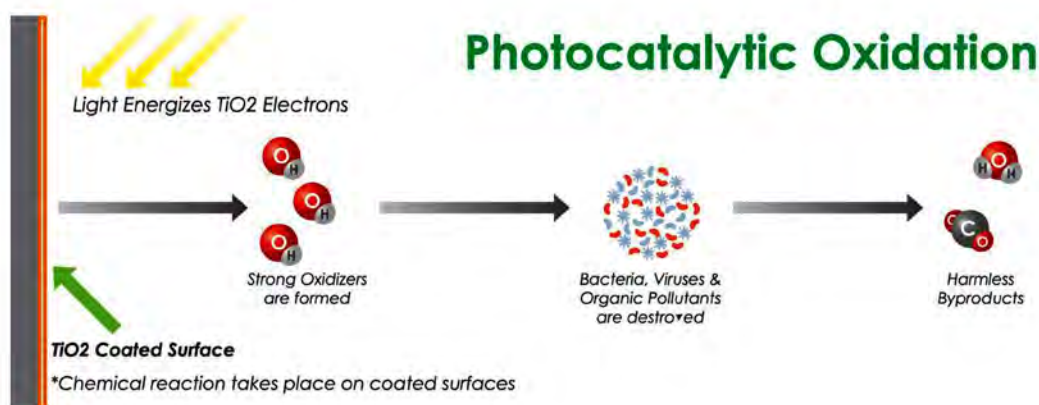
POST PANDEMIC HANDS ON GUIDE TO INDOOR AIR QUALITY

There are many things one can do to make the workplace safer, but one must remember, doing all of these also does not guarantee a 100% risk free space. Wearing a mask and social distancing and washing hands frequently are still the most important steps one can take.

Most building management systems today do not monitor indoor air quality. At most they will track is CO₂ levels. We should have 24x7 monitoring of the 5 key indoor air quality parameters – particulate matter, CO₂, total volatile organic compounds, temperature and relative humidity.

Aircraft systems are of two types – front to back and top to bottom. The front to back systems in today's world can be harmful for people sitting in the rear sections of the aircraft. The top to bottom air flow systems are better suited. Most aircrafts are fitted with HEPA filters and will protect the passengers from air borne transmission. ■

Photocatalytic Oxidation



REDUCING INDOOR RISKS IN YOUR WORKPLACE

- Checking workers temperature and SP02 oxygen levels daily
- Wiping hot spots 3-5 times per day
- Weekend fogging of facilities
- Installing recirculating H13 HEPA filters, equivalent to MERV 17
- Installing MERV 13 filters in AHU rooms

GCF UNITE 2020 WebSummit

11 JUNE

Device of Your Choice
02:00 - 04:00 PM | Gulf Standard Time
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SPEAKER
GIRISH BAPAT
Former Director,
Life Essentials, Unilever

LIVE WebSummit on
Impact of Indoor Air Quality: Now and in the post-Covid world

INDOOR AIR PURIFICATION ESSENTIAL POST PANDEMIC

The virus is here to stay till a cure, or a vaccine is found. Lockdowns is not a long-term solution when both lives and livelihoods matter. Going back to our workplaces is inevitable in this situation and we must learn to live with the virus.

There are three known ways of transmission for corona virus:

- respiratory transmission
- contact transmission
- aerosol transmission

In case of respiratory and contact transmission there is enough awareness created by various health agencies and governments across the world. Measures like

social distancing, wearing masks, frequently washing or sanitising your hands and avoid touching your face are highly effective methods to keep the virus away.

In a work environment the aerosol transmission also assumes importance since more people are locked in confined spaces for long hours, familiarity between people lets us reduce our guard. In these spaces it is important to monitor and maintain the indoor air quality.

If the indoor air is contaminated with particulate matter, some studies have found these particles become carriers for the virus keeping it active for long time and carrying

over large distances much beyond the 2-metre range.

Substantially higher hygiene needs will increase the use of cleaning products to sanitise frequently touched surfaces in the office, these cleaning agents generate toxic gases.

Portable air purifiers with efficiencies above 99.97% and the ability to capture particle sizes of 0.1µm can be highly effective in trapping micro particles as well as bacteria and virus in the air.

Purifiers with carbon filters will take care of the heightened VOC gases as well. Portable air purifiers have a higher rate of air flow and can also deliver 6 to 9 air changes per hour frequently cleaning the space. ■

GCF UNITE 2020
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SPEAKER

MANSOOR ALI
Founder of Amfah India,
Research Analyst and Indoor Air
Quality expert



MANSOOR ALI, Founder of Amfah India, Research Analyst and Indoor Air Quality expert.

AWARENESS, INVESTMENT REQUIRED AROUND INDOOR AIR QUALITY

Our current day building management systems are not sufficient to safely manage, control and monitor air quality. Lack of resources, including trained maintenance staff is one reason, a low impetus to invest in air quality solutions is another.

The Covid-19 crisis has exposed many shortcomings for India, including comprehensive planning for all sectors, especially healthcare, workforce, logistics and food supply.

Most buildings right now opt for basic, factory-grade air ventilation systems, rather than centralised air conditioning with air purification filters or UV lights. High-grade private hospitals fare better, but we need to bring home the message of breathable air in all other spaces.

To improve here, we need to spread awareness for air quality, the link with Covid-19 and the need for proper air quality devices. These tasks are not the kind that will happen in just a day, so we have quite the task cut out for all of us.

Aircraft ventilation systems have had to work with the dangers of poor air quality for some time, especially since the SARS outbreak in 2003. Poor air quality can increase the spread of pathogens, reduce immunity and lead to breathing difficulties, even death.

Currently, most aircraft manufacturers

claim that they have upgraded their cabin air systems to ensure that the air remains clean all the time. Their AC systems push bursts of air downwards at a metre per second, minimising the risk of cross-contamination. Filtered and renewed every 2-3 minutes, means that the air for flights is relatively safer than other indoor spaces.

There are still limits, in terms of how far people refrain from contact, to prevent the spread of the coronavirus. Social distancing, masks and reduced contact are always the best approaches to avoid the spread of the virus from one person to another.

As far as areas of improvement are concerned, aviation authorities need to extend the same measures to airports, especially waiting areas, transport buses and other public spaces.

Businesses need to acknowledge that the world has changed in terms of standards for health, office safety and indoor air quality. These are not just good-to-having, but essential parts of the new workforce. Maintaining these standards can mean the difference between life and death, as Covid-19 is in a community

spread mode, and we don't know who can bring the dreaded virus to us at work.

Begin by vigorous, industrial-strength cleaning for your air ventilation systems, especially if your offices have been shut for upwards of three months. The air quality would be stale, moist and high on pathogens – a welcome breeding grounds for many diseases.

Change air filters and upgrade to UV air purification measures and HEPA filters instead. Please continue to monitor air quality levels so that they remain at 2.5 PPM. You can invest in portable humidity monitors, and air quality trackers for this too.

Next, look at measures to improve air ventilation for your workplace – keep passage doors and windows open, install purifiers and dehumidifiers, indoor plants, especially in closed spaces. Do remember that even though coronaviruses are not airborne, they can stay suspended in a moist atmosphere for about 30 minutes.

You can also look at space management measures to ensure that everyone can breathe in good-quality air. Spread your employees with adequate space and encourage periodic walking breaks, to ensure that their overall health remains high. ■

AGILE, AUTOMATED, INTELLIGENT, SUPPLY CHAIN

With unpredictable disruptions along global and regional supply chains, manufacturers must modernise, writes Anas A Abdul-Haiy at Proven Consult.



ANAS A ABDUL-HAIY,
Director and Deputy CEO,
Proven Consult.

As the world is battling against COVID-19, the pandemic has an uneven effect on the supply chain industry. Industries such as auto, travel, consumer goods, electronics, and retail have been profoundly impacted. The supply chain economy has a large and distinct impact on economies of the world that is driven by industrial activities and innovation.

With many governments enforcing the lockdowns, manufacturers are finding it challenging to procure components for their manufacturing activities. In the time of crisis, the demand among consumers for non-essential goods has also declined. These two different spectra of the supply chain challenges are creating a crisis from both: demand and supply end of the chain.

Based on changes and constraints in demand, businesses are building new models to sustain and protect the supply chain during the current

crisis. Ensuring necessary service levels across the chain, these new models are setting precedent for protecting the supply chain against any future crisis as well.

Having a data-centric approach towards supply chain management is making suppliers more agile in their operations. Using predictive modeling and data simulations, businesses can predict the impact of a sudden decline in demand in one country that can impact the entire supply chain. Live tracking the sales, shipments, and orders with minimum latency will help businesses to identify surge or decline in demand and these data can guide the decisions regarding the production levels.

To help organisations understand where and when to source the components, advanced machine learning algorithms can be used to determine ideal source based on past purchases, commodity pricing, agro and industrial trends, among others.

The current supply chains involve several bottlenecks where the data visibility is limited between facilities located in different locations and are in-efficient. Having a uniform data and analytics platform and sharing between different locations is crucial to managing dynamic demands.

However, companies can only leverage data when the process across the supply chain is end-to-end digitised. Any gaps between the processes will increase latencies and

COMPANIES CAN ONLY LEVERAGE DATA WHEN THE PROCESS ACROSS THE SUPPLY CHAIN IS DIGITISED.

AMAZON HAS BEEN ONE OF THE FEW ENTERPRISES TO EXPERIMENT IN USING AUTONOMOUS DOCKING SYSTEMS.

can slow down the supply chain's response to the changes in demand.

Having a cloud-based or web-based ordering system, allows businesses to act on shifts in demand proactively. Creating an end-to-end digital IT ecosystem is key to drive and minimise the latencies. However, to track actual production, inventory levels, and shipments, businesses must leverage various Internet of Things technologies together to bridge data between various processes.

Automating the supply chain

IoT's are the sensors and devices interacting with each other's data through cloud systems. This helps businesses monitor the machine's performance and can indicate or predict failures to assist faster action. Starting from placing the order or query to the actual production and distribution, these various processes in the value chain funnel need to be digitised to enable faster decision making.

WHILE ENTERPRISES ARE ADAPTING AUTOMATION SWIFTLY, THE APPLICATION OF RPA HAS BEEN LIMITED TO REPEATED AND MUNDANE PROCESSES.

While manufacturers are struggling to meet quality standards due to low labor-force and demand burden, IoT devices can be used to monitor quality performances. IoT devices such as cameras and sensors can evaluate the product quality, reducing the reliability and time taken by manual quality checks. This helps suppliers to standardise the quality across different locations without slowing down production and can ensure the increasing demands are met. By enabling automation and accelerating the process, IoT's are helping suppliers to solve key supply chain problems.

The travel restrictions and health impact from the coronavirus have pushed organisations to operate with a limited workforce. While the manufacturers are looking for alternate vendors for their critical components, the reduced labor force and increased demand have led to increased lead time. Accelerating production and reducing manual interventions in the business processes are critical to solving these problems.

These challenges are inspiring businesses to implement Robotic Process Automation. Suppliers must develop greater automation capabilities to accelerate production and minimise manual interventions in the business process. Using IoT and robotics, businesses can fast track assembly lines, inventory management, and data analytics.

As supply chains are evolving, so does the assembly lines. As the new-age manufacturers are using 3D printing to produce their components inhouse, this reduces the dependency on suppliers. While 3D printing equipment is becoming a low cost, companies can 3D print key components that are expensive to source.

However, at the end of the supply chain funnel lies a greater challenge. Logistics of the delivery system or distribution systems have been dependent on laborers who are responsible for shipment and

HAVING A DATA-CENTRIC APPROACH TOWARDS SUPPLY CHAIN MANAGEMENT IS MAKING SUPPLIERS MORE AGILE IN OPERATIONS.

delivery of the end component.

Businesses like Amazon have been one of the few enterprises to experiment in using autonomous docking systems, robotics and IoT enabled drones to meet these challenges. While these automation systems may not be feasible for smaller-scale businesses, these trends are promising to close the end of the supply chain funnel in the future.

While the enterprises are adapting automation swiftly, the application of RPA has been limited to repeated and mundane processes. Suppliers across various scales and industries have been balancing between automation and digital workforce to sustain the cost of automation.

Agile and collaborative supply planning

Investing in an agile and collaborative supply planning is one of the key principles that businesses must follow. As the markets are dynamic and the spread of the virus

is fast, the market situation can become extremely volatile. To deal with such an unstable business environment business must focus on investing in strategies that are agile and tools that are designed to handle such dynamics.

As the major manufacturing players are migrating their production facilities, it is easy to fall into the same habit of all fruits in one basket strategy. Diversifying the supply chain and spreading it throughout the world will not only make supply chain reliable also help businesses to optimise cost. Businesses can source components for new products from low-cost sources and can launch new products at a lower price to boost their sales.

To address the volatile nature of current supply chain operations, organisations should mobilise a crisis-management team or a war-room setup that has the power to make quick, analysis-based supply chain decisions.

Analysts should examine supplier delivery performance, deviations from production plans, canceled orders, customer-fulfillment rates, and other business outcomes more frequently to identify any potential supply chain issues. Besides, the crisis-management team can conduct root-cause analysis and help supply chain leadership teams to prioritise issues for resolution.

The crisis management teams will be involved in updating demand forecasts and supply plans and the focus on re-allocation of constrained supply to critical customers and orders. Data being at the center of this forecast, the teams must equip themselves with updated data and data tools.

Therefore, companies with end-to-end digital processes will have the ability to live track orders, inventory, and in-production items. Based on these trackers, suppliers can take decisive measures to proactively increase production, relocate resources on key customers and orders. ■

TO HELP ORGANISATIONS UNDERSTAND WHERE AND WHEN TO SOURCE COMPONENTS, ADVANCED MACHINE LEARNING ALGORITHMS CAN BE USED.

DIGITAL TWINS CAN IMPROVE EFFICIENCY IN CONSTRUCTION

Digital twins provide the ability to create a virtual replica of potential and actual physical assets and processes, writes Andrew McCloskey at AVEVA.



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Worldwide, construction is already one of the largest industry sectors. According to PwC, Global Construction 2030 forecast, the volume of construction output will grow by 85% to \$15.5 Trillion worldwide by 2030, with three countries, China, US and India, leading the way and accounting for 57% of all global growth.

However, the sector is still dealing with four on-going challenges:

- poor productivity and profitability
- project performance, timing and budget
- skilled labor shortages
- sustainability concerns

An answer? Digital twin technology. Digital twins provide the ability to create a virtual replica of potential and actual physical assets, processes, people, places, systems and devices that can be used for various purposes.

Companies use digital twins for many reasons including testing new assets or procedures before launching them in the real world where it becomes more expensive and complicated to fix any issues, the improvement of ongoing operations or training employees.

In practical terms, this type of technology can help improve the safety on an oil rig, improve the efficiency of a production plant, or ensuring buildings

meet sustainability, efficiency or regulatory requirements. Additionally, and perhaps more importantly, a digital twin can help predict potential failures before they happen and suggest ways to prevent those failures.

The concept of digital twins is becoming relevant to an increasing number of industries and possible use cases. This is a result of the growth of digital transformation. Consequently, buildings and cities are becoming smarter – all fuelled by data and application of that data.

Gartner estimates that by 2021 there will be over 25 billion Internet of Things IoT endpoints and digital twins will exist for potentially billions of scenarios. Benefits will include asset optimisation, competitive differentiation and improved user experience.

Digital twinning is fast becoming essential to IoT deployment as many more IoT platform providers and analytics companies are investing in digital twin technology. These cover functions from initial ideas, through to design, development and construction.

Construction design and developers are often forced to limit their creativity because if a new building design or concept is created, it must be approved to match the necessary safety requirements. Timescales may also

so proactive, data-driven energy management can make a big impact on the bottom line and the environment – a digital twin helps makes this possible.

When assets are deployed or construction is commissioned, a digital twin can be continually updated with ongoing operational and process data such as maintenance and performance records, and Industrial Internet of Things sensor information. During the operational stages, variations from optimal process and asset design are captured during run-time, and the digital twin is automatically updated with this information.

Knowing the current state of an asset, the digital model can use predictive learning technology to proactively identify potential asset failures before they occur and even suggest ways to prevent those failures. In other words, the digital twin can predict when its physical counterpart will break, well before that happens.

The digital twin can also utilise artificial intelligence with advanced process control, control strategy design and process optimisation. These tools incorporate necessary variations from process and asset design into the engineering asset or plant data, enabling a complete and efficient digital value loop and unified lifecycle management. As organisations scale-up to a digital twin of the enterprise operating model, inefficiencies and opportunities in their ongoing operations can be identified and executed upon in real-time.

Digital Transformation merges the latest innovative tools and processes with organisational in-house domain expertise. This enables not only the contextualisation of new and existing data but also delivers actionable insights and information. Enterprises can then execute upon

these new insights and close the loop towards continuous process improvement. For this to occur, every Digital Transformation journey needs to begin with the critical understanding that information and data have become a priceless and strategic asset to the enterprise.

To establish an effective digital twin strategy, each asset requires a different set of asset data services, together with engineering master data, effective visualisation tools, plus collaboration and workflow procedures:

- Create a digital twin model that uses accurate data feeds to help understand product or operations performance and adjust critical control points to deliver short- and long-term value.
- Identify where digital twin simulations and predictive maintenance can deliver the best value, for example, improvements in operations or processes, reduction in costs or risks.
- Build a digital twin architectural roadmap that enables program and project planning for digital transformation.
- Data insight is king. Use a digital twin for deployments or projects as this will expose how the organisation or project connects with its current state and how it is likely to respond to internal or external changes.

A digital twin incorporates data from these diverse data points, and creates a myriad of potential benefits, including the ability to test changes to processes before they are implemented, making better and accurate decisions based on data.

Construction companies that succeed in realising the potential savings from effective intelligent master data management will reap the transformative benefits of digital twin technology and have a lot to gain through unlocking the boundaries of creativity without the burden of risk. ■

prohibit developers from being too experimental with ideas.

However, developers can test out their ideas rapidly through digital simulation that involves all the necessary real-world factors such as scale, gravity and weather for example, the total timeframe during which they could share their ideas and get them approved would be cut 100x.

Furthermore, the safety, practicality, and sustainability of the new building designs can now be tested in a simulation and the feedback will be just as accurate as it would be if the test was executed in real life because the simulation directly derives data from the world.

There are gains to be made, for example, energy represents approximately 19% of the total expenditures for a typical building,

Index results

UAE RANKS #8 IN READINESS FOR AUTONOMOUS VEHICLES

The UAE ranks among the top 10 countries in the world for the third consecutive year according to KPMG's 2020 Autonomous Vehicles Readiness Index.



Source: KPMG's 2020 Autonomous Vehicles Readiness Index Mark UAE in the table #8 position

Country or jurisdiction	Rank		2020 score
	2020	2019	
Singapore	1	2	25.45
The Netherlands	2	1	25.22
Norway	3	3	24.25
United States	4	4	23.99
Finland	5	6	23.58
Sweden	6	5	23.17
South Korea	7	13	22.71
United Arab Emirates	8	9	22.23
United Kingdom	9	7	21.36
Denmark	10	n/a	21.21
Japan	11	10	20.88
Canada	12	12	20.68
Taiwan	13	n/a	19.97
Germany	14	8	19.88
Australia	15	15	19.70
Israel	16	14	19.40
New Zealand	17	11	19.19
Austria	18	16	19.16
France	19	17	18.59
China	20	20	16.42
Belgium	21	n/a	16.23
Spain	22	18	16.15
Czech Republic	23	19	13.99
Italy	24	n/a	12.70
Hungary	25	21	11.66
Russia	26	22	11.45
Chile	27	n/a	11.28
Mexico	28	23	7.42
India	29	24	6.95
Brazil	30	25	5.49

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