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SMART CITIES AND IOT

DRIVING EDGE SOLUTIONS AND CITIZEN SAFETY

AI embedded, wireless networking vendor Aruba is partnering with global system integrators like Wipro, to deliver best in class solutions, for today's contactless society.

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ARUBA, WIPRO: PARTNERING TO BUILD SMART CITIES USING DEVICES, NETWORKS, SECURITY

BIGGEST WORKFLOW CHALLENGE HUMANITY HAS FACED

In this month's Business Transformation, three top features run through our pages. Darren Roos, CEO of IFS, takes us through the impact of the pandemic on the enterprise applications world. It is no longer a fashion nor an available luxury to drawl out implementations across months, when they could be completed in weeks, just for the sake of customisation over standardisation.

Customers are now much less inclined to want to customise applications. Customers are more inclined to fit to standard, because of an urgency to get to value. In the past what could be done in weeks took months. Now because you do not have months to do it, it does not take months, explains Roos. And where it still tends to go wrong, is when you go to users, and users are looking for what they had in the past.

The concept of citizen safety driven by the pandemic and the arrival of 5G, are reviving the feasibility of complex smart city projects. Ashish Khare at Wipro Technologies believes that smart city is not something which can be done in pockets. While technology is looked at as a key driver, it is not a technology project alone.

Jacob Chacko at Aruba indicates that a smart city initiative is nothing but a collaboration of smart retail, smart healthcare, smart transportation, smart traffic systems. An IoT gateway opens up doors for connectivity models to come and get embraced into the technology. 5G is going to be the next inflection point, as far as smart cities are concerned, Chacko points out.

However, it is this third feature that is the most hard hitting. Mike Luessi and Chris Dilley at ServiceNow claim that the global vaccination roll out, is the biggest workflow challenge humankind has ever faced, and is severely compounded by the lack of automation in healthcare and governments.

One of the biggest challenges is over-reliance on slow, manual, processes that can overwhelm medical workers. Covid-19 vaccine management is the biggest workflow management challenge of this lifetime. While we are in the earliest stages of rollout, in many regions the system is already breaking down. The level of precision in communication, coordination, collaboration has no historical equivalent.

We need an information supply chain that travels ahead of the vaccine, so that everyone is prepared when it arrives. The vaccine will work only if enough people get it and take it. Automation, innovation, collaboration of the highest level may be required. And that is food for thought and action without further delay.

Wishing you this strength and vision for the weeks ahead.

Arun Shankar
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ANALYSING THE REASONS BEHIND FAILURE OF AI PROJECTS

AI is described as a risky business but developing strategy and approach can set companies on the right path, says Anas A Abdul-Haiy of Proven Consult.

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

KEY TAKEAWAYS

- Spending on AI projects and solutions will hit the $58 billion mark within the next few years.

- AI adoption must be a step-by-step process, starting with why the business needs it, and how it can help.

- AI is risky, but the rewards can bring cost-cutting and long-term success to business.

The enthusiasm to jump on the AI train is understandable and encouraged, but the success of AI depends on the complete universe of data being captured and analysed through a large-scale database with continuous analysis of the convergence between predictive and real time data.

Premature failure of AI projects is a common concern, and one that is legitimate; recent numbers show 85% of all AI projects fail, sometimes before they have even been initiated.

Why? Well, oftentimes, these big projects are misaligned with business priorities. Especially today, a lot of businesses are invested in keeping their traditional processes going, so embarking on such an altering project is not likely to make the top priorities list.

AI is expensive. Spending on AI projects and solutions will hit the $58 billion mark within the next few years. Many companies tend to take a leap into a sea of information on the matter and end up with one takeaway: AI helps cut cost. While this is true, the results take time, effort and skills.

From partnering with the right solution providers, to hiring the perfect candidates to administer AI projects. A lot of companies will initiate and then withdraw when the costs are fully evaluated in comparison to the results. This is why strategising AI projects is essential to success, but still does not guarantee it.

This relates to the way AI is described as risky business. It is considered an expensive tool that is hard to measure and maintain. However, developing strategy and approach can set companies on the right path. It must always start with a problem the business is facing, and a question; Can AI solve it? A strategy can then be designed and set, with proper and regular measuring of RoI.

The way an AI solution will work for a business is through data, and the quality of data it is fed with. This poses another threat to AI projects, and is considered a major contributing factor in their failure. AI requires a lot of data in order to deliver, and the more the better.

If a company is small, with not much data to go from, then expectations must be scaled to that level of data availability. The data must also be relevant to the problem the AI solution is designed to solve, and oftentimes such intricacies aren't even considered.

AI is risky, but the rewards can bring cost-cutting and long-term success to business. It is most crucial to consider data quality and availability when AI adoption is on the table. Strategy, success and failure measurement criteria are also determining steps in the adoption process. Meanwhile, globally, the direction business is going towards is one that should solve the issue of low skill levels and expertise in the field. ■

DATA AND DIGITAL PLATFORM APPROACH MAXIMISES EFFICIENCY

DDP can provide more valuable, influential results than resource-intensive core system transformations, write David Panhans, Adrian Castillero of BCG.

DAVID PANHANS,
MD and Partner at BCG.

ADRIAN CASTILLERO,
Associate Director at BCG.

For organisations that have attempted to transition away from core legacy systems or taken steps to simplify the conundrum of stacks built upon them, the time is now to evaluate what success looks like. Given the pandemic and post-pandemic landscapes' competitive nature, critical questions relating to flexibility, digital governance, data integration, and technology architecture must be answered sooner rather than later. However, there are considerations to appreciate beforehand.

First and foremost, pursuing such a strategy involves high risk and expenses. Before completion, when any potential value is temporarily halted, the ability to foresee what eventual success looks like will likely be hindered. Furthermore, this period will entail a substantial degree of uncertainty, one where revenue flow and adaptability will be essential. As such, an offensive

approach via a Data and Digital Platform, DDP, transformation model is a necessity.

Less complex than long-term traditional core transformation and far more beneficial than a legacy defensive approach involving core systems, a DDP model is data-centric and iterative, capable of generating value and reducing negative business implications simultaneously. DDP uses a data layer under a smart business layer, and this combination integrates the entire organisational ecosystem, including core systems and infrastructure.

By bringing these layers together, insights and personalisation are created that can, in turn, be utilised to provide data-driven use cases. As a result, organisations can recover returns on investment, RoI, from a multi-phase journey without complete readiness, designating additional finances for transformation purposes in the process.

Adopting the DDP approach can provide more valuable and influential results than resource-intensive core system transformations, and there are proven, comprehensible reasons behind this. Firstly, core modernisation efforts focus on efficiencies by reducing expenditure associated with full-time equivalents, FTEs, maintenance, and technology.

In most instances, the main benefit captured by companies implementing DDP is that they can reach a break-even point by liberating data, and subsequently begin to generate top-line and bottom-line benefits far earlier due to the sustained delivery and effectiveness of use cases.

Driven by the overarching goal of standardising and simplifying core systems, an organisation's transformation is analysed through an application footprint and landscape assessment within their respective journeys. This involves revising operating and sourcing models, as well as team structures that need to evolve from a system-centric mentality to a product-centric approach. Fortunately, and unlike traditional IT systems, DDP does not solely revolve around technology and data.

In truth, it completely reimagines organisational governance and operations, during the transformative journey and in every phase that follows, including practices and processes concerning technology and human resource talent resourcing. Therefore, organisations have a window of opportunity to decouple digital transformation from traditional IT transformation to maximise value and efficiency and position themselves to achieve sustained success in the new normal. ∎

DDP completely reimagines organisational governance and operations

HOW TO EFFECTIVELY USE DATA ANALYTICS TO OPTIMISE RoI

Global market for data analytics is growing but companies should know how to effectively use it to support critical business, writes Vijay Kotu of ServiceNow.

VIJAY KOTU,
Vice President of
Analytics at ServiceNow.

KEY TAKEAWAYS

- The global market for data analytics platforms and tools reached $200 billion in 2019, according to IDC.

- The promise of modern analytics is to improve decision-making in support of critical business objectives.

- Building workflows from data, applying analytics, creating master view of workflow are three phases.

Corporate investments in data analytics are booming, right along with the explosion in data generated by many enterprises. The global market for data analytics platforms and tools reached $200 billion in 2019 and is expected to hit $274 billion by 2022, according to IDC. Yet many organisations are not seeing the returns they expect from those investments.

The promise of modern analytics, aided by advances in machine learning, is to improve decision-making in support of critical business objectives, from growing the customer base to retaining satisfied, productive employees. To realise that vision, companies must close the gap between knowing and doing, from collecting thousands of data streams and knowing what they contain to applying decision-making frameworks to each of them.

Companies can progress on that journey by acting on data insights through an analytics operation that uses digital workflows as its building blocks and adds layers of intelligence in three phases:

#1 WORKFLOWS FROM DATA

Digital workflows and the data they generate make every part of a process visible. Take customer behaviour, for example. With a data-collection platform in place, analytics teams today can start closing the knowing or doing gap by building workflow playbooks triggered by specific insights in the customer journey. The playbooks, in turn, flow into real-time analytics that customer service teams can easily see or be alerted to when customers hit a snag with any aspect of these tracked behaviours.

#2 APPLY ANALYTICS

The next step is to apply analytics to those individual data workflows to produce a deeper layer of actionable insights. The dashboard view into data workflows offers relevant information about all sorts of variables, so customer teams are able to act on multiple issues instead of just one.

#3 WORKFLOW MASTER VIEW

Applying analytics to the foundation built with the first two steps can offer executives a potential data gold mine: a highly actionable, digital view into core KPIs and company performance at an enterprise level. It starts with simple math.

Let us say you have 30,000 customers and you are tracking 15 workflows per customer per year. These workflows impact an average of 10 types of company employees. The analytics supporting all that is now tracking 15 million tasks or steps in all the workflows you have deemed most important to the business.

That's a 360-degree, data-enabled view into the entirety of work being done, analysed over any time period. Workflow-powered analytics can give everyone in the C-suite the same kind of dashboard for the business that our customer-facing teams use so successfully.

While no company can pull this off overnight, digital platforms and tools now enable organisations to build intelligent analytics largely by themselves. They can start optimising the most critical operations and continually convert insight into action. ■

SkyHawk AI Surveillance Hard Drives

SkyHawk AI is the world's first purpose-built drive for AI-enabled surveillance systems. Designed for deep learning applications that extend AI surveillance capabilities, SkyHawk AI simultaneously supports heavy AI workloads and smooth video streaming. With capacities up to 18TB, it offers features that are ideal for AI environments with intensive computational workloads: enhanced caching, delivering low latency, and strong random read performance.

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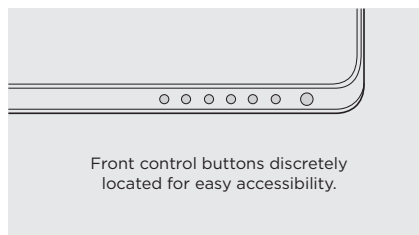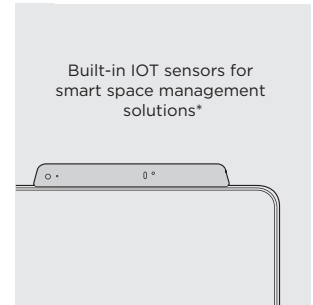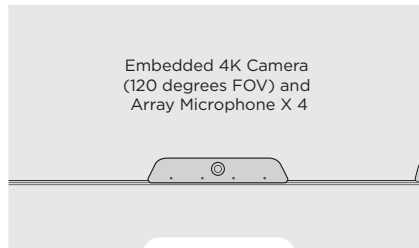
As businesses reopen, teams today will be 'working remotely' and 'in-office' and have a higher expectation for better connectivity & collaboration. Joining a meeting in seconds with both video & audio available for in-room & remote attendees is the need of the hour.

Sharp understands this need and have launched the world's first certified **Windows collaboration display** (PN-CD701) that finds the perfect fit in the workplace of the future.

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Emerson opens region's first Measurement Instrumentation Centre

Emerson has launched its first Middle East and Africa Education Centre for measurement instrumentation, located in its Dubai headquarters. The centre enables Emerson to provide customers with an immersive, hands-on learning environment in field instrumentation, analyser, and metering technologies. The centre provides solutions that help customers upskill their process automation engineering and maintenance workforce through an innovative training approach based on their specific needs.

It has the capability to offer both conventional face-to-face and virtual training, enabling Emerson to continue supporting its customers during these unconventional times of limited mobility and social distancing.

The education centre includes a modern, facility offering a collaborative environment that nurtures learning among participants, by providing full access to software and control systems from any location. It also provides virtual, instructor-led courses that resemble a live classroom experience with the convenience of remote accessibility.

BCG finds UAE Future Skills score boosted by immigration policies

Reducing the mismatch between the skills a workforce possesses and the work tasks that it needs to perform is critical to increasing overall productivity. To accomplish this goal, governments and businesses must trace the root causes of the skills mismatch and adopt innovative policy measures to tackle them, according to a new Boston Consulting Group, BCG, report titled Alleviating the Heavy Toll of the Global Skills Mismatch.

The report also unveils an interactive evidence-based assessment tool Future Skills Architect, FSA, designed to help policymakers and business leaders uncover instances of the skills mismatch in their economies. By using the FSA instrument, a government can uncover many factors underlying the skills mismatch in its country and can adopt strategies to reskill and enable the workforce. Findings from BCG's FSA tool show that the UAE has an FSA score of 62.3, above the global average of 47.2.

BCG's analysis points to the need to address three pillars of capabilities, motivation, and opportunities that underpin the creation of a vibrant and productive workforce. The UAE

DR LEILA HOTEIT,
Global Leader of Education,
Employment and Welfare, BCG.

performed well in the categories of self-realisation, accessible opportunities, and skill liquidity. In particular, the UAE performs exceptionally well in the area of skills liquidity, where decision-makers ensure that people outside a job's immediate location apply for it, to enlarge the candidate pool for every job, and to give every candidate access to a larger pool of jobs.

That might seem likely to happen naturally in a post-Covid-19 world,

where remote work has become the norm, but government policies, especially those relating to immigration and company practices play an important role to widen the talent pool for each position. In addition, the UAE has also made a significant push in improving the quality of their schools, in particular private schools, as shown by the latest Trends in International Mathematics and Science Study results.

BCG analysis highlights two key areas that the UAE should improve to create a future-ready society and economy. Firstly, Planners and HR specialists must cultivate a Human-Focused Environment by understanding the specific needs, values, and demands of talent, whose knowledge, skills, experiences, and ambitions differ greatly from one generation to another. Secondly, policymakers and business leaders must figure out how to unlock the potential of different types of labour in the economy, including older workers and people with determination.

Farnek secures hospitality contracts valued at AED 7.5M

Farnek, a UAE-based smart and green facilities management company secured six hospitality contracts valued at AED 7.56 Million. The contracts vary in length from one to three years. Farnek was awarded four hotel and apartment contracts, namely the five-star Fairmont Dubai hotel on Sheikh Zayed Road, the three-star 230 room Revier Hotel, situated in Business Bay, the four-star, S Hotel in Al Barsha and the deluxe Sonder, JBR Suites, on the Walk, Jumeirah Beach Residence.

Additionally, Farnek also secured two restaurant contracts, The Mood Rooftop Lounge in The Meydan Hotel, Nad Al Sheba and the Cloud Lounge in the Studio One Hotel in Dubai Media City. In total, over 65 staff have been mobilised to manage a range of services from cleaning, housekeeping, security as well as mechanical, electrical and plumbing maintenance.

KHALDUN ABUROK, Director of Business Development, Farnek.

UPS announces Pfizer-BioNTech Covid-19 vaccine delivery in Jordan

Global logistics player, UPS has announced delivery of the Pfizer-BioNTech Covid-19 vaccine in Jordan, supporting the country's fight against the pandemic. UPS has been at the forefront of the Covid-19 fight since February 2020, and has also supported in distributing millions of diagnostic test kits and biological samples for Covid-19.

Wael Hayajneh, Secretary General of the Health Ministry for epidemiological affairs and the official-in-charge of the Covid-19 crisis said that the Government of Jordan has started its Covid-19 inoculation programme, targeting 20-25% of the population according to priority groups, in line with WHO guidelines. He added that UPS has played a key role in securing the safe delivery of the Pfizer-BioNTech vaccine to Jordan.

Rachid Fergati, UPS Managing director for Middle East and Indian subcontinent commented that UPS is honoured to support Jordan as it works towards limiting the spread of Covid-19 and their people around the world have been trained to store, handle, transport, and deliver vaccines.

RGN secures $1M investment to boost bilingual podcast network

Rising Giants Network, RGN, a Dubai-based bilingual podcasting network, has announced it has secured an investment deal valued at $1 Million, in what is considered to be the biggest investment in a podcasting network in the region. The round was led by Triangle Media, Barry Kirsch Productions and individual investor Said Al Sayyed. Founded in early 2020 by veteran podcaster and host of the Basel Meets podcast, Basel Anabtawi, BKP chairman Barry Kirsch and audio engineer Bashar Najjar in the midst of Covid-19 lockdowns,

Rising Giants Network is a podcast company dedicated to producing immersive audio experiences in Arabic and English.

Launching shows like Amalikat Al Tareek with F1 host Firas Al Nimri, Sehtak Aham with fitness influencer Baraa Al Sabbagh, Rihlat Al Mosara'a with wrestling commentators Faisal Al Meghaisib and Yusef Callaway as well as English show Legendary Rock Stories, Rising Giants Network managed to consistently top the charts in the short time the company has been live in various categories.

Emirates Post launches Registered Digital Communications

Emirates Post has launched Registered Digital Communications Services, a brand-new initiative launched in partnership with technological services multinational brand, Lleida.net. New Registered Digital Communication Services will allow public and private organisations, as well as individuals, to deliver registered communications using digital means, such as email, SMS or web-based service, with full legal admissibility. The system tracks and traces documents and verifies receipt with a certificate of delivery, a step up from traditional methods of registered notifications and documents delivery mechanisms. This development is aligned with the UAE's move towards paperless operations.

Emirates Post will issue a digitally signed communications attestation certificate, in full compliance with UAE and international legal regulations and accredited by TRA, to be a valid secure digital record that can be used for commercial or legal purposes. These attestation certificates, which will be available to both senders and recipients,

HE ABDULLA M ALASHRAM, Group CEO, Emirates Post Group Company.

serve as a legal instrument to demonstrate who sent and received the registered communication, when the communication was legally sent and received, and what was the original content of the communication.

These services do not require customers to deploy or install any hardware, software, or plug-ins; senders can subscribe to Emirates Post services and begin using them immediately. The registered messages will be sent to the

recipients on their existing mobile devices and email accounts, with no additional account set-ups needed.

The roll-out of the service will commence with registered email messages, registered SMS messages, registered digital documents delivery and registered e-statements and invoices, followed by registered contracts and agreements, registered data privacy consent services, registered eKYC and additional onboarding services over the following months.

This initiative, from Emirates Post and Lleida.net, contributes to adding a new achievement to the UAE Government's approach to digital services and demonstrates that the country's public sector is clearly leading by example and providing the public services and infrastructures that allow the entire UAE Society to achieve the UAE Vision 2021 by H.H. Sheikh Mohammed bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai, and reinforces the competitiveness of the UAE's economy and consolidates its position in the world of digital economy.

Organisations find it difficult to keep up staff morale says ICAEW survey

Most businesses around the world expect working life to be different in the future, a survey by chartered accountancy body ICAEW has found. Based on a survey with chartered accountants from more than 50 countries, the shift to remote and flexible working was mostly seen as positive experience, ICAEW said.

Nine in 10 businesses felt working life would look different in the future, compared to pre-pandemic times. A far greater reliance on remote working during the pandemic, and the risks of staff feeling isolated, meant support for employee mental health and wellbeing was more important than before, the report said.

Just under half respondents said the pandemic had had a negative impact on mental health, while two-fifths believed organisations found it difficult to keep up staff morale. Flexibility around working hours and having a greater awareness of colleagues' personal obligations were key to

supporting mental health, the report said. Nevertheless, most respondents said the shift to remote working was a positive experience, as was the acceleration in technology it brought with it.

Half of those surveyed said bringing on board new employees had been difficult because aspects of 'on-boarding' new hires was more challenging when done remotely. As a result, members said they wanted to see a return to in-person interviews and induction processes. In a climate where new and young employees had missed out on the benefit of face-to-face interactions, ICAEW said organisations must actively pursue mentoring, guidance and formal training to help build their practical experience.

The report also examined the value that face-to-face interactions

MARK PROTHEROUGH, Executive Director, Learning and Professional Development, ICAEW.

can add to organisations. Half of survey respondents said that the pandemic posed challenges when engaging new clients and building relationships, while just under half thought it was easy to maintain corporate culture. The pandemic had underlined that organisations were ultimately dependent on people interacting, ICAEW said, and suggested that remote working could bring new dynamics to employee interaction. Remote working could change the perception of hierarchy, break down cross-country barriers and facilitate recruitment, the report added.

EDRIS ALRAFI, Head of Middle East and Africa, ASI.

Sentiment in GCC cautiously optimistic according to ASI

Despite positive news for markets globally from the likely Covid-19 vaccines, sentiment in the GCC remains cautiously optimistic, according to Aberdeen Standard Investments, ASI. Emirates NBD's latest monthly insights predicts recovery in 2021 to be slower and uneven compared with many developed markets. This stems from governments across the region providing liquidity via central banks, rather than directing fiscal stimulus into households and businesses.

The report forecasts only a modest rebound in oil prices over the next 12 months, with Brent oil to average $50 per barrel in 2021, well below the budget break-even price in GCC countries. ASI believes investors seeking opportunities in the region need to be selective to capture sectors and markets that offer a clearer path for growth.

However, the UAE offers greater scope than most of its neighbours for expansionary fiscal policy in the shorter term. Evidence of this includes structural reforms such as extending visa schemes and allowing 100% foreign ownership for onshore companies in some sectors, with the goal of luring and retaining expats, plus attracting private sector investment.

The Public Investment Fund was awarded another $40 Billion in government reserves in the first half of 2020 to tap into various opportunities. Investments have ranged from Uber to Softbank's Vision Fund to electric carmaker Lucid Motors to Disney. PIF also favours the hydrocarbons industry, taking stakes in oil giants BP, Total and Shell.

In recent months, efforts have been underway across the GCC to diversify supply chains to prevent overreliance on foreign suppliers. This has fostered stronger regional ties, including the adoption of a Kuwaiti proposal to create a joint food supply network across the GCC. Special arrangements at borders and customs posts have ensured the flow of basic food and medical supplies within the six-member alliance. Other sectors offering investment potential include healthcare, construction and transport.

A report by Alpen Capital predicts a boost in investments to meet the growing pandemic-led demand and possibility of future outbreaks. These will include research activities and digitisation in a bid to drive growth of services and improve operational efficiencies. Alpen Capital noted that Saudi Arabia represents just over half of the region's healthcare, followed by the UAE.

ICAEW finds Saudi Arabia's economic recovery weighed down by oil sector

Economic Update: Middle East Q4 2020, from Oxford Economics, commissioned by chartered accountancy body ICAEW, reported that Saudi Arabia's oil and non-oil sectors will end the year below their 2019 growth levels. However, while the oil sector continues to weigh down Saudi's economy, continued public support and an improving health situation should drive growth higher in the fourth quarter of 2020, with overall GDP growth predicted to be -4% and +2.8% in 2020 and 2021, respectively.

Saudi Arabia boosted oil production in April when the OPEC+ agreement broke down, which was then subsequently cut back sharply as a new deal was agreed. According to ICAEW, oil output reduction will lead to a 4.6% year on year drop in oil sector GDP, the largest fall since 2009, followed by a 1.4% growth in 2021. The oil price slump has also weakened public finances, underpinning the 24% y on y decline in total revenue in the year to September.

Although the tripling of VAT to 15% and a hike in import duties have yielded a strong uptick in non-oil revenue, a

key diversification metric under the Vision 2030 agenda, Saudi Arabia's non-oil economy declined by 3.6% this year, the first negative outcome in over 30 years. The sharp VAT hike also pushed inflation above 6%, driven by accelerating food and beverage prices as well as transportation costs. Price increases have since moderated but are curbing domestic demand, on top of the impact of Covid-19 measures.

Despite these challenges, the Purchasing Managers' Index gauge moved back into expansion in September. This upward trend looks set to continue with the opening up of travel and tourism from January, which is projected to boost momentum more meaningfully in 2021 and maintain the positive trend in point of sales transactions. On the demand side, capital spending is expected to suffer for the remainder of 2020. This is due to the struggling private sector, and reallocations in public spending from capital expenditure to Covid-19-related support and stimulus. As a result, ICAEW forecasts a drop of around 12% in private sector investment in 2020, the steepest fall in decades.

How Nissan is using its electric cars to provide power at disaster operations

Outside, there are the familiar scenes of devastation: Rubble. Mud. Broken power lines. But inside the volunteer centre in Nagano Prefecture in the heart of Japan, power tools are charging, a photocopy machine whirrs, and the smells of boiled rice and fresh coffee fill the air. In the wake of Typhoon Hagibis, those working at the centre have found an unexpected way to plug in: the white Nissan LEAF parked outside.

The electricity pulled from the car's battery is shared across the centre through dusty cables. Addresses of those affected are photocopied, maps are spread out in well-lighted rooms and bursts of laughter cut through even the darkest moment. The idea of using Nissan's electric vehicles during disasters was born during Japans' 2011 earthquake and tsunami, which rocked even a nation that's used to frequent typhoons and endured one-tenth of the world's earthquakes in the past 10 years.

After nearly 5 million homes lost power in the 2011 disaster, Nissan provided a small fleet of first-generation LEAFs to help out. The company also began to explore how electric cars could be used to share their energy.

In May 2018, the Blue Switch project was launched. Its mission: to demonstrate how electric vehicles can be used as power sources for purposes beyond mobility. In a typical year, powerful storms will disrupt the lives of millions, knocking out power to entire cities. This is what happened during last year's Typhoon Faxai. Being prepared means striking agreements with local governments and companies.

Just last week, Nissan reached a major milestone: 100 agreements signed. Of these, 75 relate to how Nissan's electric vehicles can get straight to work the moment a disaster strikes. During those critical first hours and days, the electric vehicles can move around disaster areas and deliver power where it is needed the most. With no exhaust fumes and completely silent, a LEAF can be parked inside a building. It can recharge where the power supply has been restored, and then drive on to another hard-hit region.

A fully charged LEAF e+ with a fully charged 62-kilowatt hour battery can provide enough electricity to power an average Japanese home for up to four days, charge 6,200 mobile phones. It can keep the lights and fridges on at a local convenience store, allowing people to buy food or diapers, or keep a nursery school room cool during nap time.

Leaders expected to do things differently, Salesforce Survey

Salesforce has published its first Global Stakeholder Series: Future of Work, Now research study, a data-driven look at how the Covid-19 pandemic is shaping people's attitudes about current work environments and their perceptions on the future of work. Key insights from the research include:

MORE ACCESS TO TECHNOLOGY NEEDED

60% of respondents expect working from home to become the new norm. Technology is critical for companies to continue keeping employees safe and businesses running smoothly. Over one third of non-remote workers globally say they do not have the technology to effectively work from anywhere. Non-remote workers are those who've either never worked remotely or who've already returned to the workplace under special conditions.

BRIAN SOLIS,
Vice President,
Global Innovation
Evangelist,
Salesforce.

PRIORITISE SUPPORT IN RESKILLING

As new ways of working become the new norm for the near-term future, employee focus is now shifting to personal development. In fact, 65% of employees believe that workforce development must be a high priority for businesses, and 70% say technology should play a major role within it. The value of new skills is also becoming more commonplace in the eyes of employees, with 95% of respondents saying adaptability and 93% saying collaboration will be important skills

over the next six months.

EMPLOYEE WELL-BEING IS PARAMOUNT

The effects of multiple ongoing crises are taking their toll on employees. They have concerns around access to jobs, access to healthcare, racial inequality and worries about the environment. Increasingly, people believe that businesses should help move the needle on critical societal issues. 61% of respondents believe that businesses should make closing the gap on global inequalities a priority. In the current pandemic, around four in five respondents, 79%, believe that workplace safety should be a high priority for businesses.

PLATFORM FOR CHANGE

60% of respondents trust businesses to build a better future for younger generations, and are counting on them to do so, 52% say it's critical their employer gives back to the community. Value-driven businesses will be poised to not only survive, but thrive after the pandemic.

Middle East economy won't see pre-Covid level until 2022, ICAEW says
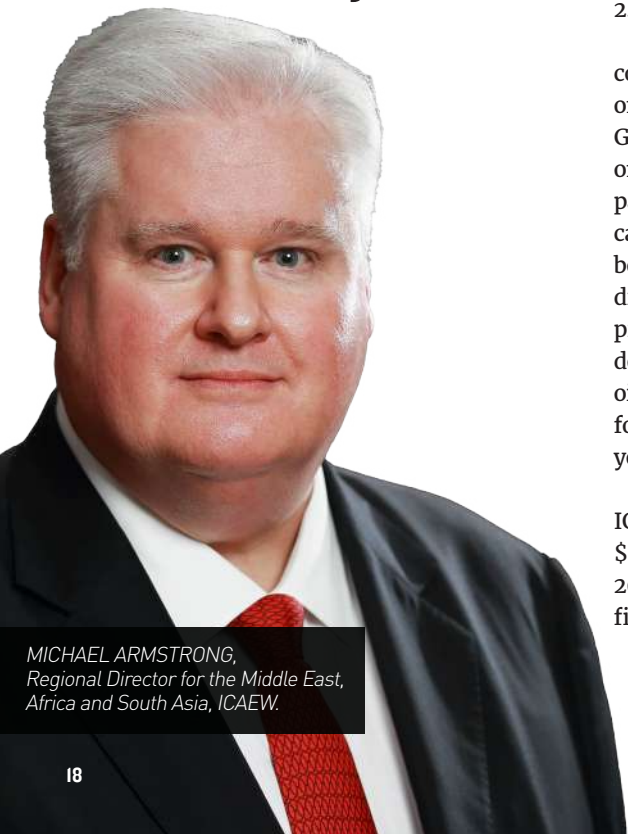
MICHAEL ARMSTRONG,
Regional Director for the Middle East,
Africa and South Asia, ICAEW.

The latest economic update from Oxford Economics and commissioned by chartered accountancy body ICAEW, reports that economic recovery is slowly underway in the Middle East but won't return to pre-crisis level until 2022. GDP forecasts for the Middle East for this year and next stand at -6.8% and +2.9%, compared to an average pace of 2.6% between 2010 and 2019.

With infections largely in check, GCC countries have continued to ease out of lockdowns. While clearly positive, Google mobility trends show the pace of return to normality has slowed, particularly in the important workplace category, and tourism traffic has also been subdued. The oil sector remains a drag on overall growth as countries cut production in line with the OPEC+ April deal. Therefore, with both oil and non-oil sectors facing hurdles, the GCC is set for a large GDP contraction of 5.3% this year, before recovering by 2.4% in 2021.

In its latest Economic Update, ICAEW's estimate for Brent crude is $41.7pb for this year and $49.3pb in 2021, slightly higher than forecasted figures back in March. However, there

is limited upside for oil prices through 2022 and 2023. The subdued outlook for oil prices will limit GCC governments' room to provide fiscal support, preventing growth from returning to the levels they were at the end of 2019 before late 2022, later than most other regions in the world.

In the non-oil economy, recent vaccine developments boost the chances of consumer-facing sectors, such as hospitality and airlines, being viable in a year's time. This should benefit regional countries with a higher share of tourism, mainly the UAE and Bahrain, where non-oil economies have struggled to pick up pace and companies have continued to trim their workforces. The burden of job losses has fallen on the expat population, leading to a departure of many workers and a decline in population. Elsewhere in the region, the outlook remains weak, with Iran and Lebanon both thrust into renewed lockdowns. Inflation has spiked in both countries against the backdrop of currency devaluation and is predicted to be in double digits this year and next.

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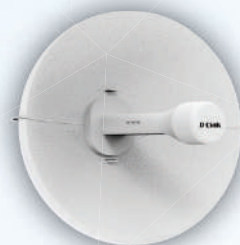
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Farnek launches cloud, mobility-based in-house smart fleet management

UAE-based smart and green facilities management, FM, company Farnek has launched an in-house smart fleet management solution that will not only optimise the performance of its transport fleet, but also improve service delivery to its customers. The solution, which covers Farnek's entire transport fleet of more than 300 buses, vans and cars across the UAE, was built by its in-house technology division, which after a lengthy process of research and development, has simply and ingeniously adopted and adapted the latest smart technology to produce a homemade solution.

Using Farnek's live administrative portal, operational staff at its logistics centre compare vehicle inventory with the current and scheduled demand and issue instructions to the drivers, each vehicle is fitted with a dedicated smart phone loaded with an app. The drivers log in, accept the notification based on a QR code sent to the smart phone in the vehicle and start their journey. The app automatically calculates and compares the estimated and actual journey times and presents the driver with Google Maps-based navigation, to show the most time-efficient route to take.

The operational dashboard can also generate incident reports, organise new transport schedules, search for the nearest and most relevant available vehicle, corelating with customer demand. A whole host of reports can also be generated by the system as well, from vehicle assignment and utilisation to monthly expense reports. There is also a driver's module holding driving documents and records of any previous incidents or violations.

Temi, Double 3 robots available at Jacky's retail and online stores

Jacky's Business Solutions, a B2B solutions provider for robotics, is now offering its Temi and Double 3 robots to consumers through Jacky's Electronics both at its retail stores and online. The two robots will also be shortly available on several online marketplaces in the region.

Jacky's Business Solutions became the official distributor and the service center for the award winning, Temi Robot for the UAE and the GCC in October 2020. Temi Robot is an affordable, ideal companion using ground-breaking AI technologies and built-in powerful features such as VOIP calling, telepresence, navigation, built- in chatbot Alexa, among others. Developed on Android platform, it is customizable with applications using the SDK kits. Once fully charged, the robot can work nonstop for up to 8 hours.

While Temi can be used for either personal or business use, some of the most popular uses include distance learning and helping students learn coding, work from home virtual video calls for business, telepresence in the healthcare industry, concierge in hospitality, sales associate in a retail, temperature measurements, Covid awareness, among others. With the availability of Android SDK, programmers can build custom applications based on the customer needs. In the case of large volumes, custom branding can be done so that the unit looks part of the organisation.

Emirates, DP World part of Vaccine Logistics Alliance supporting COVAX

Dubai has launched the Vaccine Logistics Alliance to speed up distribution of Covid-19 vaccines around the world through the emirate. In support of WHO COVAX initiative and its efforts to equitably distribute two billion doses of Covid-19 vaccines in 2021, the Dubai Vaccines Logistics Alliance combines the expertise and global reach of Emirates airline with DP World's worldwide network of ports and logistics operations, along with the infrastructure of Dubai Airports and International Humanitarian City to distribute vaccines worldwide.

The distribution will particularly focus on emerging markets, where populations have been hard-hit by the pandemic, and pharmaceutical transport and logistics are challenging. The alliance is working with a broader set of stakeholders including pharmaceutical manufacturers, forwarders, government agencies and other entities for transportation of vaccines.

International Humanitarian City, IHC, the world's largest hub for humanitarian logistics based in Dubai will be a vital partner in the Dubai Vaccine Logistics Alliance bringing its vast expertise in humanitarian logistics for aid materials such as food and medicine in markets with limited infrastructure. IHC and Emirates SkyCargo have already partnered on many humanitarian cargo flights and earlier in 2020, also signed an MoU for closer collaboration for humanitarian assistance flights.

Bahrain achieves nationwide 5G coverage for 1.5M people

Bahrain has achieved full national 5G coverage, according to Bahrain's Ministry of Transportation and Telecommunications. Two of three mobile operators have achieved full coverage to the Bahrain's population, sparking a new wave of opportunities for streaming, gaming and supply chain technologies.

All of Bahrain's 1.5 million population is now able to access the high-speed service. Investment experts hope that the roll-out will attract other heavyweight tech firms in the post-Covid era as companies look to make full use of the wide promise of next generation technologies across a wide variety of applications.

Bahrain's telecom sector attracted some more than $2 billion between 2009 and 2019. The country's ICT sector now accounts for nearly 3% of national GDP. Researchers estimate that there will be more than 1 billion 5G connections by 2023.

HE ENGINEER KAMAL BIN AHMED MOHAMED, Minister of Transportation and Telecommunications, Bahrain.

Everyday life, made simple
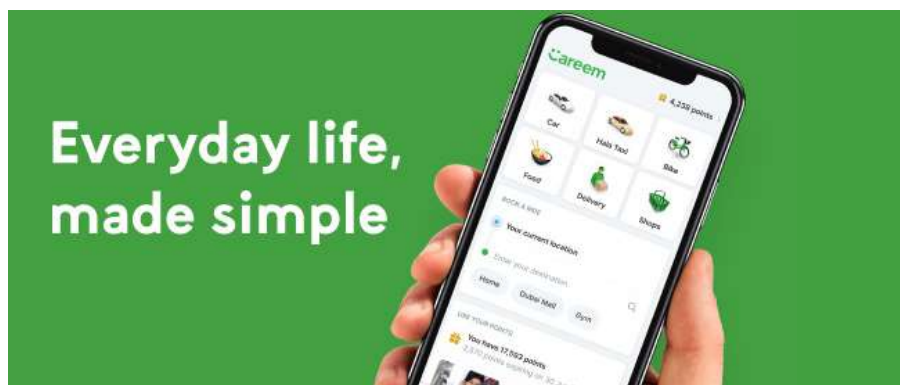
Careem expands car ride-hailing service across the UAE through Super App

Careem has expanded its city-to-city ride-hailing service in the UAE, allowing users of the Super App to book a Careem car to take them anywhere throughout the country. Having previously piloted the service between Dubai and Abu Dhabi, Careem has extended the service to now include Sharjah, Ajman, Ras Al Khaimah, Fujairah and Al Ain. The select Emirates who have Careem services will allow customers to book a variety of car types to their chosen destinations.

Victor Kiriakos-Saad, General Manager at Careem UAE commented that they continue to find opportunities to enhance their customer experience and therefore the launch of the extended service comes as a part of a Careem scheme to offer simplified transportation to all residents and visitors. He added that from the successful launch of the Abu Dhabi to Dubai route, Careem will now introduce five additional Emirates in which customers can travel between using Careem ride-hailing, these being Sharjah, Ajman, Ras AL Khaimah, Fujairah and Al Ain.

48% META manufacturers realised cost efficiencies in DX, Infor IDC brief

Manufacturers in the Middle East, Turkey and Africa region are experiencing significant gains from their digital transformation, DX, projects. Still, they could achieve far more if they improved the way they define, plan, and execute their DX projects, according to a new IDC info brief sponsored by Infor. In the info brief, Future of Manufacturing: Driving Transformation in the Age of Industry 4.0, IDC revealed that 48% of manufacturers in the Middle East, Turkey, and Africa, META, realised cost efficiencies from their digital transformation initiatives, while 47% achieved productivity improvements, and 39% saw increased revenue.

The info brief also stressed that manufacturers stand to increase the effectiveness of their DX initiatives if they follow the correct steps at the planning and implementation stage. IDC recommends that manufacturers start their DX projects with a detailed assessment covering operations, systems, data, skills, organization, and infrastructure, and create a DX roadmap with short-term and long-term goals and KPIs to measure progress. It also recommends that organizations build a cross-functional team from various departments to drive the plan, and make periodic reassessments and updates.

The info brief also revealed common pitfalls to avoid, including initiatives that are not well integrated with the rest of the business' strategy; undermining the perception of DX as being everyone's responsibility; a lack of understanding of existing data assets; and siloed technology environments.

KHALED AL SHAMI, Director of Solution Consulting for the Middle East and Africa, Infor.

Emirates NBD allows NFC document verification for new customers

Emirates NBD became the first bank in the Middle East, North Africa and Turkey region to allow new customers to have their identity documents verified using contactless NFC technology when opening a bank account via its mobile banking app. The bank's TruID solution uses NFC technology to read information from embedded chips in the documents and seamlessly extract data to autofill a digital account application. The customer is then prompted to take a selfie within the app to complete the process.

Emirates NBD's TruID digital identity verification solution was developed as part of the bank's collaboration with fintechs VisionLabs and Smart Engines. Apple users can have their biometric passports read using the NFC technology, while Android users can avail electronic reading of both Emirates ID and their biometric passports.

*SUVO SARKAR,
Senior Executive Vice
President and Head
of Retail Banking and
Wealth Management,
Emirates NBD.*

*JOHN-DAVID LOVELOCK,
Distinguished Research Vice President,
Gartner.*

Gartner forecasts EMEA IT spending to grow at 2.8% in 2021

IT spending in EMEA is forecast to total $1.075 Trillion in 2021, an increase of 2.8% from 2020, according to the latest forecast by Gartner. IT spending in the region is expected to decline 6.5% in 2020. Spending across all segments is expected to decline in 2020. However, in 2021, as organisations start reconfiguring their business and operating models for a new reality, companies will increase their spending levels and shift the areas they are spending in.

Organisations have to respond to the public health interventions caused by Covid-19. One part of those efforts will be in spending on devices 2021. Devices spending by EMEA organisations will move from a decline of 15.1% 2020 to an increase of 1.7% in 2021. Thin and light notebooks spending is on pace to grow 10% and desktop-as-a-service platforms spending will achieve a steep increase of 60% in EMEA in 2021.

The speed at which remote working is occurring varies considerably around the world depending on IT adoption, culture, and mix of industries. The US will lead in terms of remote workers in 2021, accounting for 52% of the US workforce. Across Europe, UK remote workers will represent 48% of its workforce in 2021, while remote workers in Germany and France will account for 38% and 34%, respectively.

Investments in delivering technologies to support remote workers will fuel spending on these technologies in EMEA by 5% in 2021. EMEA organisations will increase their total spending on collaboration and content platforms, 17%, security software, 11%, and cloud conferencing unified communications, 4%, in 2021.

PwC's Academy Middle East wins Training Partner Award by CertNexus

PwC's Academy Middle East was named the Most Innovative Authorised Training Partner by CertNexus. The annual authorised training partner meeting and award ceremony was held virtually from Rochester, NY. The award recognises the exemplary representation by PwC of CertNexus' emerging technology training and certification programmes and the Academy's achievements in delivering future skills for the GCC's digital economy.

PwC's Academy launched the region's first qualification for Artificial Intelligence certified by CertNexus in 2020. Aiming to bridge a widening skills gap, the qualification for Certified Artificial Intelligence Practitioner, CAIP equips local talent with the knowledge and skills for practical application of AI in the workplace.

Amanda Line, Partner, PwC's Academy commented that digital training is an integral element of their training portfolio, and has been for a number of years. She added that this reflects the alignment of PwC's Academy with many initiatives introduced by the governments across the GCC, including the UAE government's strategy for Artificial Intelligence centred on making the UAE the first in the field of AI across diverse sectors driving the economy, and Saudi Arabia's national strategy on data and Artificial Intelligence aiming to train 20,000 AI experts.

Intelligent connected machines will proliferate by 2030, ConsumerLab report

Consumers expect connected technology to become more flexible and interactive going forward and see devices enabling more pro-active, and even creative choices in a wide range of everyday life situations by 2030. The tenth edition of the Ericsson ConsumerLab 10 Hot Consumer Trends report highlights consumer predictions about the various roles that connected intelligent machines could take on going forward. Each of these roles could be seen as new service areas, opening a range of opportunities for 5G service providers to gradually extend intelligent networks to their customers.

Based on long-standing global trend research, the ConsumerLab 10 Hot Consumer Trends 2030 report represents the expectations and predictions of 50 million early technology adopters across 15 major cities. In this study, respondents rated 112 connected intelligent machine concepts, ranging from a human-centred to a more rational perspective. The result is an overview of the 10 roles consumers expect connected intelligent machines to take in everyday life by 2030. Each trend in the report depicts a specific role that such machines could take.

SOME OF THE HOT CONSUMER TRENDS FOR 2030:

- Body bots: 76% of consumers predict there will be intelligent posture-supporting suits.
- Guardian angels: Three-quarters believe that privacy guardians will help fool surveillance cameras and block electronic snooping.
- Community bots: 78% believe electronic watchdog services will alert neighbourhood allies to any trespassers.
- Sustainability bots: Future weather will be extreme. 82% believe devices will share data and warn about local rain torrents or heat blasts.

Blockchain, geofencing can improve urban air quality, Ford study

Research by Ford has shown how emerging technologies such as blockchain and dynamic geofencing can complement plug-in hybrid-electric vehicles to help contribute to cleaner air in urban centres, offering benefits for cities, citizens and operators. The findings follow an extensive three-year study into the potential for commercial PHEVs to help cities solve air quality challenges. More than 400,000 kilometres of data was collected during the programme with dozens of Ford Transit and Tourneo PHEVs deployed to a variety of municipal and commercial fleets in London; Cologne, Germany; and Valencia, Spain.

Among the learnings was how geofencing and blockchain technology can complement PHEVs to further improve urban air quality by triggering zero-emission running based upon local air quality.

DYNAMIC GEOFENCING

Low-emission zones are increasingly common in urban centres across Europe. Ford's geofencing feature, fitted as standard on Ford Transit Custom PHEV, can help cities to maximise air quality benefits where they are most needed. With geofencing, the vehicle's zero-emission electric-drive mode can be activated automatically whenever it enters a low emission zone, without intervention from the driver. The Cologne municipal fleet trial took this one step further, showing how blockchain technology can complement geofencing to further enhance efforts to improve air quality. The time a trial vehicle entered or left a geofenced zone was recorded into a blockchain, a secure and transparent digital ledger that creates permanent time stamped records which are saved on multiple computers, ensuring 'green miles' driven could be safely stored and potentially shared among relevant parties such as city authorities and fleet owners.

COOL RUNNING

The small and medium-sized businesses taking part in the Valencia study included delivery, cleaning, and private security fleets, with irregular itineraries that sometimes took them outside of the city boundaries. For these longer journeys, fleets were able to benefit from the PHEV's onboard 1.0-litre EcoBoost petrol engine which can charge the battery on demand and extend the vehicle's range to more than 500 km WLTP.

The Valencia fleet also included an innovative PHEV refrigerated van fitted with a Zanotti Invisible electrically powered chiller unit.

CRAIG HAYMAN,
CEO of AVEVA.

AVEVA takes sustainability initiative, joins UN Global Compact Network

AVEVA has joined the United Nations Global Compact and the UN Global Compact Network UK, a voluntary leadership platform for the development, implementation, and disclosure of responsible business practices. With this announcement, AVEVA joins thousands of other companies around the globe committed to taking responsible business action to create a more sustainable world.

Launched in 2000, the UN Global Compact is the largest corporate sustainability initiative in the world, with more than 12,000 companies and 3,500 non-business signatories based in over 160 countries, and 69 local networks.

Its aim is to mobilise a global movement of sustainable companies and stakeholders to create the world that conducts business responsibly by aligning its strategies and operations with Ten Principles on human rights, labor, environment and anti-corruption; and takes strategic actions to advance broader societal goals, such as the UN Sustainable Development Goals, with an emphasis on collaboration and innovation.

AVEVA is already making strides towards a sustainable future, and the announcement marks another step in this journey. Alongside embedding changes across its own functions, AVEVA is enabling its customers to advance their own sustainability efforts with software solutions that can be applied across more than nine industry verticals to address challenges such as providing real-time energy data and supporting improved operational efficiency to help customers cut their energy consumption and emissions.

SH Capital to provide digital treasury management services for SMEs

A new digital treasury services management provider SH Capital, SHC, is launched in Dubai with a mission to empower small and medium sized enterprises, SMEs and MMEs. SHC offers global banking services, asset management, FX hedging solutions, investment products and services.

SH Capital is a subsidiary of parent company Stanhope Financial Group, which launched with $3.5 million funding in November last year. In December, the group also announced the launch of its EU headquarters in Lithuania after obtaining its Electronic Money Institution licence.

The independent fintech firm, which has received its in-principle approval Cat 3A regulatory licensing from the DFSA, Dubai, is set to begin trading as of end of Q2 2021, with a mission to help companies meet their financial goals during the Covid-19 recovery.

SHC will act as an intermediary for clients, helping them to access leading and global tier one cash investment products. The Stanhope team of leading industry experts will also advise on commercial paper, money market funds, futures, options, ETFs & FX hedging solutions. Additionally, SHC has already partnered with a number of global counterparties, exchanges and e-trading venues to provide liquidity in the equity, FX, fixed income and commodity markets for all clients.

In spite of recent market volatility due to Covid-19, SHC is also committed to providing bespoke financial strategies for companies as matched principle, designed to meet their risk tolerance and position them ahead of the curve for both short and long-term financial goals.

Accenture, Salesforce expand alliance to drive sustainability

Accenture and Salesforce have announced expansion of their alliance to help companies embed sustainability into their business, meet growing customer and stakeholder expectations, and contribute to advancing the United Nations Sustainable Development Goals, SDGs. The combination of Accenture's Sustainability Services, Salesforce Sustainability Cloud, and Salesforce Customer 360 will bring sustainability to the front office and provide the C-suite with true visibility into their company's historical and real-time environmental, social and governance, ESG, data.

Companies will be able to track, measure and act on a range of sustainability initiatives, including reporting on carbon usage, supporting customer engagements,

creating positive consumer experiences, meeting regulatory requirements and developing new business models.

Salesforce Sustainability Cloud, built on Salesforce Customer 360, will provide a trusted platform that gives customers a 360-degree view of their corporate environmental impact to help them measure and manage their carbon footprint and transparently report investor-grade climate data. Accenture will help integrate Salesforce Sustainability Cloud into their business strategies, operating models, technologies, and core processes and systems with industry-specific requirements and develop sustainability insights that can scale across organisations and their ecosystems.

Honeywell launches its first cloud-based fire safety systems

Honeywell has launched the first tools from its new suite of Connected Life Safety Services, its first all-in-one cloud platform for fire safety systems. Honeywell's CLSS suite of tools, built on the Honeywell Forge platform, enable fire technicians to minimise disruption, prove compliance and reduce time needed for design, installation, commissioning, inspection, maintenance and reporting of life safety systems.

Especially in today's environment, organisations across the fire safety value chain face multiple challenges:
● Achieving more with fewer resources, many facility maintenance teams are working with reduced staff.
● Managing challenges of limited access to facilities due to shutdowns.
● Dealing effectively with safety incidents, where risks remain the same at any occupancy level.

Honeywell's CLSS platform addresses these challenges by enabling systems integrators and facilities management firms to access the data within a

fire system from anywhere, without necessarily being physically be at the control panel.

Firetron, the largest individually owned life safety systems company in Texas, is using the Honeywell CLSS platform to support the development of compliance records for its customers.

Honeywell's CLSS platform is also being employed by EDSB Group of Companies, a UK-based provider of fire, security, electrical, mechanical and building services, in a 50,000-square-meter logistics centre for a freight carrier at East Midlands Airport.

Through application of digitisation principles and Industrial Internet of Things technology, Honeywell's CLSS tools make it easier to design, install, test and commission fire systems while helping eliminate errors and manual data entry throughout the designing, commissioning and maintenance processes. These tools can also improve the delivery of on-time completions and the handover of a compliant system with the relevant reports, saving

channel partners and end users time and money. During planned maintenance, CLSS streamlines the verification of compliant fire system testing and automatically generates and archives compliance reports for audit purposes.

Whether using the CLSS mobile app or a PC, facility managers can monitor their systems and easily access compliance reporting. This real-time view also enables technicians to troubleshoot a system remotely, allowing them to arrive on site with the right tools to service a system the first time, truly maximising efficiency and minimising disruption. This is even more critical given the industry's talent gap of skilled fire technicians.

Using CLSS tools, Honeywell partners can reassure their end users that they are in full alignment with mandated inspection and maintenance requirements. CLSS automatically captures the testing activity thereby removing any doubt on which device was tested, when and by whom. It also automatically generates suggested corrective actions and planned maintenance recommendations based upon local regulations.

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DARREN ROOS,
CEO IFS.

STANDARDISATION, ASSET MANAGEMENT, SERVITISATION

The pandemic has transformed corporate outlook towards rapid implementation of applications, cloud adoption, efficiency focused asset management and servitisation.

The global pandemic has caused many businesses to adjust in their approach towards implementing and using business applications. In some areas they have accelerated their initiatives, where they had once just begun. Global software vendors have also had to adjust their approach in engaging with end customers and how to deliver their projects.

Reflects IFS' CEO Darren Roos, that historically this used to be a face to face, time consuming activity, flying to the customers destination and doing workshops into what their processes would look like.

A key part of the discussion used to be on how to customise the IFS application to suit the end customer's needs. "It was always, from our perspective, a pretty painful thing to do. Because frankly, we have spent nearly 40 years building our technology, and we know what best practice looks like," explains Roos.

End customers have to follow time to value in order to ensure their business is continuing to work.

TIME TO VALUE

However, in the post pandemic phase of things, end customers have developed an urgency to get to value. "It is a bit of a revelation, to be honest. Customers are much less inclined to want to customise their applications. They are much more inclined to go fit to standard, because there has been an urgency to get to value," he says.

Pre-pandemic, in the absence of current restrictions, end customers may have taken up to six months to get their applications up and running. "Now we are doing it in three weeks instead. That is a good example of how things have changed and applies to everything," continues Roos.

In the past end customers used to talk about time to value being an important principle. But in the present situation, end customers have to follow time to value in order to ensure their business is continuing to work. End customers have fundamentally changed the way about how they will do things in the future, feels Roos.

However, on the flip side, every implementation, depending on the size of the end customer involves some degree of customisation. As long as software vendors like IFS deliver a fit to standard solution without customisation, they can be cost effective. This is now being recognised by top end customer executives, who equate fit to standard as also delivering time to value.

In the past, because businesses had months to do the implementation, so what could be done in weeks took months. "And now because you do not have months to do it, it does not take months. And there is a much greater commitment to getting it done," he explains.

"But where it tends to go wrong is when you go to the users, and users are looking for what they had in the past. And there is significant resistance to change. So, the change management requirement has not gone away," points out Roos.

End customers are now questioning the reasons why the IFS solution needs further customisation, and why the embedded best practices from IFS cannot be adopted. This causes customers to ask, why not this way?

ARRIVAL OF THE CLOUD

Global enterprise application vendors like IFS need to stay focused on what their end customer are looking for, and not go with the tide. Now there is a much greater focus on subscription and cloud. With the slowing down of liquidity in the markets, end customers are increasingly moving towards a commercial model of subscriptions.

IFS develops enterprise application software for customers who manufacture and distribute goods, build and maintain

> Where it tends to go wrong is when you go to users, and users are looking for what they had in the past.

> Over half of customers, we engage with today have chosen a subscription model.

assets, and manage service-focused operations.

As an enterprise application vendor, IFS offers its customers the choice of adopting a subscription model. "Over half of the customers that we engage with today have chosen a subscription model," says Roos.

IFS's enterprise application suite is hosted on Microsoft Azure. "We absolutely believe that customers should deploy in the cloud," says Roos. And the reason that Roos advises his end customers to adopt cloud is because IFS can provide a standardised application, that can be updated and maintained by the vendor.

"We also believe from a security and resilience perspective, that running in the cloud is the right way to do it," he adds. However, IFS continues to provide its customers the choice of running IFS from on-premises, from the public cloud, from a private cloud in their datacentre, or as a node with their cloud service provider.

Roos points out that running the IFS application suite from the Microsoft Azure platform is not necessarily the challenge. "It is not the application itself. It is about tooling, automation, security, interoperability, integration, all of the capabilities around the application itself," he says.

If IFS were to host its solution on all available platforms, including AWS, GCP, Ali Cloud, that complexity would cost the vendor, and therefore the end customer as well. By hosting only on Microsoft Azure, IFS needs to manage the cloud tools only on one platform.

IFS uses an architecture, that takes advantage of containerisation and Kubernetes to provide an extension of its cloud in the customer's own environment, and functions as a node.

Some end customers based in global markets such as aerospace and defense, operate based on their jurisdiction, and prefer to manage the IFS cloud environment on their own. Other end customers may choose to do it for regulatory reasons or for data stewardship reasons, or for the maturity of their solution. These choices need to be made available to them.

With full functional parity, IFS allows this portability from one type of cloud to the other. IFS can support end customers in deploying as an on-premises solution, as a private cloud, treated as a node of its own cloud. Or, as an interim step in their journey towards the public cloud.

"We still have customers that simply choose to do it that way. Even if it is not the most elegant, but that is their choice. We see customers that might want to deploy initially as a product in their own datacentre, and then at a later stage, move to the cloud," says Roos.

"We always get caught in the middle of trying to do what is best for the customer, and, what we legitimately believe is best for the customer. At the same time not being overly prescriptive," reflect Roos, about the multiple roles that IFS needs to play to enable the cloud journey of its end customers.

IFS provides an end-to-end ERP experience and its ERP solution provides visibility across customers, people and assets. Whenever a customer of an IFS' end customer engages, called a moment of service, the solutions can orchestrate across all the three. "Providing an outstanding moment of service is something that these solutions are built to do," says Roos.

"We continue to push ourselves to make the applications easier to

deploy, and easier to use. There is a significant orchestration of capability, which is required to create that outstanding moments of service. We all understand the number of things that have to come together to provide outstanding moment of service," he says.

MARKET VOLATILITY AND GROWTH

Globally, IFS operates across five major market segments. This includes aerospace and defense; engineering, construction and infrastructure; manufacturing; service industries; and telecommunications, energy, utilities and resources.

Historically, IFS is a significant player in the commercial aviation space, where large commercial aviation companies use IFS for their maintenance, repair and overhaul solution.

"That sector has been under enormous pressure in 2020, and is likely to be for the foreseeable

future. The other area is, oil and gas on the back of the challenges that sector had, earlier in 2020. We have certainly seen a slowdown in that area," points out Roos.

Despite these global slowdowns, IFS was still able to experience double digit growth in its software revenue, because of acceleration in other industries and markets.

Remote services and support, like IFS remote assistance, which enables customers to leverage augmented reality, to drive remote servicing of assets, saw growth in 2020.

"We have been fortunate in that the business has been resilient throughout. Our business was never focused on one sector. We only operate in five industries, and those five indices are pretty dispersed, which means that we have held up well," Roos explains on how IFS managed to pull through the challenging year of 2020.

IFS has been operating in the Gulf region for 17 years and has offices in UAE and Oman, and is in the final stages of opening its office in Saudi Arabia. IFS has end customers in Kuwait, Egypt, Bahrain and Qatar, amongst others. The largest airline, largest telecom, largest utility, largest shipyard, largest aviation MRO, are IFS customers.

"I think the region is certainly well positioned. I think they have dealt with the pandemic incredibly well. What we see is a significant opportunity as the economies diversify and grow in the region. These include energy, telecom, aerospace, and defence," points out Roos.

BOOSTING EFFICIENCY AND PRODUCTIVITY

The pandemic has also increased attention on how organisations can boost their efficiency through remote teams using various digital management services such as asset management and servitisation.

Asset management is a systematic approach for the realisation of total value from tangible and intangible assets, over their complete life

cycles. And servitisation is a service concept where industries use their products to partially sell outcomes as a service rather than capital expense, one-off sale.

Says Roos, "We actually started in asset management, and it is our roots. We then branched into ERP. So, asset management has always been part of the core solution and does not require any incremental deployment."

"I think that it is becoming more kind of du jour, because ultimately, understanding your assets in the context of servitisation is becoming significantly more important. I think that is what we see today, and the example that I use all the time is the Peloton bike," he adds.

Peloton, a US based exercise equipment company, offers an exercycle and treadmill on a monthly subscription basis, including remote streaming fitness classes.

Roos also cites the example of Rolls Royce, an IFS customer, who is a global manufacturer and supplier of aircraft engines. "They just do not do that anymore. The way that they do it now is they sell hours of operation."

That is the big change. In order for businesses to be able to sell hours of operation, they need to have a very good understanding of their assets. Asset management needs to be tightly integrated into the enterprises business.

Enterprises can build sustainable revenue streams, around assets produced and sold, and outcome-based services or servitisation. For this they need to understand their assets through total data management, have devices to monitor asset performance, deliver the right service remediation when required, through the right technician, with the right skill set, and with the right components, to service the asset on-site. "That is where the margin comes from," Roos points out.

"We see a number of customers, across all of those industries that we operate, that servitisation has a much faster growing trend. And asset management is intrinsic to that," concludes Roos. ◼

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LEVERAGING CLOUD FOR BIGGEST WORKFLOW MANAGEMENT CHALLENGE

The global vaccination is the biggest workflow challenge humankind has ever faced compounded by lack of automation in healthcare and government.

CHRIS DILLEY,
CTO for state and local government,
ServiceNow.

The arrival of multiple Covid-19 vaccines has created hope that the end of this pandemic may be in sight. But producing a vaccine is the first step in an immensely complex process that we must get right.

Last fall, the US government set a goal of inoculating 20 million Americans by the end of 2020. As of January 24, 2021, 18.5 million people had been vaccinated.

In conversations with governments, providers, and analysts in recent weeks, we focused on the issues that have slowed down vaccine distribution and administration. One of the biggest challenges is an over-reliance on slow, manual, error-prone processes that can overwhelm medical workers and systems.

We have seen multiple examples of medical facilities using email as a primary method to schedule vaccination appointments. Often, the emails go unread by busy clinicians who are the first priority group. As a result, the scheduled appointments are missed, leading other employees to perceive that appointments are available when they are not.

Hospitals are under siege from the pandemic, and mistakes are bound to happen. But there is a better way to manage one of the most consequential vaccination efforts in human history.

We have a powerful, novel weapon in the fight against Covid-19: digital workflows that automate critical processes, increase accountability, and dramatically improve efficiency.

Even a perfectly optimised vaccination programme will not end the pandemic by itself. We have still need to wear masks and maintain social distancing protocols for months to come, according to a new model developed by Columbia University researchers.

But digital workflows have transformed slow, manual functions for dozens of industries. In the battle to vaccinate the world's 7.8 billion people, they can provide the speed, transparency, and coordination that essential organisations need to address this global crisis.

Covid-19 vaccine management is the biggest workflow management challenge of our lifetime. To win, we must move faster than the virus. That will require governments to work in concert with healthcare providers, pharmacies, and other entities involved in administering vaccines.

Health systems and government

MIKE LUESSI,
General Manager of Healthcare and Life
Sciences, ServiceNow.

agencies know how to vaccinate people. What they do not know is how to do it 15.6 billion times globally, since most vaccine recipients will require two doses at top speed, and with a level of precision in communication, coordination, and collaboration that may have no historical equivalent.

The supply-chain issues are daunting. We need to deliver enough vaccines for every person. Every dose must be maintained at specific temperatures from manufacture to inoculation. Health systems must track who has received a first shot, then schedule second shots on specific dates. They also need to follow up with each patient and track any adverse side effects.

We are now in the earliest stages of vaccine rollout, and in many regions the system is already breaking down. The good news is that digital workflows can help optimise vaccine delivery

by automating critical elements of this process, including inventory management, staffing, scheduling, support, patient communications, reporting, and more.

At ServiceNow, we are working with all stakeholders, from large government agencies to small private healthcare and pharmacy groups, to help them manage their vaccine response. Our new Vaccine Administration Management solution supports President Joe Biden's goal to deliver 100 million vaccinations in his first 100 days in office, with immediate actions underway by the Biden-Harris administration to convert vaccines into vaccinations.

The State of North Carolina Department of Health and Human Services and NHS Scotland are among the more than 100 organisations currently working with ServiceNow on their vaccine management efforts. Based on our experience with all these organisations, we have identified three critical areas of focus.

#1 ESTABLISH A VACCINE MANAGEMENT COMMAND CENTER

Given the number of private- and public-sector entities involved in the vaccine delivery process, it is essential to define each organisation's roles and responsibilities.

So far, the US approach has been that the federal government provides Covid-19

One of the biggest challenges is over-reliance on slow, manual, processes that can overwhelm medical workers
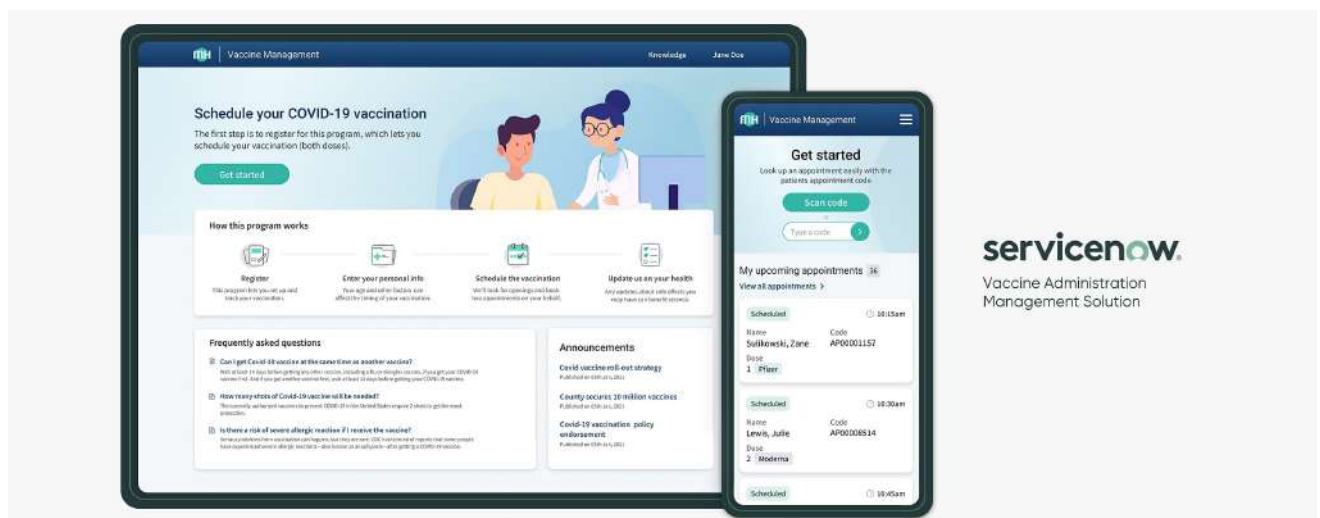
KEY TAKEAWAYS

- Hospitals are under siege from the pandemic and mistakes are bound to happen.

- A powerful, novel weapon in the fight against Covid-19 is automated digital workflows.

- Even a perfectly optimised vaccination programme will not end the pandemic by itself.

- Covid-19 vaccine management is the biggest workflow management challenge of this lifetime.

- We are in the earliest stages of rollout, and in many regions the system is already breaking down.

- The level of precision in communication, coordination, collaboration has no historical equivalent.

- Coordinating vaccination efforts seamlessly with county and local officials, is less familiar territory.

- We need an information supply chain that travels ahead of the vaccine, so that everyone is prepared when it arrives.

vaccines, and states figure out how to administer them. State agencies determine what systems of communication, reporting, and other functions they must provide. Where gaps exist, states call on their emergency response teams or departments of health or public safety to bridge them. If those organisations cannot fill the gaps, they will typically ask healthcare systems to do so.

State and local governments need to cooperate with symphonic precision. The good news is that they have a model to follow: a vaccine ops playbook developed by the US Centers for Disease Control and Prevention last fall that lays out major operational requirements to get vaccines to patients as quickly as possible.

At a national and global level, digital workflow management can provide an invaluable dashboard view of all the moving parts in this process.

#2 PAY ATTENTION TO INFORMATION HAND-OFFS

Healthcare organisations know how to manage vaccine supplies and schedule vaccination appointments. Coordinating vaccination efforts seamlessly with county and local officials, however, is less familiar territory.

The biggest problems in vaccine delivery typically arise when one organisation hands off responsibility

to another. Here again, workflow management tools can help because they make it easier for providers to synchronise efforts with other partners in the supply chain.

#3 CREATE AN INFORMATION SUPPLY CHAIN

We have all seen the recent headlines. Many hospitals, overwhelmed with Covid-19 patients, do not have enough staff to administer the shots. Local government officials typically get little advance notice of arriving vaccine shipments, forcing them to scramble to schedule vaccinations. Many communities also lack ready access to information about vaccine efficacy.

We need an information supply chain that travels ahead of the vaccine, so that everyone is prepared when it arrives. Providers need to know how many vaccine doses they are going to receive, and when and where they will arrive. Vaccine recipients need to know when they can expect to receive a shot and where they should go to get it.

Ultimately, the vaccine will work only if enough people take it. A survey in December by the Kaiser Family Foundation found that more than 1 in 4 Americans are vaccine hesitant, because of safety concerns and a lack of trust in government.

Access to good information is essential to building trust. Before anyone gets a jab in their arm, government agencies, healthcare providers, and citizens need to be better informed. That is another way that digital workflows can help end the pandemic. ∎

PARTNERING TO BUILD SMART CITIES USING DEVICES, NETWORKS, SECURITY

Vendor Aruba and global system integrator Wipro are partnering to jointly innovate across data and analytics and build tomorrow's smart cities.

Is smart city just a buzzword? The term has been around for almost a decade and yet remains one of the lesser understood of the new age digital technologies.

Here is a definition from the Smart Cities Council: A smart city uses information and communications technology to enhance its livability, workability and sustainability.

A smart city collects information about itself through sensors, devices and existing systems. It communicates and shares the data generated using wired or wireless networks. It analyses data to understand what is happening now and what may happen next.

The magic of a smart city happens when collective intelligence is generated by allowing sensors and devices to access data from other sensors and devices inside the smart city platform.

MAKING SMART CITIES

"Compared to global initiatives, the region leads in the adoption and roll out of smart city initiatives. And that is mainly because of wider and deeper initiatives, which the region has gone ahead with. As compared to some of the other geographies there are pockets of excellence here," says Ashish Khare, General Manager and Global Practice Head, IoT and Smart

City CIS at Wipro Technologies.

Country wide initiatives depend on taking the success to a large community, in comparison to a single city taking multiple initiatives. When it comes to taking that success to larger community, and to other cities within the country, or within the region, that is where the differentiation comes in.

"I believe smart city is not something which can be done in pockets. It has to be a nationwide initiative, or it has to be a region wide initiative. And that is where this region has a clear edge," stresses Wipro's Khare.

A smart city initiative typically

ASHISH KHARE,
*General Manager and
Global Practice Head, IoT
and Smart City - CIS at
Wipro Technologies.*

KEY TAKEAWAYS

- I believe smart city is not something which can be done in pockets.

- While technology is looked at as a key driver, it is not a technology project alone.

- The final goal of any such vision is how do we bring multiple tracks together.

- Smart city initiatives and Internet of Things cannot be justified completely on ROI.

- I would say cost benefit analysis is the key, while a return on investment is part of the benefit.

includes multiple sectors, such as travel and transport, law and government, utilities, and is a strategic approach rather than a point solution.

The success of a smart city initiative depends on selection of the right technology for process improvements. But since it directly impacts citizens, there is a human angle to it.

While technology is looked at as a key driver, it is not a technology project alone. The business angle and the human angle drives success here, while technology becomes more of an enabler to get that success.

Unless these aspects are understood, followed by selection of the right technology to align benefits, the initiative will remain more of a drawing board discussion.

"Smart city is nothing, but, a collaboration of smart retail, smart healthcare, smart transportation, smart traffic systems. So, all these things need to come together to make a successful smart city project," explains Jacob Chacko,

Regional Director, Aruba Middle East and South Africa.

"A smart city initiative is productive and successful, when you consider the human element and the citizen's quality of life," reinforces Aruba's Chacko.

"From Aruba's perspective, we are enablers of infrastructure and add the security side of things, which is one of the very clear building blocks in ensuring that a smart city project is successful," he continues.

"In general, the real enablers of any smart city initiative are Internet of Things, IoT, connectivity platform, security enhancements,

delivering select services for citizen," says Aruba's Chacko.

A key consideration in any smart city initiative is the final business outcomes and the level of cyber security built around them.

PLANNING SMART CITIES

"Mostly when people talk about smart cities, they talk about a use case and associated benefits of that use case. We do not stop there and we talk about how to do the overall strategy, plan the initiative, and then getting to the final goal," says Wipro's Khare.

A single use case in a smart city initiative can be the starting point, but it cannot end there. Based on

the priorities of a geography, region or country, multiple such use cases need to be identified and prioritised.

"The most important thing is to start a smart city journey and make it a long-term strategy, aligning things accordingly," explains Wipro's Khare. "The final goal of any such vision is how do we bring multiple tracks together."

Individual use cases and point solutions, enabled by various technologies, need to be blended through network connectivity and security, finally extracting building blocks of data. The availability of such integrated data further allows data correlation and data insights across all the use cases.

The benefit of such an integrated data picture across multiple use cases, far exceeds the benefit of data analytics and correlation from a single use case.

As an example, Wipro's Khare points to waste management, that impacts multiple aspects of a citizen's life. "If we look at waste management as only the waste collecting vehicles and the bins, then we are narrowing it down and we are not using the real benefits from a citizens standpoint. Waste not only impacts an individual but impacts a larger community in the way it is managed. These are all connected blocks," he elaborates.

Another challenge which smart city initiatives face in real life situations is their inability to scale in size, typically remaining as isolated use cases, inside a community or a city. There are at least two fundamental reasons for this according to Wipro's Khare.

Smart city initiatives are complex projects and require tight collaboration between government agencies, departments, private parties, technology providers and service providers.

"I would say the biggest showstopper for mass deployment and peak adoption is the fear of failure itself. Even if one of these collaborating elements are not in the right shape, that impacts the initiative," says Wipro's Khare. The countervailing best practice is therefore to progress in a step-by-step fashion.

The other inhibitor that limits the ability of smart city initiatives to scale without intervention is the wide gap between establishing a definite return on investment versus establishing a visible cost to benefit equation.

"Smart city initiatives and Internet of Things cannot be justified completely on RoI. I would say cost benefit analysis is the key, while a return on investment is part of the benefit," explains Wipro's Khare.

In smart city initiatives the end results sometimes have intangible benefits, which sometimes are

JACOB CHACKO,
Regional Director, Aruba Middle East and South Africa.

KEY TAKEAWAYS

- Smart city is nothing, but, a collaboration of smart retail, smart healthcare, smart transportation, smart traffic systems.

- The IoT gateway opens up doors for connectivity models to come and get embraced into the technology.

- We call it dynamic segmentation, where we exactly segment the right traffic to the right destination.

- 5G is going to be the next inflection point, as far as smart cities are concerned.

more important than real returns on investment, in terms of money.

On the flip side, the cost of adopting technologies that support smart city initiatives optimally as well as Internet of Things, are becoming more affordable. More importantly, while increasing affordability is a driver, the combination of technologies suitable for smart city initiatives are also becoming more effective, creating a positive forward momentum.

"In other words, choosing a set of technologies in the right combination, are making use cases available with the right balance of cost," reflects Wipro's Khare. These positive changes are now creating a favorable outlook towards smart city initiatives in the region, often involving multiple use cases.

SMART CITY TECHNOLOGIES

According to IDC, there will be 55 billion connected devices by 2022, which are typically sensors with a range of functionalities. Smart city solutions from Aruba, aided by artificial intelligence algorithms, address the infrastructure, networking, and security layers. Solutions from Aruba address the digital IP vulnerability of these sensor devices as they are activated and connected to a smart city network.

If the control of these devices is compromised, the entire smart city network can also be compromised. "We have always been focused on security to ensure the plethora of devices or sensors, which are out there in a smart city, can be onboarded into the network in a safe and secure manner," points out Aruba's Chacko.

In any smart city solution, an understanding of the network connectivity points is important. Connectivity can be through wireless, wired, or low power networks for sensors.

A key solution provided by Aruba is the IoT gateway, that interconnects mixed networks in a smart city solution. "The IoT gateway opens up doors for connectivity models to come and get embraced into the technology," explains Aruba's Chacko.

Aruba's networking technology rapidly detects and categorises the types of devices on the network. Additional solutions like ClearPass Device Insight

MEET THE EXPERT

KARTHIKEYAN GUNASEKAR,
*Solutions Lead, EMEA, ESP, IOT
and Smart Cities Aruba.*

provides visibility to assess the security profile of the devices and displays the information on a customer facing dashboard.

Using artificial intelligence, Aruba solutions also segments the network traffic to ensure that there is no latency and that data analytics is done in the most optimum manner at the edge or at the core. Suitable and optimised network telemetry by Aruba solutions, ensures that data is well segmented resulting in high efficiency of data processing.

Aruba has used specific chipsets with artificial intelligence embedded in it to optimally route network traffic. The data science models for routing of network traffic have been collected from millions of devices supplied by Aruba across the globe.

Aruba's data science models receive updates in real time and help to align network traffic with processes. This process of using artificial intelligence to manage network traffic for the purpose of optimisation of data analytics and aligning with business processes, is termed as AI ops.

"We call it dynamic segmentation, where we exactly segment the right traffic to the right destination. Artificial intelligence can only generate benefits if the data is segmented and that is achieved by segmenting the network traffic from the initial stages itself," adds Aruba's Chacko.

Wipro's smart city solutions also use artificial intelligence and work extensively on the network edge. In particular Wipro's Smart I-Connect

WIPRO'S SMART CITY METHODOLOGY

Smart city initiatives leverage digital technologies to deliver citizen centric initiatives. Wipro's Khare points out that Wipro plays a lead role in at least three specific areas.

In the first area, Wipro brings in its domain knowledge, advisory and consulting services, and connects them with citizen, city or country challenges, aligning them to priorities and processes. It further maps all of this to technology solutions in consultation with partners like Aruba.

The second area that Wipro operates in, is platform engineering including systems integration and data analytics. And the third is adding its own intellectual property into building the solutions for smart city initiatives.

The critical building blocks of any smart city initiative with a larger Internet of Things use case, are digital infrastructure, connectivity, security, and the platform. These need to be tightly integrated through security and need to leverage on various technologies to deliver the final benefits.

And finally, there needs to exist a service management framework, which does continuous device monitoring and benefit analysis to deliver the results as they were committed.

In order to deliver these components, Wipro partners with technology players for various aspects like digital infrastructure, connectivity, security.

"Technology comes from various ecosystem partners and Aruba is one of the most important partners in them. All these steps need to be tightly coupled," stresses Wipro's Khare.

sits at the network gateway and manages traffic at the edge. Data segmentation is also a key part of Wipro's smart city solution architecture.

"Data segmentation is a critical element, because we do not believe in getting everything together at one place and trying to process it that way," says Wipro's Khare. "Even if we look at command and control, we believe a city may not have a single command control. It may have distributed command controls for ease of operation, and for managing technology," he continues.

Using such an architecture means initiating data segmentation and then processing and targeting the data in the right place.

FUTURE SMART CITIES

Citing the example of the Internet in 1995, and iPhone in 2007, Aruba's Chacko points out that the role of artificial intelligence in networking technologies is also fast reaching a similar point of inflection. Another technology that is rapidly approaching the point of inflection for smart city initiatives will be the roll out of 5G telecom technology.

"5G technology is well suited to manage the requirements of smart city initiatives in terms of volume of data, and the speed of data transfer. 5G is going to be the next inflection point, as far as smart cities are concerned," says Aruba's Chacko.

Wipro's Khare also emphasises the close bonding between 5G technology and Internet of Things. "I would say 5G and IoT are tightly bonded. The adoption of IoT will change with 5G coming in to the masses. 5G monetisation cannot happen without IoT. These two things are complementary and will go hand in hand, and probably the inflection point is very close to us now."

Going forward, for smart city initiatives, 5G will be the choice of networking technologies deployed outdoors, and Wi-fi will be the choice of networking technologies deployed indoors.

"The learning point from the current pandemic is to start preparing technologies to align with such situations in the future. And for this, image analytics, occupancy management, contact tracing are going to be key technology enablers," feels Wipro's Khare.

As a conclusion, Aruba's Chacko points to a statement made by Fareed Zakaria in his book: 10 lessons for a post pandemic era. "One of the quotes that he made, which was very interesting was, there are decades when nothing happens, and there are weeks when decades happen. We are exactly in that era now."

Smart cities enabled by IoT infrastructures are fast heading into becoming tomorrow's reality. ■

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RSA SecurID Suite enables organizations of all sizes to mitigate identity risk and maintain compliance without impeding user productivity. It ensures users have appropriate access and confirms they are who they say they are with a modern, convenient user experience. In addition, RSA SecurID Suite provides unified visibility and control across organizations' many islands of identity.

AIRPORTS

MANAGING DIGITAL TRANSFORMATION AND CONTACTLESS TRAVEL

Airports are facing a double whammy, prepare for the inevitable volume surge of passengers, at the same time create a contactless secure journey.

Before the pandemic, passenger travel was at a high, with around 9 billion people traveling every year. That number was expected to double by 2040. With the number of air traffic movements increasing steadily, congestion in the airports and airspace was becoming a growing concern.

The biggest challenge was how to meet the increasing demand while maintaining safety and providing greater visibility and insight to airport operations. To tackle these challenges, airports have accelerated their master plan initiatives like CapEx-intensive expansion plans or using advanced technology to create capacity.

Over the last few years, we have seen a rising demand for technologies that can integrate systems across Airport Operations like Airside, Terminal or Landside. By integrating everything from Airfield Ground Lighting, to Gate Turnaround, Tower and Core Terminal Airport subsystems, you can get far better oversight of airport operations, to optimise turnarounds and get more aircraft movements per hour.

GEORGE BOU MITRI,
Vice President and General Manager,
Honeywell Building Technologies, Middle
East, Turkey and Africa.

Airports have accelerated initiatives like Capex-intensive expansion plans or using advanced technology to create capacity

We have seen rising demand for technologies that can integrate systems across airport operations

Over the long-term, these kinds of technologies are going to be critical to supporting the growing demand for regional and pan-continental air travel.

DIGITAL TRANSFORMATION

Before the pandemic there was focus on digital transformation to improve airport operations, and in the medium and longer term we expect this trend to continue and indeed accelerate, with a greater emphasis on safety and security.

We also see self-service becoming an important element of transformation to ensure that the passenger is in control throughout their journey, inside the airport or at off-airport premises. Aspects such as online check-in, bag self-tagging and dropping and virtual queuing, will enable airports to operate more effectively in a two-meter economy.

As the industry looks to return to the new normal, there is opportunity for change, and this is where we see the potential to usher in a new age of sustainability. Of course, this rests on the

aviation industry's various approaches to profitability and cost control. Investment in digitalisation and automation can help drive more efficiencies which in turn can help achieve sustainability goals.

Smart building management has a huge role to play here too, and as connectivity and infrastructure develop with 5G, combined with emerging technologies that harness the power of things like Big Data and Machine Learning, the ability to optimise operations to reduce energy consumption, while continuing to meet business goals, is only going to increase.

For instance, adding core airport data information such as real-time flight arrival time or gate allocation changes to an intelligent and connected building management system can enable airport operators to optimise their energy usage.

PANDEMIC HIT

Now more than ever, extra measures and precautions are being taken to improve the well-being and security of airport staff and passengers. Industry bodies

> By integrating everything you can get better oversight of airport operations and more aircraft movements per hour

such as the International Air Transport Association and the International Civil Aviation Organisation have issued guidelines and recommendations on improving safety and security in airports, which need to be complied with.

As the industry focuses on to return to flying, the challenge now is how to efficiently move disparate volumes of people through the terminal safely, complying to social distancing norms, maintaining rigorous cleaning processes, and ensuring air quality while at the same time keep waiting and transit times to reasonable levels.

To successfully tackle these, airport security and operations teams need to be properly equipped to reduce the risk of infection at each stage of the passenger journey. They need to have situational awareness in all spaces of the airport, from curb to gate, as well as early detection of potential risks associated with people and property.

In response to Covid-19 there are three things airport operators and their airline partners want to focus on – maximising the safety of their customers and staff, maintaining regulatory and standards compliance, and ensuring business continuity.

Technology has an important role to play with all three of these priorities, from control systems to monitor terminal throughput and avoid congestion, to air quality management systems, and other intelligent building management solutions that can

KEY TAKEAWAYS

- In the medium and longer term we expect this trend to continue and accelerate with emphasis on safety and security.

- We see self-service becoming an important element of transformation to ensure the passenger is in control throughout their journey

- Online check-in, bag self-tagging and dropping, virtual queuing, will enable airports to operate more effectively.

- As the industry focuses on return to flying, the challenge is how to move volumes of people through the terminal safely.

- Ensuring air quality while at the same time keep waiting and transit times to reasonable levels.

- Technology has an important role to play to keep the airport operation running in the event of an alert.

keep the airport operation running in the event of an alert.

In response, we recently launched our Healthier and Safer Airports' solutions, part of Honeywell's Healthy Buildings portfolio, which includes a range of technologies to support airports as they resume operations and work to reassure their customers.

For example, to help improve surface cleaning and ensure fresh air circulation in terminals we have created new solutions that enhance ventilation and temperature controls, manage humidity, pressurisation, filtration, as well as ultraviolet solutions to mitigate contagion risk.

On the safety and security side, we have technologies that can be used for people counting, managing the flow of passengers, temperature screening as well as frictionless access control. Through deep learning and artificial intelligence–based video analytics, it is possible to use existing cameras and see if passengers are complying with social distancing guidelines and wearing face masks to protect themselves and others.

We have developed these solutions with integration in mind, so that whether they are being installed at the design and planning stage, or being retrofitted into an existing architecture, they can integrate seamlessly with existing systems in the terminal.

AIRPORT SOLUTIONS

Honeywell is working across its businesses to quickly develop solutions that support critical sectors, like air travel, recover. We are working with customers to implement holistic approaches and solutions that support safer, more efficient and more secure terminal operations whilst restoring passenger confidence. Our Healthy Buildings solutions for airports enable this, as they are fully integrated with air quality, health, safety and security controls, backed by expert services.

The solutions enable safer terminals by improving air quality, conducting thermal screening, people counting, frictionless access and PPE compliance checks using video analytics, minimising risk of exposure and choke points. This can also centrally monitor and secure all areas of the airport terminal including baggage handling and parking, among others.

From curbside to airside, we are making it easier for passengers to flow through an airport and can help generate insights into how people can be supported and reassured in an airport environment. As the industry looks toward recovery from the impact of Covid-19 we will see technologies like these play a central role in giving people the confidence they need to get back into the air, and operators the intelligence they need to capitalise on growth. ■

HAVE YOU SET UP YOUR DIGITAL CONTROL TOWER?

A digital control tower methodology orchestrates, overcomes roadblocks, and delivers digital outcomes, explains Rob Van Dale at Kearney Middle East.

ROB VAN DALE,
Partner at Communications, Media,
and Technology, Kearney Middle East.

Digital control tower empowers organisations to foster a digital mindset by actively driving behaviors that support digital

According to IDC, investments in digital transformation and innovation by the government and the private sector in the Middle East, Turkey, and Africa are expected to account for 30% of all spending in the region by 2024—up from 18% in 2018—with that momentum set to crank up a gear on the back of Covid-19.

Yet despite this rising investment, getting digital transformation right is no easy task: it is a steep learning curve where only around 30% of global projects deliver a positive financial impact. This is a challenge faced by private and public sector organisations, and at national levels.

There are four main challenges holding back progress:
● Limited organisational buy-in
● Gaps between ideas and execution
● Failure to scale
● Minimal commercial impact

Our experience shows us that making digital transformation happen is not about a big-bang approach. It is about an approach that prioritises execution over ideas and is practical, iterative, scalable, and driven by hard financial benefits. And four key enabling functions—IT, procurement, finance, and HR—have the power to act as the catalysts for accelerating that journey toward digital transformation.

That is where our proven digital control tower methodology—our practical approach to embracing digital, overcoming roadblocks, orchestrating within organisations, and laying solid foundations for delivering financially driven, tangible digital outcomes—comes in.

Digital control tower delivers systematic change by tackling the traditional hard blocks procurement, financing, resourcing, IT, and data and soft blocks capabilities, culture, workspaces, and governance that hold back digital transformation see figure.

Overcoming hard blocks requires a coordinated effort that spans the five areas of procurement, finance, HR, IT, and data.

A two-speed procurement process to rapidly source, assess, onboard, and scale up digital partners. This means setting up a process that runs parallel to traditional procurement to support partnerships with start-ups and other digital vendors.

This process compresses procurement timelines by factoring in direct vendor participation in the digital factory, a blanket waiver of approval, and simplified service agreements with predefined terms and conditions.

Venture capital-style stage-gate funding for a flexible, lower-risk budget allocation. Part centrally led and part business-unit-led, this approach effectively replaces cumbersome business-case definitions that come with upfront, inflexible budget allocation at the beginning of the year.

Instead, it enables the budget to be allocated incrementally and linked to the success of each MVP sprint, which is evaluated every 12 to 14 weeks.

A centralised model to recruit digital specialists. Digital control tower helps overcome recruitment

Our experience shows that making digital transformation happen is not about a big-bang approach

KEY TAKEAWAYS

- A two-speed procurement process to rapidly source, assess, onboard, and scale up digital partners.

- Compresses procurement timelines by factoring in direct vendor participation in the digital factory.

- Venture capital-style stage-gate funding for a flexible, lower-risk budget allocation.

- This approach replaces upfront, inflexible budget allocation at the beginning of the year.

- Digital transformation in regional markets is achievable while getting there is a three- to four-year journey.

and resource challenges in digital programs by attracting and retaining internal talent, and hiring specialised external candidates like UI, UX designers, design-thinking consultants, and agile coaches.

This empowers organisations to optimise the way they deploy resources across a portfolio of digital initiatives, as well as to effectively manage cross-functional resources.

A two-speed IT approach to rapidly implement digital solutions alongside more complex architectural changes. This is achieved by creating digital building blocks for MVPs including secure cloud enablement, agile DevOps environments, sandboxed development environments, and clear data governance—a smart, parallel IT ecosystem that is fully equipped to run digital factories and MVP sprints.

A unified data strategy with a robust data architecture and governance is required to support digital transformation. Digital control tower acts as a federal facilitator, coordinating data assets owned by individual business units. Data strategy becomes even more important as adoption of big data increases the number of use cases across MVPs.

Focusing on the soft blocks helps create a self-sufficient organisation that successfully adopts a digital mindset, builds capabilities, breaks

down barriers to communication, and promotes collaboration.

Digital control tower empowers organisations to foster a digital mindset by actively driving behaviors that support digital. Overcoming a legacy outlook requires adopting a start-up mentality, focusing on action and impact, and working in a dynamic and iterative manner. It means motivating teams by incentivising entrepreneurship and accountability.

A 5x5 approach to capability building is crucial to delivering a sustainable digital transformation. Five skill archetypes—leadership team, factory core teams, digital specialists, business support, and the broader organisation—need to be upskilled in five digital capabilities— agile methodology, digital toolkits, web app architecture, design thinking UX, and data science skills.

Digital control tower encourages collaboration and promotes cross-factory interactions. This is combined with the use of online agile collaboration tools such as Jira and Yammer, which are designed to break down barriers to communication and underpin a results-oriented approach to problem-solving.

Periodic cadence rhythm is defined across various MVP sprints and initiatives for better communication and coordination. Key leadership engagement and interventions are planned at various levels to ensure leadership has full visibility of progress and teams can openly share key challenges and learnings.

Digital transformation in regional markets is achievable. Getting there is a three- to four-year journey that demands focus, discipline, and buy-in from all stakeholders.

Our own experience at Kearney with clients has taught us that the digital control tower methodology has the power to make the difference between expensive, failed digital transformations and successful transformations—with early results—that deliver tangible returns on investment. And the time to kickstart that journey to digital is now. ■

Overcoming hard blocks requires a coordinated effort that spans procurement, finance, HR, IT, and data

DATA WILL DOMINATE DEFENCE LOGISTICS SECTOR IN 2021

Live asset usage data, anywhere military operations and sustainability goals will shape the future of defence logistics, explains Graham Grose of IFS.

GRAHAM GROSE,
Vice President and Industry
Director, IFS.

Covid-19 has actually accelerated digital change in the military

While 2020 was a turbulent and uncertain year across many industries, for the defence sector, it has been a wake-up call. Military organisations in particular have been forced to adopt new ways of working due to social distancing and the need to collaborate remotely. This has driven a need for more technology and less traditional, paper-based, processes.

This increased use of technology by military organisations and their in-service support partners is spawning a proliferation of valuable data being fed back by their assets, their people and their software. This data backbone is the common thread which underlies my three key developments that will shape the industry in 2021 and beyond.

Simulated data, AI, Machine Learning and predictive analytics, moves from maintenance concept to practicality. There has been significant discussion in recent years about the potential for AI and predictive analytics among military, industry and academic commentators. But now, in a practical sense, we are closer than ever to translating these principles into on the ground maintenance strategies to revolutionise military asset readiness.

5G is a key enabler for practical AI for military operations. With the proliferation of technology such as 5G connectivity allowing as close as possible real-time data exchange, the stage is set for live maintenance updates from military assets such as aircraft or vehicles to be fed back into a logistics system. This system can then optimise maintenance personnel on the ground to make seamless scheduled or even unexpected repairs.

Adding in machine learning is the next step to make maintenance as predictive as possible, bringing the ability to aggregate this data and use AI to simulate assets in a digital twin environment. Add in pre-set requirements such as number of sortie hours required of individual assets, and AI and machine learning will allow OEMs and military organisations to simulate wear on critical components such as engines in a fully digital environment.

These models can then be used to inform decision-making for the physical asset, turning simulated data into an on the ground strategic advantage.

Anywhere operations, a key armed forces requirement becomes achievable in disconnected environments. But even in today's increasingly digital world, there will still be situations where constant connectivity to analyse this data in real time is simply not possible, and nowhere more so than in military operations.

Gartner projects anywhere operations to be one of the top strategic technology trends of 2021 across all industries, not just defence. It defines anywhere operations as an IT operating model designed to support customers everywhere, enable employees

Anywhere operations become achievable in disconnected environments

Sustainable operations, what was once considered a luxury is now a strategic goal

5G is a key enabler for practical AI for military operations

everywhere and manage the deployment of business services across distributed infrastructures.

The military often performs mission-critical disconnected operations in difficult to reach locations beyond a forward operating base, which means they are perhaps the sector with the most pressing strategic need to embrace the idea of anywhere operations.

Optimising operations in such a disconnected setting means racing data back from these forward operating bases back to a main operating base which has the connectivity to inform maintenance and repair requirements. And here is where data connectivity becomes key.

AI, Machine Learning, and predictive analytics capabilities cannot optimise maintenance cycles without data to work with. As a result, expect in the coming months to see much more focus on supporting software that must have the ability to collect data in the field then upload, sync and action that information when an asset returns to base.

Sustainable operations, what was once considered a luxury is now a strategic goal. An area which will also see increased focus and scrutiny

going forward will be sustainability, something that militaries and their in-service support partners may have felt immune from given their remit to maintain national security at all costs, but times are changing.

Measuring sustainability efforts from a logistics standpoint also keys into the increasingly data-driven environment military organisations are introducing.

Firstly, more efficient asset management in terms of predictive maintenance will vastly reduce the logistics footprint associated with supporting complex equipment such as aircraft and vehicles. Secondly, the same software components which use data streams to help track asset performance and assess financial costs can track environmental costs as well. Environmental impacts can be assigned to each asset and rolled up into a reporting structure to detail the overall environmental impacts of military operations.

Three key developments but one theme is common which is reliance on a consistent data thread. Covid-19 has impacted industries in different ways, in the military it has actually accelerated digital change. The job is now for military organisations and defence in-service support providers to prioritise their digital initiatives and make sure they have the correct software infrastructure in place, because the benefits of these initiatives will not be achieved in isolation.

While these three developments are differing focus points for defence logistics and support, there is a common digital thread linking them all together, the reliance on data collection, access and analysis. Only by making sure their software infrastructure is able to exploit this common digital thread will they be able to give frontline soldiers, maintenance personnel and commanders alike a data-driven picture of military operations they need and crave for. ■

UNLOCKING THE BENEFITS OF THE INDUSTRIAL INTERNET OF THINGS

IIoT has made a vast difference to the efficiency of the industry and it is here to stay for the foreseeable future, writes Ravi Gopinath of AVEVA.

RAVI GOPINATH,
Chief Cloud Officer and Chief
Product Officer, AVEVA.

IIoT offers organisations a powerful framework for operational continuity

The Industrial Internet of Things, IIoT, is here to stay. Many heavy industry companies in fields such as engineering, mining, oil & gas, and manufacturing are accelerating their adoption of digital transformation journeys due to recent global events. The barriers to adopting IIoT technology has also fallen dramatically in the past decade.

Historical challenges to implementing IIoT solutions included expensive components to add network connectivity, difficulty aggregating data from disparate data streams, and lack of a centralised database or dashboard. Now businesses can have the opportunity to adapt and maintain operational excellence in volatile times through digital transformation.

The current global crisis is accelerating cloud and the use of data in increasingly sophisticated ways to provide visibility and certainty into operations.

Adoption of analytics is said to be one of the greatest drivers of digital transformation, as businesses seek greater data-driven insights. Data acts as a source of truth that helps teams focus on the critical factors that determine business resilience. There has also been a fundamental shift in mindset. Businesses are acutely aware that they must become more resilient by using technology.

Companies are using IIoT to their advantage to securely connect, and collect data from diverse remote assets, channeling information to advanced operational applications, and closing the loop by feeding key business applications. This helps to enable optimisation, asset management, enhanced analytics, and modelling or simulation, thus providing and improving business efficiency. This has been particularly true for the industrial sector, for instance, where IIoT has had a significant impact in five key areas.

Real-time operational information is used to understand what is happening in real-time and enables the condition management of asset and operations lifecycles. For example, a dashboard displaying vibration frequency of a rotating asset such as a turbine during operation provides real-time understanding of the asset operational behavior and state.

Historical operational information helps you to understand what has happened in the past to create intelligence around operational behaviour of assets. Through operational trends, display of KPIs and dashboards, you can create abstracted views of operational states. For example, a graph may be displayed on a dashboard showing the turbine's past vibration frequency during operation. This can be compared to the real-time vibration frequency, creating intelligence on the asset's long-term operational trends.

Predictive analytics is used for what-if type modelling. Integrating up real-time and historical data enables your team to assess potential

Prescriptive analytics describes what is needed to optimise asset and operations lifecycles

Adoption of analytics is said to be one of the greatest drivers of digital

outcomes of operational states and behaviors, even accounting for tertiary variables. Deterministic or non-deterministic models can then be applied for open-loop simulation and predictive analytics. For example, you can now estimate how long a piece of equipment can run before it requires inspection or is predicted to fail.

Prescriptive analytics describes what is needed to optimise asset and operations lifecycles. Scenario-based guidance is created and delivered through learning elements and

closed-loop algorithms to enable your team to calibrate planning and scheduling across the entire enterprise value chain. For example, using a unified supply chain model, scenario-based calculations can be used to optimise maintenance schedules and performance, minimising impact to your operations.

Enhanced safety is a combination of connected IoT devices, augmented and virtual reality technology provide real time operating procedures and key messages to operations personnel, reducing human error for performing specific tasks. Operators are also supplied with information about the location of existing hazards by superimposing them over the operator's location.

Industrial organisations will continue to evolve how they handle and present data at the plant level, and those who make sensible choices to ensure flexibility and expansibility will unlock unlimited potential in existing and expanding data. If your organisation does not have a strategy in place for digital transformation, the all-important first step is to execute a pilot project and key steps include defining an operational architecture, choosing an initial underlying system to provide state-of-the-art user interface and

data platform and tackling small projects that prove the concept of key requirements.

Covid-19 has significantly curtailed global and local mobility, leaving the global economy to face the prospect of a sharp recession. This will put businesses under enormous strain. To help navigate the challenge, digital transformation can provide the data driven insights needed to adapt and overcome.

IIoT offers organisations a powerful framework for operational continuity. Enabling users of all levels and experience to access the critical information they need to do their jobs successfully. IIoT devices also empower workforces with the digital services they need, such as equipment utilisation, condition management and more. IIoT offers innovative ways to monitor and manage objects in the physical world, particularly as huge streams of data offer companies' better avenues for decision making.

The results? More uptime, more efficiency and a more engaged and empowered workforce due to the access they have to a unified stream of insightful intelligence, at a time when it's never been more important to contextualise data and information that drive actionable insights.

Digital transformation is enabling companies to enhance their capabilities, increase their reach and returns across their asset and operations value chains. The use of IIoT through real-time online monitoring and analytics has had a profound impact by improving response times to potential issues and minimising possible damage to the environment, which has ultimately resulted in the avoidance of costly unscheduled shutdowns, while improving profits. IIoT has made a vast difference to the efficiency of the industry and simply put, it is here to stay for the foreseeable future. ■

Predictive analytics is used for what-if type modelling

GROWING RELEVANCE OF CORPORATE GOVERNANCE IN TIMES OF CRISIS

Niranjan Gidwani, Former CEO of Eros talks about the need to step up corporate governance rules which are critical to ensure success of any organisation.

NIRANJAN GIDWANI,
Consultant Director and Former
CEO of Eros Group Dubai.

Less than half of surveyed family firms in the UAE have a formal board of directors

In recent times, corporate governance is one topic which has received much attention throughout our region as well as the rest of the world. Corporate governance is all about maximising shareholder value legally, ethically, and on a sustainable basis, while ensuring fairness to every stakeholder, the company's investors, customers, employees, vendors, the government of the land, and society at large. Longevity is the best index of the success of an organisation, and good governance is one of the most critical conditions for ensuring longevity and growth. Tom Tierney, Former Managing Partner of Bain Consultancy has very correctly remarked, "Corporate culture is what determines how people behave when they are not being watched."

Many companies have created corporate governance cultures that talk of one value system, while their processes, structures and incentives may reflect an entirely different value system in practice. Clearly, good governance requires that companies must learn to move more and more from the reactive and compliance mode of corporate ethics to the integrity mode where the functions of the entire organisation and its leaders are completely aligned with its value systems.

Great managers and leaders are supposed to be simplifiers. They operate on simple and easy to understand business rules. Such rules are easy to communicate and easy to follow. After all, one cannot cheat people with simple rules. It is interesting to note that, without exception, every global or family company which violated basic governance principles did so by creating a web of complex and confusing rules.

Family firms are the backbone of the global as well as UAE's economy. They account for a significant segment of the non-oil gross domestic product and employ almost 70-80% of the workforce in the private sector. Therefore, family firms' contribution, and existence into the future is crucial and valuable to the economy.

Therefore, with all the global changes, the rapid digitisation, plus the covid-19 experience, it is now even more important than ever for these family firms to survive. One way they could navigate through this crisis is to put in place a robust corporate governance structure, which is essential for business continuity and to smooth succession from one generation to the next.

Having a formal family council and protocol is essential to promote family and business welfare, as well as to organise the relationship between family members and the business. Even during external shocks like the current global pandemic, a family council creates the formality necessary to establish well-structured decisions driven by family values and vision. Impulsive and rashly thought out business calls may yield short term gains, but need

Good governance is one of the most critical conditions for ensuring longevity and growth of any organisation

Having a well-structured board of directors limits the risk of managerial opportunism

to be looked at in terms of long-term continuity of businesses.

One of the most basic corporate governance mechanisms is to share the boardroom with a professional, well-diverse, ethnically balanced, non-family board of directors. Having a well-structured board of directors not only ensures better accountability, but it also limits the risk of managerial opportunism, and prevents conflict of interests which senior management may have with

their own business. It also helps in preventing family nepotism, and yet is also useful for navigating the socioeconomic consequences of the current global pandemic. However, less than half of surveyed family firms in the UAE, or for that matter, within the Middle East and South Asia region have such a formal board of directors.

During the current global pandemic, such a board could adjust its role to scrutinise the risks of the crisis and monitor the associated effects and future consequences on both the family and the business. As such, being caught without a board of directors during a challenging time may adversely affect family firms' ability to foresee risks and adjust procedures and policies to mitigate the challenges ahead.

However, merely having a board of directors in place does not guarantee success, the board's composition and structure matter to ensure competitiveness in times of crisis. A report released shows that only 22% of family firms have external members on their boards. Unfortunately, not having independent members as a part of the board of directors implies that family members and extended relatives dominate board-table discussions. Only time will

tell if family members' personal conversations are enough to overcome the new reality.

The biggest concern about this crisis is uncertainty. Unlike previous crises that were financial in nature, the current global pandemic has brought drastic changes in almost all aspects of human and corporate life and behavior. One positive impact of the global pandemic for UAE business families is that some of them have acknowledged the need to have effective corporate governance structures in place.

The UAE and the region must institute awards for good, ethical corporate behavior, and promote a corporate governance ranking system. Senior managers and leaders must be ranked not only on the basis of their performance and leadership capabilities, but also on the basis of the standards of ethics and integrity they set, and on whether they are using their positions of power to further their own businesses and wealth.

In the ultimate analysis, we are all temporary custodians of the wealth we generate, be it financial, intellectual or emotional. We have all, at some time, eaten the fruit from trees we did not plant. In the fullness of time, when it is our turn to give, we must in turn plant trees that we may never eat the fruit of. Trees which will and should benefit future generations. This should be our sacred responsibility. And good, honest corporate governance only helps in better fulfilling this responsibility.

Sadly, lack of adequate, ethical, balanced governance structures is causing immense amount of global bleeding at the bottom line, while ownership is made to focus on the top line. ■

Every company which violated basic governance principles did so by creating a web of complex rules

Pat Gelsinger to be Intel's New CEO effective Feb 15, 2021

Intel's board of directors has appointed 40-year technology industry leader Pat Gelsinger as its new CEO, effective Feb 15, 2021. Gelsinger will also join the Intel board of directors upon assuming the role. He will succeed Bob Swan, who will remain CEO until Feb 15.

Most recently, Gelsinger served as the CEO of VMware since 2012, where he significantly transformed the company into a recognised global leader in cloud infrastructure, enterprise mobility and cyber security, almost tripling the company's annual revenues. Prior to joining VMware, Gelsinger was President And Chief Operating Officer of EMC Information Infrastructure Products at EMC, overseeing engineering and operations for information storage, data computing, backup and recovery, RSA security and enterprise solutions.

Bain & Company promotes Cyril Gourp as new Partner in the Middle East

Bain & Company, global management consulting firm, has announced a new partner promotion in the Middle East. The promotion of Cyril Gourp is among 48 partner and 6 expert partner appointments across 25 global offices. Cyril Gourp is a core member of the Financial Services and Private Equity practices at Bain & Company with deep industry knowledge and expertise.

With over 18 years of professional experience in management consulting and banking, including 9 years in the Middle East, he has extensive knowledge in driving full potential strategies and transformation programs in Financial Services. Prior to joining Bain & Company, Cyril worked for a global management consulting firm and Exane BNP Paribas.

Pfizer promotes Patrick van der Loo to Regional President for AfME

Pfizer has announced the appointment of Patrick van der Loo as Regional President for Africa and Middle East region, AfME. Patrick's Pfizer experience spans more than 20 years in leadership roles with multiple successes across geographies.

In his new role as Regional President for AfME, Patrick will lead commercial operations to bring scientific breakthroughs in vaccines, oncology, rare diseases, internal medicine, hospitals, and inflammation and immunology, to serve patients.

Patrick has managed some of Pfizer's largest therapeutic areas in cardiovascular and neuroscience globally and led the commercial development efforts of a 500+ molecule business. In his previous role, Patrick was responsible for leading and executing Pfizer's commercial and cultural strategy in Japan, Korea, Australia, and New Zealand.

Network International appoints Nandan Mer as Group CEO

Network International Holdings has announced that Simon Haslam, Group Chief Executive Officer has decided to retire from the Company after forty years in the financial services sector. As a result, and following a global leadership search, the organisation has announced that Nandan Mer, currently MasterCard Strategy Head, International Markets, will succeed Simon as Group CEO. Simon will step down as Group CEO and from the Board of Directors and will remain with the Company throughout his six month notice period to ensure a smooth transition.

Nandan has a proven track record of building and growing businesses over 30 years in a number of global markets with leading financial institutions including American Express, Citigroup, United Bank for Africa and most recently at MasterCard.

AspenTech appoints David Leitham as SVP and GM to lead pharma

Aspen Technology has appointed David Leitham as Senior Vice President and General Manager to lead the company's pharmaceutical industry growth strategy.

Leitham has 25 years of experience in the pharmaceutical industry and is responsible for expanding AspenTech's footprint in the pharmaceuticals market, shaping the product and solution strategy and leading go-to-market efforts. He has demonstrated a track record of success integrating and transforming software businesses and products and growing them at double digits, while leading a software portfolio that drove over one billion dollars in connected sales. He brings significant expertise to AspenTech in mergers and acquisitions integration having worked on multiple integration efforts to transform businesses into high performing operations.

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GLOBAL CIO FORUM KICKS OFF REBOOT UNITE CIO SERIES

The Global CIO Forum launched its first Unite CIO Meet, a part of its new initiative, Reboot. The theme of the first event held at TopGolf in Dubai was work-life balance. 12 CIOs who attended the meet spoke on 12 different topics. Delegates who attended the Unite CIO Meet included Pankaj Bajaj of Capital Health, Mohammad Shahzad of Dubai Developments, Ajay Rathi of DAMAC Group, Vinay Sharma of Gulftainer, Jayakumar Mohanachandran of Easa Saleh Al Gurg, Syed Naqvi of Al Hilal Bank, Shailesh Mani of Flemingo International, Muhamed Noufel of Royal Continental Hotels & Suites, Atul Aggarwal of Ceasers Bluewaters, Nithin Geo Thomas of Amity University, Venkatesh Mahadevan of Dubai Investments and Anshul Srivastav of Emirates Post.
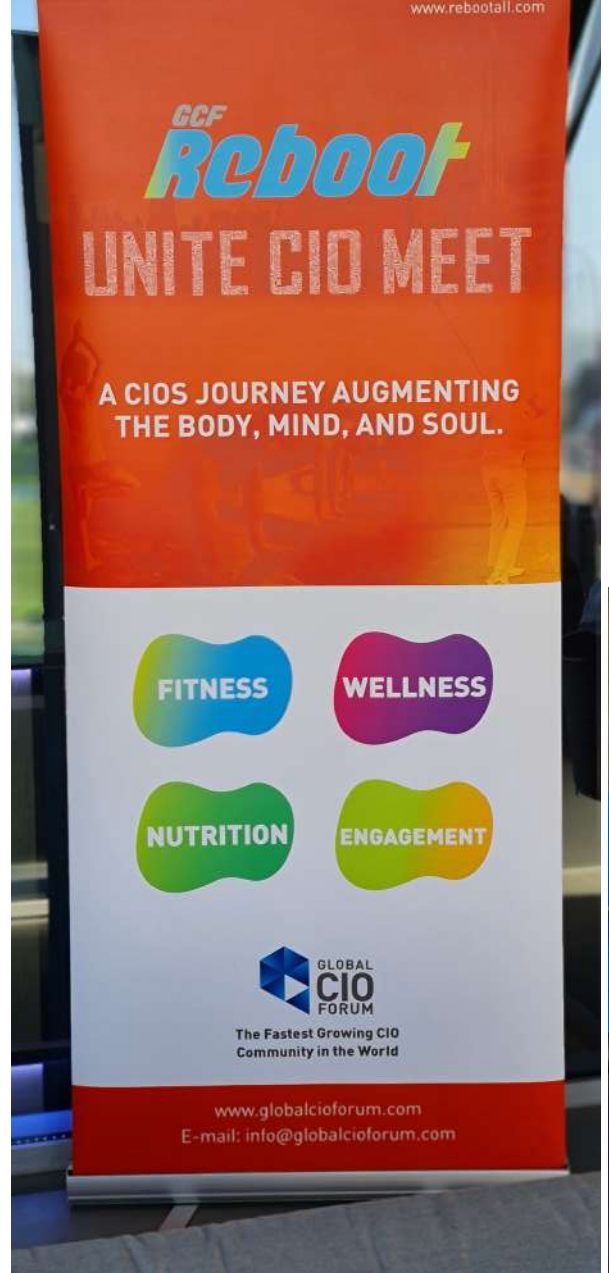
WORLD MAP
# OF VACCINATIONS

Humanity's greatest logistical challenge

no data   1   2   3   4
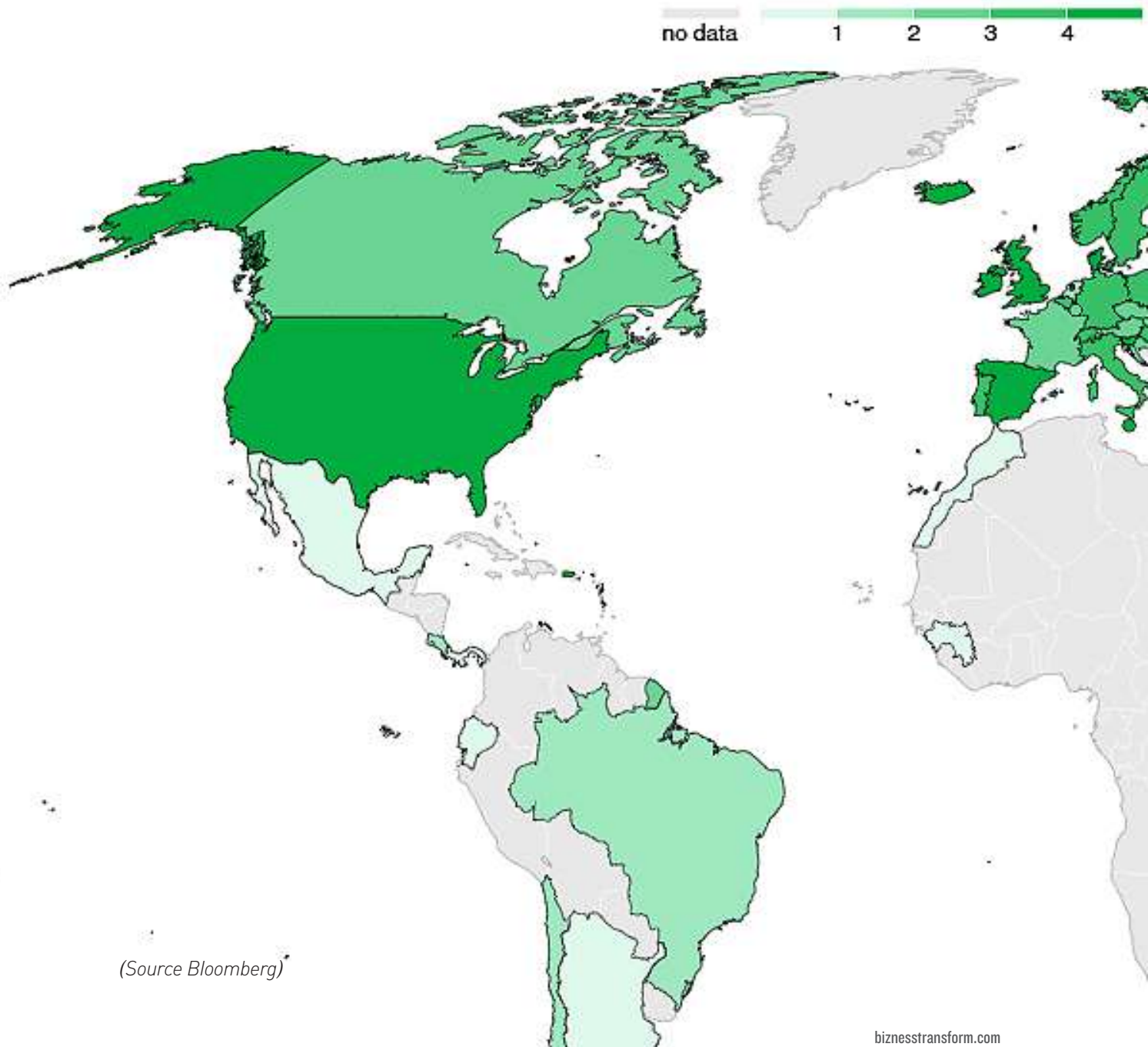
(Source Bloomberg)

WORLD MAP
OF VACCINATIONS

More than 159 million doses have been administered in 76 countries. When will life return to normal? This is a complicated question and the subject of debate among epidemiologists. Vaccinating roughly 70% to 85% of a country's population would enable a return to normalcy. On a global scale, that is a daunting level of vaccination. Globally, the latest vaccination rate is 5,803,044 doses per day, on average.

per 100 people
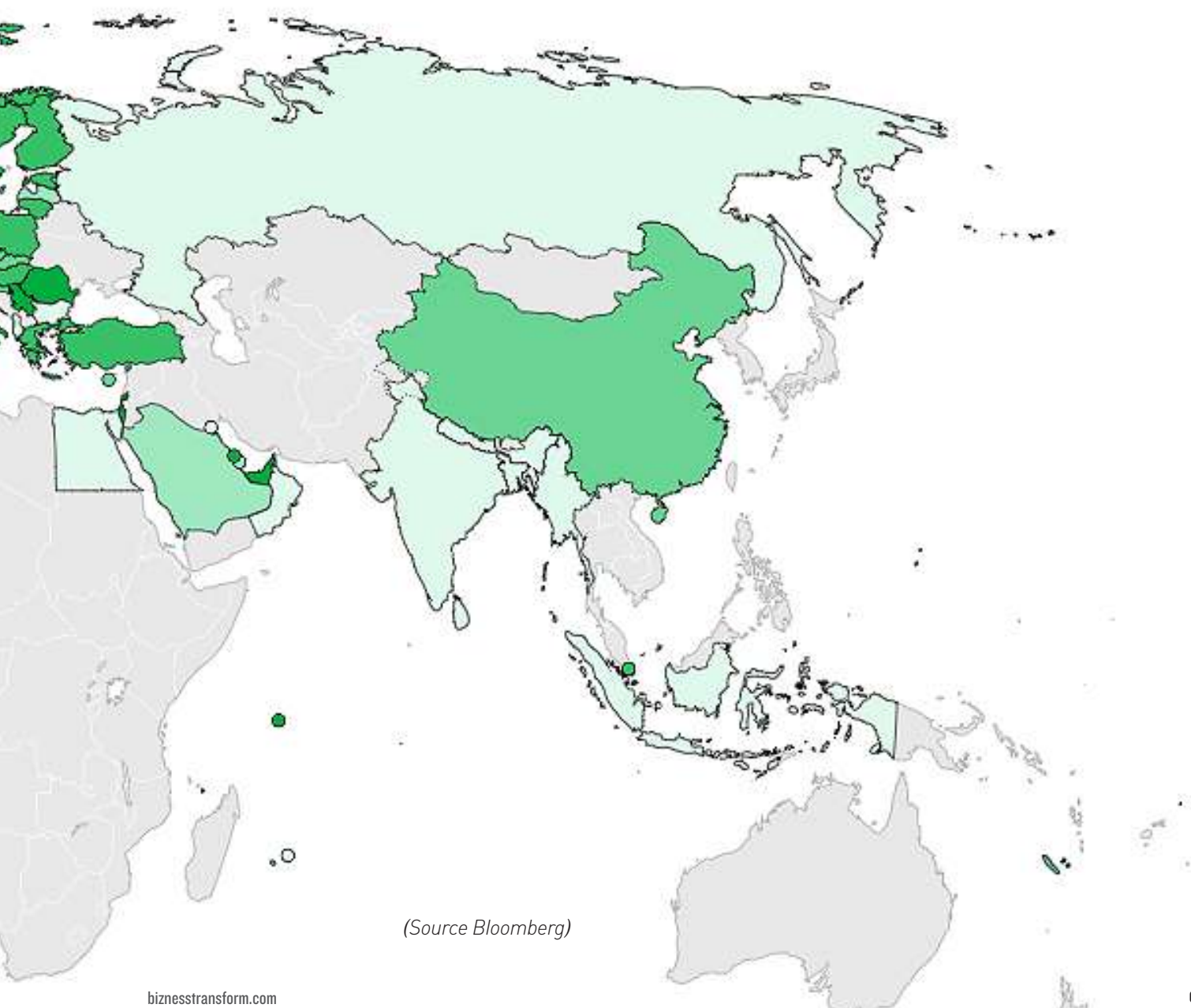
(Source Bloomberg)

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