INESS NSFORMATIC biznesstr JANUARY 2021













DIGITAL

Recognising CXOs who championed digital transformation initiatives for their organisations across 2020.





















Platino Group, **EG**















There's one thing even a billion-dollar company can't afford:

a security breach



Safeguard your IT with ManageEngine

Security Information & Event Management | Identity & Access Management

Network Security Management | Unified Endpoint Security & Management

Privileged Identity Management | Firewall Security Audit & Log Management

www.manageengine.com

CONTENTS

JANUARY 2021



05 EDITOR'S PREFACE

06-10 **OPINION**

12-15 GEC AWARDS

17-23 GITEX 2020

24-26 **NEWS 202**I

50-53 INDUSTRY COMMENTS

54-55 **LOOKING GLASS**



35-50 SPECIAL REPORT

- Aveva: Four key transformations in the industrial sector
- Canon: Business has crucial role of staying ahead of curve
- GoDaddy: Creating a seamless and enjoyable online customer experience
- Heriot-Watt University: CIOs must balance agility, risk management, uncertainty
- KPMG: Digital transformation will move into large scale
- MuleSoft: IT spending more time keeping lights on than innovation
- Pagero: CEOs fear Amazon will dominate their space of business
- Panasonic Marketing: Usage of technology can happen anywhere at any time
- Salesforce: AI merged with CX expected to be regional game- changer
- Saxo Bank: Commodity market buoyed by everything rally into 2021
- Saxo Bank: How the world navigated greatest contraction since 1930s
- Trend Micro: Securing hybrid cloud will be differentiator



YOUR DAILY MUST-HAVE

INSPIRON 15 3000 (3593) LAPTOPS



Featuring:

10th Generation Intel® Core™ i7-1065G7 Processor • 16GB memory • 2TB Hard Disk Drive • DVDRW 4GB Graphics • 15.6" FHD • Ubuntu Operating System • Platinum Silver colour • Arabic Keyboard.



Mitsumi Distribution FZCO
Tel: +971 4 370 6058
Email: supportae@mitsumidistribution.com

BUSINESSTRANSFORMATION

MANAGING DIRECTOR Tushar Sahoo tushar@gecmediagroup.com

EDITOR Arun Shankar arun@gecmediagroup.com

CEO Ronak Samantaray ronak@gecmediagroup.com

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

GROUP SALES HEAD Richa S richa@gecmediagroup.com

EVENTS EXECUTIVE Gurleen Rooprai gurleen@gecmdiagroup.com

Ronit Ghosh ronit@gecmdiagroup.com

Jennefer Lorraine Mendoza jennefer@gecmdiagroup.com

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

PRODUCTION, CIRCULATION, SUBSCRIPTIONS info@gecmediagroup.com

GEC MEDIA GROUP

UAE

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

USA

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

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

Published by Accent Infomedia MEA FZ-LLC # 203 , 2nd Floor G2 Circular Building, Dubai Production City (IMPZ) Phone: +971 4 564 8684

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

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



GREATEST COLLAPSE AND THE FASTEST REBOUND

2020 will be remembered for many things known and many things forgotten, but not erased. Forgotten, because the speed at which events took place and the drama behind them, usually covered the recall of the previous set of events, no matter how dramatic they themselves were.

Less well known in the technology industry is the fact that 2020 witnessed the largest loss in the global stock markets since 1930. And it also witnessed the fastest rebound. Says Saxo Bank's Peter Garnry, this year will be remembered for the fastest equity market rebound in modern history driven by aggressive policy action.

Tesla led Saxo Bank's UAE list, followed by Apple, Nio, Microsoft, and Amazon. com. US technology companies topped the list of most popular stocks amongst UAE investors in a record-breaking year. And it was the resounding come-back of the global technology industry and digital properties that pulled global stock indices back into the green across 2020.

Says KPMG's Wejdi Harzallah, digital transformation will move into large scale. KPMG anticipates additional digital transformation in 2021, geared towards larger investments and larger projects in cloud adoption and ICT consolidation. Four key transformations will dominate the industrial sector, points out Aveva's Craig Hayman. These include digitisation, artificial intelligence, sustainability, and insights from data. 2021 will pave the way for further digital transformation within industrial sector organisations, but uncertainty is here to stay, as well as the possibility of a resurgence of Covid-19.

There is also a lot of pressure on business to stay ahead of curve, says Anurag Agrawal at Canon. The role of business is also crucial in getting everyone within the organisation on board with any change and to make sure all departments work cohesively.

Faced with new challenges and new frontiers of innovation, CIOs must balance agility, risk management, uncertainty, points out Anas Abu Ghoush at Heriot–Watt University. There will be increased spending on cybersecurity tools as well as business intelligence, data analytics and cloud solutions in the year ahead. So large is the gap between the leaders and laggards of digital transformation, that CEOs fear Amazon will dominate their space of business, at some point of time, according to Luis Ortega at Pagero. For business leaders who are not identifying transformation opportunities, their organisations will fail to prepare for the next digital disruption.

Points out Hidetoshi Kaneko at Panasonic Marketing, technologies like AI and IoT are not standalone solutions but elements of a larger solution, bringing overall functionality and value for business.

Also, in this issue, we recognise the top digital transformation champions of 2020. 20+ senior IT executives were recognized during The World CIO 200 Roadshow of 2020, for their digital transformation initiatives in their organizations.

Is there a note of business optimism in the air? It appears so! Wishing you the best on the road to profitability ahead.

Arun Shankar arun@gecmediagroup.com

MOVING FROM VUCA TO A RUPTURED WORLD

The world, which was earlier complicated, has now turned more complex, with Covid as a wakeup shock, and the lessons have been good and positive, explains Independent Consultant Director, Niranjan Gidwani.



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

KEY TAKEAWAYS

- Resilience is often spoken about in terms of navigating or getting through challenges.
- The key part of resilience is not about bouncing back, it is about bouncing forward.
- Resilience is about using adversity as a catalyst to become stronger.
- Creating a culture of burnout is opposite to creating a culture of sustainable creativity
- According to Ariana Huffington, the most important word coming out of the Covid experience is the word resilience.

ntil now, our world has always been referred to as the VUCA World, a world of Volatility, Uncertainty, Complexity and Ambiguity. VUCA is an acronym drawing from the leadership theories of Warren Bennis and Burt Nanus.

However, taking inputs from a renowned strategic trainer, Captain Raghu Raman, who is also an armed forces veteran, the world is now become a RUPTured world. RUPT standing for Rapid, Uncertain, Paradoxical and Tangled.

The world, which was earlier complicated, has now turned more complex. Covid has come as a wakeup shock. This world has learnt huge lessons from the Covid experience, most of them good and positive, yet some negative and selfish as well.

The most important takeaway for all will be inculcating the humility to re-learn. And to re-start with the spirit of a Start Up. And while doing so, the new breed of leaders must realise that while performance is mandatory, if we cannot periodically disconnect, we cannot lead.

Creating a culture of burnout is opposite to creating a culture of sustainable creativity. This mentality would need to be introduced as a leadership and performance-enhancing mentality, starting from schools.

As the world will continue with the remote working model, user experience with intelligent automation has become even more critical. Organisations are, and will continue to realise more and more the value of cloud.

The Op-ex model, which leads to cost effective solutions, is becoming more prominent. In order to attain scalability in business, Uniformity, Simplicity and Standardisation will become the key.

More localisation of production is likely to happen, beginning with critical items like medicines, communication equipment, and likely to extend to food and dairy supply. These will become essential areas of economic and national security.

Needless to say, localisation may drive up costs. But some amount of localisation is here to stay for a few years.

The socially responsible organisations during Covid will turn out to be better brands, and without realising, may have invested well in intangible marketing of their organisations as brands.

According to Ariana Huffington, the most important key word coming out of the Covid experience is the word resilience.

Resilience is often spoken about in terms of navigating or simply getting through challenges. But the key part of resilience is not about bouncing back, it is about bouncing forward. It is about using adversity as a catalyst to get better and become stronger.

Resilience allows us to tap into deeper resources in ourselves we did not even know we had, not just to overcome the obstacles but to be transformed by them.



Huawei IdeaHub

New Style Smart Office

3-in-1 Whiteboard | Projector | Online Meeting



HOW TECHNOLOGY HAS IMPACTED THE BUSINESS OF EDUCATION

Dr Vikas Nand Kumar Batheja at Capital College explores how present and future technology will shape the business front of the education industry.



DR VIKAS NAND KUMAR BATHEJA, Co-Founder and Director, Capital College.

KEY TAKEAWAYS

- With the infusion of technology, education has built a foundation to retain its quality.
- Digital tools are accelerating education pathways and allowing students to take control of their professional journey.

n recent years, technology has evolved to be an integral part of almost every industry, including the education sector. While some argue that the education system has not drastically changed over these centuries as conventional ways of teaching are yet recognised in the present times. However, with the global pandemic making headlines every day, education with the infusion of technology has built a

foundation to retain the quality of education.

Classrooms today have transpired into students looking at their computer screens, laptops and tablets to attend lectures. The pandemic has given rise to the largest remote learning experiment where many schools, universities and other education institutions had shut across 190 countries worldwide, impacting almost 90% of the students. Although there is a lot of conjecture if digital tools are a boon or a bane to the education system, what remains unanswered is how digitisation has impacted the overall business from an educator's perspective.

Today, most of the students' demography represent either the Millennial or Generation Z and many of them expect financial independence much ahead when compared to the older generation. While undertaking a higher education qualification, students are already looking at opportunities for their business and technology is enabling them to succeed. Digital tools in the form of Ed-Tech are accelerating a student's education pathway and allowing them to take control over their professional journey.

Unlike the conventional times where collaborations were only considered a nice add on or more on an initiative basis, education institutions are welcoming other corporations and companies to establish fruitful collaborations. In today's times, there are a plethora of tools available for schools and

universities to do so as an engaging facility with their students. For instance, Google Drive, Dropbox, Evernote, Todolist and many other giant tech-driven companies are open for partnerships.

The field of artificial intelligence has already created a massive impact on both personal and professional space. Like every other industry, the education sector is also changing with rapid developments in the AI and innovation leagues. Education and technology are regarded as one of the fastest–growing industries as many people are looking to upskill and find employment growth in their careers with the aid of digital learning platforms.

In line with this, research conducted by Microsoft, McKinsey Global Institute has declared that there will be roughly a 50% decline in teaching faculty by the end of 2030.

There are several strong reasons to imply the drastic impact of augmented reality in the education sector. Augmented Reality has been an essential part of industrial revolution 4.0 where it's worth is set to reach \$198 billion by 2025. In this year alone, research suggested that this digital aspect has reached 1 billion users worldwide, a significant portion coming from the education industry.

To support this prediction, global research suggests that the brain processes visuals 60,000 times faster when compared to processing textual material. Is it going to affect the sector positively or negatively? Only time will tell.









WHY THE GCC WILL REMAIN OPEN FOR BUSINESS AND TRAVEL

Travel and tourism are key sectors of UAE and Saudi Arabia both of which have different centres of influence, explains Anita Chalke at Proven.



DAVID NOËL, Regional Vice President, Southern Europe, Middle East and Africa, AppDynamics.

88 % of UAE-based IT decision makers were planning to increase their spend on cloud.

he current pandemic-induced economic downturn has led many to rapidly increase the speed at which they digitise their business — sequestering workforces in their homes and looking for ways to serve a customer base that is now concentrated within digital channels. For many brands a greater transition into the cloud has been a fundamental strategy underpinning this move.

However, moving to the cloud still has its challenges for some organisations. New complexities in the IT environment can prevent IT teams from delivering the promised return on cloud investments. Monitoring and observability are now critical components to an effective hybrid cloud strategy.

A YouGov survey — pre-pandemic — revealed 88% of UAE-based IT decision makers were planning to increase their spend on cloud. And across the Arab Gulf, all evidence suggests these plans have been accelerated by Covid's intrusion.

IDC expects multi-cloud to grow in popularity, with the GCC public cloud market alone projected to more than double by 2024, from \$956 million in 2020 to \$2.35 billion.

There is no denying that cloud adoption is on the rise and cloud has helped technologists overcome many of the conundrums unearthed by the pandemic, but it presents its own challenges. In many cases, the shift to the cloud has also led to a more complex, distributed application architecture and configuration. Some components remain on-premise, while the rest of them move to the cloud, creating a hybrid architecture.

This leaves enterprises struggling to keep up and therefore failing to fulfil their customers' needs. In a market environment in which customer demands are trending towards immediacy, and IT teams are scattered to the four winds, the savvy CIO must surely ask: what if something goes wrong?

In this scenario, teams urgently need a way to monitor, configure and optimise their enterprise's application ecosystem, through a bird's-eye view that captures complexity but reflects it in a concise form.

Observability is important here because it provides the raw, granular data necessary to gain an in-depth understanding of complex and highly distributed systems. By implementing the right observability, cloud-management and on-premise solutions, organisations can maintain visibility across their application environment, from a browser session request to a backend database call.

Because the management console sits as a layer of intelligence across all platforms — and allows businesses to combine data from and apply policies to any of those platforms — they are not locked into any one cloud solution. They can choose whichever is best for the task at hand.

From their eagle's nest, IT teams will see the bottlenecks as they occur, and dispatch resources, either human or digital, to address them. Users will no longer be impacted by poor performance and brands will retain revenues and brand reputation.

According to a 2018 report by Gartner, fewer than 15% of businesses implement an effective monitoring solution, which may endanger investments made in cloud computing.

Remote workforces and collaboration tools require the cloud, but the cloud cannot be the answer to all innovation goals. Businesses need to harness the benefits of an effective monitoring and observability strategy across its entire IT landscape, or the benefits of the cloud almost disappear.



SkyHawk Al 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.







SMART SURVEILLANCE WITH 24×7 CLEAR STREAMING

SkyHawk's innovative ImagePerfect and ImagePerfect Al firmware are the clearest choices in the industry.



Phone: +971 4 8863850 E-mail: marketing@asbisme.ae www.asbisme.ae



DRIVE PROTECTION MADE EASY

Rest easy with three years of Seagate Rescue Data Recovery Services, offering an industry-leading 90% success rate against unexpected data loss from power outages, natural disasters, user error, viruses, and more. Coupled with the included SkyHawk Health Management (SHM) drive monitoring software designed for prevention, intervention, and recovery, peace of mind is yours.

GEC MEDIA PAYS TRIBUTE TO FRONTLINE

On December 6, at the V Hotel in Habtoor City, GEC Media Group paid homage to our unsung heroes. Frontline workers are a key reason why the wheels of global economy are continuing to spin, despite the pandemic. These are the people who are making things happen, across industries and sectors.

GEC Media Group proudly honoured them and highlighted their contribution over an evening filled with awards and entertainment. This was also GEC's first hybrid event, held in-person as well as streamed online and made available all over the world.

Currently in its 7th edition, the GEC Awards 2020 recognised over 42 regional technology channel players who have brought innovative solutions to the table and helped customers sail through this pandemic.

The compere was the evening was Karan. The event started with welcome notes by Ronak Samantaray, CEO, GEC Media Group; Anushree Dixit, Global Head Content and Strategic Alliance, GEC Media Group; and Arun Shankar, Editor, GEC Media Group. This gave way to the first set of awards, for Top Distributor.

And the winners were...

AWARD CATEGORY	SUB CATEGORY	ORGANISATION
TOP DISTRIBUTOR	Data Center Solutions	Malco Technologies
TOP DISTRIBUTOR	Infrastructure	Ingram Micro
TOP DISTRIBUTOR	Specialized Cyber Security Solutions	EMT Distribution
TOP DISTRIBUTOR	Network Security	Spectrami
TOP DISTRIBUTOR	Channel Enablement	VAD Technologies
TOP DISTRIBUTOR	Daa Management	StorIT Distribution
TOP DISTRIBUTOR	PC & Compute	Asbis Middle East
TOP DISTRIBUTOR	Cloud	Redington Value
TOP PARTNER	Workforce Reskilling	Spectrum Networks
TOP DISTRIBUTOR	Unified Storage	Data care LLC
TOP DISTRIBUTOR	Security	StarLink
TOP DISTRIBUTOR	Enterprise Security	Spire Solutions
TOP DISTRIBUTOR	Network Optmization	SECURENET
TOP DISTRIBUTOR	VAD of the Year	Mindware

The first set of awards were followed by an entertaining game of acting out the word, an inspiring video compilation highlighting the critical role frontline workers are playing, followed by an enthralling dance session.

WORKERS AT DAZZLING AWARDS CEREMONY

Next up, was the second set of awards, given in the Top Reseller category. The winners were...

AWARD CATEGORY	SUB CATEGORY	ORGANISATION
TOP RESELLER	Security	RNS Technologies
TOP RESELLER	Digital Forensics	DIFOSE LLC
TOP SI	MANAGED SERVICES	MIDIS SI
TOP SI	IT Infrastructure	BITS Secure IT Infrastructure
Top BT Solution	Storage	Synology Inc.
Top Business Transformation Initiative	Healthcare	Zulekha Hospitals
Top Business Transformation Initiative	Green Data Center	Moro Hub

The awards evening was interspersed with video compilations of frontline workers and the role they are playing in helping organisations survive this pandemic. CxOs from various organisations thanked them ardently, and highlighted the human, and humane, aspect of their contribution.

The third set of awards were in the Top Vendor category.

The child set of attains there in the top behavior eacegory.				
AWARD CATEGORY	SUB CATEGORY	ORGANISATION		
TOP VENDOR	Networking	Aruba, a Hewlett Packard Enterprise company		
TOP VENDOR	Enterprise Solutions	Zebra Technologies		
TOP VENDOR	Endpoint Security	Cybereason		
TOP VENDOR	Email Security	Keepnet Labs LTD		
TOP VENDOR	Flash Storage	Pure Storage		
TOP VENDOR	Enterprise Communications	TalariaX Pte Ltd		
TOP VENDOR	SD-WAN	Riverbed		
TOP VENDOR	Data Management Solutions	Commvault		
TOP VENDOR	DNS Security	Infoblox		
TOP VENDOR	Hyper Converged Infrastructure	Nutanix		
TOP VENDOR	Secure Identity Solutions	ARCON Techsolutions Pvt Ltd.		
TOP VENDOR	Enterprise Solutions	Veeam Software		
TOP VENDOR -AI	Multi-Cloud	Juniper Networks		
TOP VENDOR	Hybrid Cloud	Netapp		
TOP VENDOR	Cyber Security	SonicWall		

The break after these awards was literally full of laugher. The compere called on stage four participants who had to mimic the laugher of a character from a popular Bollywood film. This gave way to dancers from the USA, which also happened to be the last dance of the evening.

Next up, was the second set of awards, given in the Top Reseller category. The winners were...

1 '	1 70 1	0 /
AWARD CATEGORY	SUB CATEGORY	ORGANISATION
TOP VENDOR	Network Security	Sophos
TOP VENDOR	Enterprise Security	Pulse Secure
TOP VENDOR	Privileged Access Management	BeyondTrust
TOP VENDOR	Data Protection	Veritas
Top Vendor	Memory Solutions	Toshiba
TOP VENDOR	Digital Transformation	Dell Technologies



































The Workplace of the Future with the

WINDOWS COLLABORATION DISPLAY from SHARP



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.

*The availability of cloud service varies by country/region



Features effortless wireless device sharing from major platforms. Touch back available on Windows 10 & Android devices

70" Class (69.5" diagonal) Interactive Display System | 4K Ultra-HD UV²A Edge Lit LCD Screen | Projected Capacitive Touch Screen | 10-Point Multi-Touch Screen | Bundled high performance 8m USB Type C Cable for charging laptops, touch, video, audio and network signals | Modular 4K Camera with Microphone Array x 4 | IoT Sensor Hub with Motion, Light, Temperature/humidity & Air Quality Detection













GDRFA Dubai, Software AG partner to enhance digital innovation in services

The General Directorate of Residency and Foreigners Affairs, GDRFA, in Dubai and Software AG signed a second generation MoU to accelerate digital transformation in immigration services.. The memorandum was signed between His Excellency Major General Obaid Muhair bin Suroor, Deputy Director General of GDRFA Dubai and Rami Kichli, VP – Gulf and Levant, Software AG at the 40th GITEX Technology Week. This is a succeeding step in the strategic

alliance between the two companies commenced in 2018.

The initial collaboration between the two entities unveiled extensive opportunities to provide new insights, optimise operations, rationalise systems and ease processes for end users. The extended collaboration will further tackle the toughest challenges, unleash the fullest potential and enable GDRFADubai to elevate the efficiency of processes, scale systems and advance

capabilities to maximise the value that end users can derive through the upgraded system.

Software AG's technology solutions empowers GDRFA's portfolio range of services. The entity's key focus will revolve around revolutionising end user services that are currently presented at GITEX Technology Week. The new generation platform will collaborate on portfolio-based projects to automate its internal demand generation. It will also address external requirements for GDRFA by linking it to external bodies ranging from other government departments, private entities or third parties.

EVOTEQ launches Alassisted surveillance and oversight system

EVOTEQ has launched EVOTEQ Smart Surveillance, an AI-assisted surveillance and oversight system in response to the growing demand for modern asset surveillance and monitoring solutions. This advanced system has been deployed at the Middle East's sustainability pioneer Bee'ah's 92-hectare Al Sajaa landfill to provide world-class security and incident management.

The EVOTEQ Smart Surveillance sets a new industry standard in facility security management with advanced capabilities, including a network of AI-enabled and thermal detection smart cameras, next-generation machine learning algorithms and an integrated autonomous drone system. This innovative solution secures extensive grounds through real-time monitoring, identifying and analysing potential hazards before they escalate.

A landfill site has several unique security requirements, from controlling site access and





securing sophisticated machinery to monitoring environmental variables and ignition points among others. EVOTEQ Smart Surveillance replaces the traditional security approach of utilising closed-circuit television cameras and physical staff patrolling the grounds, through a digitalised, reactive and cost-effective solution.

Honeywell displays solutions for critical sectors of the economy

Honeywell is demonstrating latest technologies to support critical sectors of the economy, including healthcare, retail, logistics and warehousing, in the Covid-19 era, at GITEX 2020.

Following the closure of malls and stores as a response to the virus earlier this year, a large segment of the consumer population has been shopping online. The healthcare industry has been under immense pressure given the significant rise in patients. Hospitals face substantial challenges with bed availability, and maintaining and expanding the capacity of their facilities to treat patients with Covid-19. In addition to this, there is a growing requirement for critical high quality personal protective equipment to help protect frontline healthcare workers.

In response to these rapidly-evolving trends across retail, logistics and healthcare, Honeywell is showcasing a portfolio of cutting-edge technology at GITEX 2020, which includes:

Healthcare solutions: Honeywell is demonstrating a safe patient journey, and talk about how to ensure a fast, ultra-safe, trackable and traceable trip to the hospital.





TAMM showcases innovative digital government services

The Abu Dhabi Government Services Ecosystem, TAMM, is showcasing its achievements and a range of its innovative digital government services that offer seamless experiences for customers at the 40th GITEX Technology Week taking place until December 10th at the Dubai World Trade Centre.

At the Abu Dhabi Government pavilion, which will exhibit products such as the TAMM Car, have simulation displays and show short videos of key achievements, visitors can experience first-hand some of TAMM's innovative and ground-breaking digital government services that have been rolled out in Abu Dhabi. These have been designed to improve the everyday lives for Abu Dhabi residents and citizens.

TAMM allows users to access a wide range of Abu Dhabi Government services and information through one single platform including the website, mobile app, TAMM Service Centres and Contact Centre.

Established as the region's biggest technology event, GITEX provides the perfect platform for TAMM to show the visitors what they are working towards with the event attracting experts and business professionals.

The services that are being showcased are: TAMM Mobile App. Abu Dhabi Locker, Abu Dhabi Pay, TAMM Cares, Contact Centre Telephony Modernisation, the Customer Relationship Management platform, Customer Journeys and Abu Dhabi Connect.



Abu Dhabi DoE displays energy modelling programme

As part of its role to lead the energy sector in the Emirate of Abu Dhabi and upgrade the energy ecosystem in accordance with international standards, the Abu Dhabi Department of Energy, DoE, presented its Energy Modelling Capability Build programme at GITEX Technology Week 2020.

The programme forms part of the DoE's strategic vision to enhance and empower the Abu Dhabi energy sector and prepare it to keep up with any future developments. The

Department is taking part in the Abu Dhabi Government's pavilion at the event under the Government Services category, showcasing the latest updates to its digital services and the prospects of integration with the Abu Dhabi government service system Tamm, in line with the emirate's strategy for digital transformation.

The Energy Modelling Capability Build programme promises to deliver a number of outcomes needed to enhance the DoE's ability to lead the energy sector in the Emirate of Abu Dhabi and to develop an advanced energy model, namely, improved sector collaboration and dialogue; faster and better decision-making capability; improved transparency, forecasting, and optimisation; enhanced policymaking and regulatory oversight; and support for the ongoing efforts to deliver on Abu Dhabi and the UAE's targets and commitments.



GDRFA Dubai, Software AG partner to enhance digital innovation in services

Nedaa has signed a new partnership agreement with Airbus at the ongoing GITEX Technology Week 2020 in Dubai for the deployment of mission-critical communication solutions. HE Mansoor Bu Osaiba, Chief Executive Officer of Nedaa and Walid Lahoud, Head of Sales Middle East and North Africa for Secure Land Communications at Airbus inked the agreement during a signing ceremony held at Nedaa's pavilion, which also hosts Airbus.

As part of the partnership, Airbus' Tactilon Agnet 500 and 800 and the Tactilon Dabat hybrid device will be deployed through Nedaa's private

mission-critical 4G network starting 2021 to achieve stronger and faster response in the area of public safety coordination. Government entities, security and public safety authorities, first responders, event organisers, operation management departments and personnel of organisations across all vital sectors can leverage the solutions' advanced features for a better communication support system.

Tactilon Dabat, a 4G smartphone and a Tetra radio in one single device, is designed to enable users to smoothly transition between Tetra and LTE network services. The Tactilon Agnet



500 and 800 collaboration platforms, on the other hand, offers secure push-to-talk and messaging services with accurate location tracking, voice and messaging, video sharing and other multimedia functions, allowing communication between different technologies of mission critical networks and devices. in case of emergency situations that requires rapid assessment and response or monitoring of ongoing operations. Tactilon Agnet can be fully incorporated into a Tetra network to achieve a hybrid work environment. At the heart and brains of a Tetra network is Airbus' Taira Tetra Server, a key building block for evolving Tetra networks to hybrid and broadband LTE.

Etisalat demos the future of mobility and smart retail

Etisalat is pushing the boundaries of innovation at the 40th edition of GITEX Technology Week, as it takes everyone on a journey of immense possibilities in the future of mobility and retail with the transformative power of 5G and futuristic technologies. This year at GITEX, Etisalat has introduced new mobility segments along with 5G connectivity in commercial and regional as well as inter-regional aerial transport. This in line with Etisalat's continuous efforts to boost the Dubai Government's strategy to raise the share of autonomous transport to as much as 25% of the total transportation in the emirate by 2030.

Making a grand entrance at GITEX this year are the all-electric, highly automated and fully connected BMW Vision iNEXT, and BMW Vision DC Roadster, a futuristic electric motorcycle a major step into the full-size electric two-wheel segment. Etisalat has also partnered with BMW to provide the eSIM platform, connecting wirelessly with ConnectedDrive vehicles, providing customers an enhanced driving experience.

Taking off from Etisalat's stand is the taxi SA-1, an electric flying taxi developed by Hyundai with Uber.





This fully electric car flies a distance up to 60 miles at an altitude of 1,000 to 2,000 feet. With 5G, this is a great use case that can enjoy the benefits of the ultra-low latency and high speeds of this superior network.

AirCar, an autonomous allelectric human carrying flying car, is



taking private autonomous transportation to another level. The flying car can be charged by 80% in 15 minutes, enough to fly from one side to another in most cities. The world's fastest autonomous delivery drone by German drone maker Wingcopter is making its presence for the first time at the Etisalat's stand. This futuristic concept will set a benchmark for the logistics industry.



Snapshots from GITEX 2020

The 40th GITEX Technology Week successfully united international technology visionaries, industry innovators and global investors as the tech world finally resumed in-person interaction at Dubai World Trade. The event showcased the diversity of the global technology industry with participation from over 60 countries, while hosting pavilions from some of the world's most innovative technological nations. Here is a random sampling of what went on at GITEX 2020.













Dubai Internet City highlights techinspired Covid-19 response

When the world was hit by an invisible virus causing global disruption and significant socio-economic damage, technology united us. By enabling businesses and schools to maintain continuity and mitigate unprecedented uncertainty, it became an unsung hero on the front lines, emerging as an engine of growth, resilience and innovation. At GITEX Technology Week 2020, Dubai Internet City and its business partners is inviting visitors to its pavilion to showcase how technology supported the region during recent months and how it will reshape the future of the post-pandemic world.

Some of the other companies that supported the UAE's technology-inspired Covid-19 response to the pandemic will be exhibiting at the GITEX pavilion. Dubai Internet City, the region's largest business community for tech and talent, is featuring a series of immersive experiences at its pavilion alongside its business partners Anghami, Zoom, HTC Vive; students from the Dubai Institute of Design and Innovation; and a selection of startups from in5, an enabling platform for tech, media and design entrepreneurs.





Ericsson focuses on digital transformation at GITEX 2020

Ericsson returns to GITEX Technology Week virtually this year as a Digital Transformation Partner, taking centre stage at one of the world's most prestigious technology events. Ericsson will use its participation at the prestigious event to update customers, partners and the ICT industry with the latest 5G updates and insights from its global engagement and leadership.

To date, Ericsson has installed 70 live 5G networks around the world, with operators trusting the company's cutting edge 5G technology to propel them into the future of ICT. These networks span 36 different countries, and Ericsson has signed 117 commercial agreements around the world.

The latest Ericsson Mobility Report, released last

month, estimates that by the end of 2020, more than 1 billion people, 15% of the world's population, will live in an area that has 5G coverage rolled out. In 2026, 60% of the world's population will have access to 5G coverage, with 5G subscriptions forecast to reach 3.5 billion, making the current 5G uptake in subscriptions and population coverage the fastest of any generation of mobile connectivity.

GITEX is one of the biggest information and communication technology events in the Middle East and North Africa region, and is attended by all major operators, telecom professionals and partners in the industry. Ericsson's presence at the event marks the company's leadership in the areas of 5G, digital transformation and Internet of Things in the region.



Hyundai's Urban Air Mobility Vision wows visitors

Hyundai Motor Group's Urban Air Mobility vision concept, S-A1 is on display at GITEX Technology Week. Etisalat recently named the S-A1 to its Best Innovations in 2020 list and invited Hyundai Motor Group to showcase its game-changing technology. The full scale, all-electric S-A1 is on display at Etisalat's booth, along with a virtual reality zone that illustrates how Hyundai Motor Group's UAM vision will help reduce passenger commute times and relieve congested ground transportation.

UAM is expected to become a critically important component of integrated mobility solutions as cities worldwide continue to

grow, with the world population projected to reach 9.7 billion in 2050, two-thirds of which will live in urban areas.

The GITEX display reflects
Hyundai Motor Group's vision, first
announced at CES 2020, to usher in
the era of seamless mobility, which
includes an air vehicle designed to
address the urban mobility needs
of tomorrow's cities. The fullscale model of the SA-1 aircraft
demonstrates this solution; a PBV
that links people to people on the
road; and The Hub, which serves as
a venue for mobility transfer and
community activities.

GITEX offers the latest in telecommunication networks, mobile communications and applications, next-generation networks, augmented reality, virtual reality, artificial intelligence, wearable, connected cars, unmanned aerial vehicles, etc. Presenting over 4,700 exhibitors from more than 97 countries, GITEX Technology Week is the event to attend in order to meet influential business decision makers.



Distance is NO BARRIER

Introducing D-Link Smart Wireless Solution for Point-to-Point Deployment

DAP-F3704-I

Range: Up to 5 Kms Antenna Gain: 10 dBi High-Power Wireless 5Ghz 11n Bridge



DAP-F3711-I

Range: Upto 5 Kms Antenna Gain: 15 dBi High-Power Wireless 5Ghz 11ac Bridge



DAP-F3705-N

Range: Up to 10 Kms Antenna Gain: 23 dBi High-Power Wireless 5Ghz 11n Bridge



DAP-F3712-N

Range: Up to 20 Kms Antenna Gain: 23 dBi High-Power Wireless 5Ghz 11ac Bridge



TDMA+Polling Avoiding collision/ Interference between channels ACK Timeout adjustment Improves long distance Transmission Intelligent Rate Control Improving stability of Bandwidth Self Healing Useful in extreme noisy area

send Quick® Entera



Award Winning Notification Management

Platform

Don't rely on slow and old-fashioned email notifications, you need faster response times.



SMS, Email, Social Messenger Apps, Team Collaboration Tools

Visit www.talariax.com for more info

P&G commits to 2,021 acts of good in 2021

Procter & Gamble, P&G, has announced a commitment to 2,021 acts of good for 2021, starting with its next major wave of contributions of health, hygiene and cleaning products, personal protective equipment, and financial support collectively worth tens of millions of dollars for Covid-19 relief efforts. These acts of good represent the next chapter of P&G's Lead with Love consumer campaign, which includes a call to action to make 2021 the year we all come together to do more and do better, for communities, equality and our planet. P&G is bringing this to life through a new Lead with Love film, Emotions, which highlights the eight emotions humans are born with and why love is the most powerful.

P&G is mobilising the power and reach of its trusted brands to deliver on its commitment of 2,021 acts of good. These acts will include new programmes that will be announced throughout the year, as well as longstanding programmes

which will have new impacts in 2021. For example:

In the Middle East and Africa, P&G will continue distributing products gender equality and environmental sustainability. P&G will continue to support online learning programmes for children of determination in the UAE.

P&G has supported communities and consumers through unexpected challenges for more than 180 years, and stepped up to provide significant support for Covid-19 relief, equality and the environment in 2020. In addition to donating tens of millions of dollars in funds, product, and in-kind support to provide Covid-19 relief this year, P&G established the Take On Race Fund, continued its series of films such as The Choice that shine a light on inequality, and achieved several important sustainability goals, including sending



zero manufacturing waste to landfill across all P&G manufacturing sites globally.

P&G also announced an acceleration of its climate actions through It's Our Home, its newest climate commitment to be carbon neutral for the decade. Under the Lead with Love campaign efforts, P&G will further grow the reach and impact of positive action for communities, equality and the environment.



LG to debut energy-saving, eco-friendly water heater

LG Electronics will be presenting its advanced, energy-saving Inverter Heat Pump Water Heater at CES 2021. A CES Innovation Award-winner, the new model is powered by LG's DUAL Inverter Compressor, which promotes fast and effective water heating, all the while delivering lower electricity consumption and running costs. What's more, the highly efficient and durable smart appliance is compatible with the LG ThinQ app for convenient control from inside or outside the home.

LG's DUAL Inverter Compressor heats water using condensation heat generated in the process of compressing and circulating refrigerant. The result is a water heater that uses up to 74% less energy to operate annually than a conventional electric water heater. The new product will be available in 200-litre and 270-litre capacity versions, featuring impressive energy efficiency ratings of A+ and A++, respectively. What's more, the highly durable compressor and water tank are covered by a 10-year warranty. LG's efficient system utilises heat from the air to further reduce electricity usage, while its two internal heat sources ensure that users will never have to go without hot water even in times of heavy use.

The smart Inverter Heat Pump Water Heater is Wi-Fi-enabled, allowing it to work seamlessly with LG's mobile ThinQ app, available on both Android and iOS devices. With the app, homeowners can manage and monitor the system remotely, receive regular maintenance reminders and diagnose certain issues without having to call customer service. Users can also check the water temperature in real-time and use the scheduling function to set the time and duration of operation.







Dubai Airshow 2021 to boost focus on emerging tech

To be held under the patronage of His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice President, Prime Minister of the UAE, Ruler of Dubai and UAE Minister of Defence, Dubai Airshow is set to return for its 17th edition on 14–18 November 2021. One of the most successful air shows in the world, the event will be held with the support of the Dubai Civil Aviation Authority, Dubai Airports, the UAE Ministry of Defence and Dubai Aviation Engineering Projects and organised by Tarsus F& E Middle East.

The event will be the only airshow of its kind to take place in a live format, highlighting Dubai's response to the Covid-19 pandemic and the world-class safety measures implemented in the emirate. Dubai Airshow will be the most important and critical point of convergence in 2021 where the future of global aerospace industry will be showcased and analysed. Welcoming experts from commercial and business aviation, defence and military, aircraft interiors, air traffic management, maintenance, repair and overhaul, space and air cargo, the show will serve as an ideal platform for re-thinking strategies, navigating uncertainty and scaling up operations to ensure the smooth re-establishment of the industry in general.

According to latest IATA reports, the second half of 2021 is expected to see improvements after a difficult 2021 first half. Aggressive cost-cutting is expected to combine with increased travel demands during 2021, due to the re-opening of borders with testing and widespread availability of a vaccine, to see the industry turn cash-positive in the fourth quarter of 2021, which is earlier than previously forecasted.

A range of new features for Dubai Airshow have been confirmed, which include a strong focus on cutting edge technologies used in the aviation industry. The new Technology Showcase will provide a platform to exhibit the latest tech and will also include key conference programmes on topics such as 5G, cybersecurity, artificial intelligence and blockchain.

There will be a new East-West Startup Hub as part of the Airshow, called VISTA, which will give startups access to mentorship programmes and a chance to meet with vital decision makers and globally ranked investors to launch, grow and scale their startups. In 2019 alone investment in aerospace startups reached nearly \$1 billion. With a range of dedicated feature areas and thought leading conferences, the Show also supports and responds to developments within the industry making it the critical meeting place for aerospace and beyond.

Dubai Airshow, in close coordination with the Defense Services Marketing Council, is launching a new advisory board, which will not only serve the Airshow but the regional industry in general. The Advisory Board will be focused on a range of topics including instilling confidence in aviation post–pandemic, development of talent and skills as well supporting the next generation of women in aerospace. More details on this will be announced in the coming months.



Blockchain, geofencing, hybrid vehicles 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. The trial also featured an innovative PHEV van fitted with an electric refrigeration unit powered independently of the vehicle's batteries, showcasing the operational flexibility and range of use cases supported by the platform.

The Ford Transit Custom PHEV was the International Van of the Year 2020 and, along with the Tourneo Custom PHEV, is part of Ford's global move towards electrification. The company's extensive range of electrified commercial vehicles in Europe also includes the 48-volt mild-hybrid Transit, Transit Custom and Tourneo Custom EcoBlue Hybrid variants, Fiesta Van EcoBoost Hybrid and the fully electric E-Transit arriving in spring 2022.

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.

The trial also tested dynamic

geofencing: instead of a fixed low-emission zone triggering the vehicles' zero-emission modes, Ford's dynamic geofencing pilot constantly adjusted the boundaries based on air quality data captured by Climacell and the City of Cologne.

As Ford's connected PHEVs entered these constantly fluctuating zones, they automatically switched to low-emission mode, taking the decision making out of drivers' hands, improving air quality for citizens and helping vehicles maintain compliance with local restrictions.

Both the Cologne and Valencia studies proved the value of connecting vehicles and cities to help reduce air pollution and develop low-emission zone compliance; of the 218,300 km covered by the 20 vehicles in Cologne and Valencia, almost half were driven on purely electric power, rising to more than 70% in the Cologne geofenced zones.

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. Rather than using a generator to power the refrigeration system, Ford along with Zanotti, a leader in transport refrigeration and part of the Daikin Group, and local transport refrigeration specialists, Mebauto, created an electric solution that cools the load compartment in 18 minutes and offers true zero-emission driving when the van is operating in electric-only mode.

The chilled vehicle successfully coped with intensive work schedules through Spain's hot summer, delivering meals, perishable goods and pharmaceutical products from urban supermarkets to vulnerable people sheltering from Covid-19 at home.

The refrigerated van achieved 82% of its mileage in electric-drive mode, rising to 90% in the Valencia geofenced area. Drivers could top up the van's battery while reloading and fully recharge it each night. When required, the range extender enabled trips of up to 143 km between supermarkets and customers in the city centre.





Phone: +971 4 8863850

E-mail: marketing@asbisme.ae

www.asbisme.ae













DIGITAL TRANSFORMATION CHAMPIONS 2020

Recognising CXOs who championed digital transformation initiatives for their organisations across 2020.

INSPIRE AWARDS

































Global CIO Forum honours path-breaking organisations with

#DXInspire Awards

2020 has been an extraordinary year for almost every organisation, as it grappled with the fallout from the pandemic. As many experts have pointed out, it accelerated digital transformation to an unprecedented pace, and what would normally take years was achieved in mere months. Leading this charge were forward-thinking and highly motivated CIOs who saw their organisation through this difficult phase. However, digital transformation does not mean only the technological transformation that an organisation embarks upon. When an organisation, including all its departments, walks towards a single goal by unifying all its people and processes, that is when it truly realises the potential of a digital organisations. During the grand finale of the World CIO 200 Roadshow, organised by Global CIO Forum on December 14, the #DXInspire 2020 Awards recognised 20 path-breaking organisations that have redefined digital transformation to its core.



A digitalized logistics, trade facilitation ecosystems (involving government agencies) for cross-border trade, via a seamless integrated ecosystem where logistics service providers and customers converge to transact, communicate and exchange data securely.



The US eCommerce Import Programme is an all-in-one solution for high volume parcel imports to the U.S., with services spanning across the whole importation cycle.



Developed in-house, Phoenix is not just another School Management System (SMS), it is an Integrated All-in-One Solution catering to not only school operational requirements but also peripheral needs such as HR, Finance, Transport, Catering, Uniforms etc.



The ME programme has over time enabled simplification & rationalisation of our legacy landscape. Onboarding system has fundamentally changed the manner in which clients are onboarded, ~99% Individual and ~92% Juristic clients are now onboarded digitally.



A project aimed at scaling up SME businesses. From contact to contactless (online). Implementation coincided with Covid.



We are moving from a manual and semi-automated, to a fully automated Electronic Health Records for all patients across AKU network in 6 regions.



Digital transform - Core business and Business operation.



Digitisation of the end-to-end crew journey. CrewPal enhanced productivity on top of facilitating a touchless operation. Our crew accesses the CrewPal app from the comfort of their personal A transformative solution, using emerging technology at the core.



DMCC was selected as the best free zone globally for 6 years in a row, to maintain that unique global spot, DMCC has launched a smart city multi-million \$ project as part of Dubai Smart City. This will increase the happiness of all Dubai residents.



Combine 24 projects at one project.

31



TGV BOX TecnoFerrari automatic vehicles (TGV) are battery-powered shuttles that move automatically following a track of magnets permanently inserted into the floor, therefore completely safe both for wheels vehicles and for the operators.



AG&P is working to provide city gas connection to 12.5 Million household customers in India (Post COVID-19), hence digitalization is on top priority from the customer point of view starting from registration, gas connection, metering, billing & payment.



Unique marketplace with B2B2C2C solutions. During Pandemic, it created a significant value in business i.e. In just 06 Months, revenue is 100 M PKR form B2C and 1.4 B from B2B segment. Almost 15 K B2C, 55 K B2B customers on boarded.



SEHA's COVID19 Project provided necessary coverage for the entire UAE population through its 31 screening centers, field hospitals, acute hospitals, AHS clinics etc. He was directly involved in each and every single initiative for COVID19 action plan.



In the time of corona, it has become imperative for organisation to create alternate channel which provides same experience to customers while they use to interact physically. Considering this we opted to create a digital contactless customer experience.



It change the business model for controlling the asset of the land and building for government and like it with big data and GIS system for controlling the location and space.





Robotic Process Automation.

Reduces GE's liability risk.







Bring innovative approaches to Customer Experience through CDP; increase efficiency for the Operation and have Best in place for Data Analytics (Data is Oil).



We are launching a first shariah compliant digital neo bank in the region.



Using LTE in policing.

33

Transcend your digital transformation journey with us



ENABLING DIGITAL TRANSFORMATION

MENA | APAC | AMERICAS

350+ Professional Team | 250+ Enterprise Clients | 30+ International Awards 10+ Global Locations | 20+ Nationalities



ACCELERATED TRANSFORMATIONS AND DISRUPTIONS

The pace of transformation has been accelerated across regional enterprises as they come to terms with the pandemic and find solutions to recover.

























Craig Hayman, AVEVA
Anurag Agrawal, Canon Middle East and Turkey
Selina Bieber, GoDaddy

- Anas Abu Ghoush, Heriot-Watt University Dubai Wejdi Harzallah Partner, KPMG Lower Gulf
- Brent Hayward, MuleSoft Luis Ortega, Pagero Hidetoshi Kaneko, Panasonic Marketing
- Thierry Nicault, Salesforce Ole Hansen, Saxo Bank Peter Garnry, Saxo Bank
- Bilal Baig, Trend Micro

(Left to right, top to bottom)



FOUR KEY TRANSFORMATIONS IN THE INDUSTRIAL SECTOR

Digitisation will continue, artificial intelligence will automate, focus on sustainability, critical insights from data, will dominate inside industries.



CRAIG HAYMAN, CEO AVEVA.

echnology has become deeply embedded in almost every facet of modern-day life and plays an intrinsic role for many businesses across the globe. Digital transformation is enabling organisations, particularly in the industrial sector, to enhance their capabilities, and increase their returns across their assets and operations.

The use of the Industrial Internet of Things, IIoT through real-time analytics has had a profound impact, by improving response times to potential issues and minimising possible damage to the environment, which has resulted in the avoidance of costly unscheduled shutdowns, while improving profits.

As we look ahead into 2021, four key technology predictions stand out for the industrial sector.

First, digitisation will continue to spread and mature within organisations - connected IIoT will go deeper and wider across the core of many businesses. Second, artificial intelligence AI and machine learning ML enabled technologies will continue to automate processes to deliver improved performance and agility. Third, there will be greater focus on sustainability as businesses look to become cleaner and more efficient in their use of natural resources. Fourth and not least, businesses will look to unlock critical insights from data.

#I DIGITISATION

Digital capabilities strengthen resiliency. 2021 will pave the way for further digital transformation within industrial sector organisations. Across industries, business leaders are also turning to technologies such as AI and 3D modelling to understand their production processes and plans. To adjust to an environment where the supply of raw materials is volatile and demand for end products is focussed on the essentials, businesses must understand their production facilities better than ever before.

Cloud is not necessarily a pre-

requisite for digital transformation, but an enabler. Cloud technology accelerates time to value, increases collaboration, and reduces costs. What has been evident in 2020 is that a cloud platform allows organisations to consolidate data from multiple sources into a central location for improved transparency and accessibility – at any time, any place and from any secure device.

The current crisis is accelerating the use of cloud and data in increasingly sophisticated ways to help provide visibility and certainty into operations. The 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 aids teams to focus on the critical factors that determine business resilience. There has also been a fundamental shift in mindset: customers now understand where they need to get to and how quickly they need to get there. In an age where time is progressively of the essence, an increased focus on digital transformation and data-driven insights will be a game changer.

#2 AUTOMATION

According to Gartner, By the end of 2024, 75% of enterprises will shift from piloting to operationalising AI, driving a 5x increase in streaming data and analytics infrastructures. Boosting augmented data



2021 will pave the way for further digital transformation within industrial sector organisations.

KEY TAKEAWAYS

- The current crisis is accelerating the use of cloud and data in sophisticated ways.
- Al uses historical IoT data to analyse trends which can help in streamlining the supply chain.
- Industry 4.0 will help to bring information together to build a digital twin that allows organisations to optimise sustainable processes.
- Uncertainty is here to stay, as well as the possibility of a resurgence of Covid-19.
- The adoption of data analytics is said to be one of the greatest drivers of digital transformation.

management systems with AI, will also help to optimise and improve operations. Examining large samples of operational and historic data will become the norm.

We will also see AI applications increasingly being supported by devices and sensors connected through the IIoT. The combination of IIoT and AI has begun the next wave of performance improvements, especially in the industrial sector.

Furthering this automation, AI uses the historical IoT data to analyse trends which can help in streamlining and improving the supply chain process through cutting-edge solutions such as AI-driven operations scheduling. This provides recommendations to humans as to the optimal scheduling sequence, substantially reducing error and inefficiencies.

#3 SUSTAINABILITY

Sustainability is a journey beginning by measuring where organisations are. Digitisation is the natural first step for a fact-based approach. This data allows complex businesses to develop a meaningful strategy and execute it on the ground.

Industry 4.0 will help to bring information together to build a digital twin that allows organisations to optimise sustainable processes. If we take the energy sector, in the past few months jet fuel consumption dropped dramatically, however energy consumption overall remained relatively stable, and electricity demand grew.

Electricity remains the most efficient way to distribute energy around the world. In manufacturing in comparison, many companies' supply chains could not flex at the same pace as the world was changing. Moving forward, these companies will pivot to use local suppliers to meet specialist requirements and with lower emissions.

The industrial development is crucial for economic growth, eradicating poverty and employment creation. However, increasing resource-use efficiency and enhancing technological innovation offers real opportunities to reduce costs, increase competitiveness and employment. The industrial sector, although late to the digital transformation process, has a unique opportunity to lead the way in

making a significant impact to the planet.

#4 DATA REPOSITORIES

The adoption of data 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. 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 simulation – and this ultimately means improvements in business efficiency across the entire operations.

Uncertainty is here to stay, as well as the possibility of a resurgence of Covid-19, the length and depth of the economic downturn, trade wars, oil price fluctuations and so forth, so businesses must take lessons learned from uncertainty and create their new normal.

WHAT LESSONS HAVE WE LEARNED FROM 2020?

Businesses require intelligent software to address industrial pain points for value creation, productivity improvement, insight discovery, risk management, and cost optimisation. With the right technology, businesses can be incredibly agile to manage costs, boost efficiency and avoid costly mistakes.

The combination of digitisation, automation and data driven insights, with a focus on sustainable business can be a key differentiator and a propelling force to help ensure businesses meet their goals of today and tomorrow.





ANURAG AGRAWAL, Managing Director, Canon Middle East and Turkey.

Technology is an enabler for digital transformation and provides organisations with multiple benefits.

BUSINESS HAS CRUCIAL ROLE OF STAYING AHEAD OF CURVE

The role of business is crucial in getting everyone within the organisation on board with any change and to make sure all departments work cohesively.

re-COVID-19 the pace of change in the world around us was indeed fast, but nothing could have prepared us for how quick, agile and adaptable we needed to be in the face of a global pandemic. In a rapidly changing market, being agile and customercentric is the key to survival.

Technology is indeed an enabler for digital transformation and provides organisations with multiple benefits to optimise their performance, reduce costs and drive growth. However, this technology needs to be used in the right way otherwise it is will not be beneficial and the money spent wasted.

Process automation tools introduce digital and automated processes that allows organisations to easily manage information workflows and operations, no matter where staff are based. They quickly improve business processes, making them more transparent and efficient. Inefficient processes, delays and poor control have far reaching impacts on customer experience and revenue.

Technology-based, holistic

ecosystem is important, but equally as important is the organisation's culture and acceptance toward change, failure and re-assessment of multiple strategies to integrate technology in a way to suite the organisation's objectives.

Business heads have the crucial role of staying ahead of the curve by identifying new trends and strategies that benefit their organisation.

Their role is also crucial in getting everyone within the organisation on board with any change and to make sure all departments work cohesively. This includes integrating training and upskilling sessions so everyone within the organisation is capable of adapting to the new technology-enabled systems.

Technology heads are now in a position where they need to accelerate their organisation's adoption digital transformation or risk falling behind. There is also less time to experiment with new technologies as technology heads gear up to match the rapid pace of change.

Having an understanding of the technologies that are available,

whether it is in relation to AI, data analytics, or the integration of systems, and how they can be of benefit is crucial. Equally important is outsourcing the process of digital transformation to a partner entity that has the capabilities and experience to implement an organisation-wide change without the hassle of experiencing multiple failures before finding the most suitable digitally enabled ecosystem.

All business departments are looking for the progress promised by digital transformation and one issue is that they often try to move too quickly to be all-digital. The reality is that they operate within a complex hybrid environment with a constantly evolving balance of manual, and digital workflows and the change can't happen all at once.

Rather, digital transformation should be viewed as a journey that evolves with time and that means updating key processes and seizing opportunities for automated efficiency and reassessing processes along the way.

Another main cause of failure is insufficient collaboration from customers, employees, suppliers, partners and other external stakeholders, which is crucial to ensure that the journey is successful.



CREATING A SEAMLESS AND ENJOYABLE ONLINE CUSTOMER EXPERIENCE

This means ease of discovery, intuitive navigation for your website, simple online shopping, post-purchase communication for those making online orders.



The pace and extent of digital transformation in 2020 has experienced some of the most fervent change as compared to any other year.

However, there is often a tendency to focus on broad or advanced digital change risks, while overlooking the emotional component of the global pandemic-enforced transformation. For me, the real story is that of the smaller businesses and entrepreneurs in the region and the need to help them empower themselves.

Earlier this year, in a matter of a few weeks, entrepreneurs and micro-businesses were forced to pivot their traditional business approach to factor in the online world. Breaking the traditional face to face, physical communications and in-person sales model, to quickly understand how to connect and engage online, not as a consumer, but as a business.

More consumers in the region have begun shopping online and in greater frequency. According to studies in the US, the global pandemic has accelerated the shift from physical stores to digital shopping by about five years. This seismic shift has forced businesses to rapidly pivot to digital channels such as e-commerce to drive traffic, sell online and remain competitive.

In March 2020, Rabbit had to cease their operations and scooter services entirely. Although loyal customers did not mind using the scooters, Kamal ElSoueni and his team were determined to face reality and come up with new plans to keep the business running.

Now, to adapt to the current situation, Rabbit delivers scooters to their customers, and using the new strategy in April, May, and June of this year, the business revenue grew around 100% on a monthly rate. Rabbit is rapidly growing in the city and its visibility to more people continues to expand.

Looking ahead to the rest of the year and beyond, we think it is vital that businesses reinforce their online brand identity and presence. In practical terms, this means honing your website, social channels, and other online properties.

These elements are your virtual shopfront and it is essential to continually keep them updated and interesting to help your business grow. They need to be integrated, not just from a traffic flow point of view, but also in terms of their look and feel.

Online visibility is crucial as it can help the brand build a connection and trust with its customers. Differentiate yourself



SELINA BIEBER, Senior Regional Director, MENA, Turkey, South Africa, GoDaddy.

We think it is vital that businesses reinforce their online brand identity and presence.

from the competition and convey a professional look and feel that will attract customers and help grow the business.

In terms of communication, maintain good online engagement to help ensure website visitors are aware of the quality of your products and services, by connecting with them on a regular basis.

Ultimately, you want to create a seamless and enjoyable customer experience online. In practical terms, this means ease of discovery, intuitive navigation for your website, simple online shopping especially payment options and application of offers, and comprehensive postpurchase communication for those making online orders.

39





ANAS ABU GHOUSH, Head of Information Services, Heriot-Watt University Dubai.

CIOs MUST BALANCE AGILITY, RISK MANAGEMENT, UNCERTAINTY

There will be increased spending on cybersecurity tools as well as business intelligence, data analytics and cloud solutions in the year ahead.

2021 will require organisations to both respond to digital acceleration and proactive risk management. Covid-19 has helped us all become more familiar with uncertainty and has also shown us how important certain technologies are than we previously thought. This includes artificial intelligence and machine learning as many business operations have incorporated such technologies more than ever before.

In a recent survey by Harvey Nash and KPMG, it was found that small scale deployments of AI and ML have increased from 21% before COVID-19 to 24% in a period of only a few months. In the next few years, we will witness more investment in IT and automation initiatives that will necessitate the demand for cloud

solutions that offer resource controls and real-time analytics capabilities.

As we forge ahead with digital transformation, it is also important that CIOs achieve a balance between agility and risk management, especially in the face of sustained uncertainties. Hence, there will be increased spending on cybersecurity tools and software as well as business intelligence, data analytics and cloud solutions in the year ahead.

To support their overall digital strategy, more companies will invest in AI and ML-powered analytics and position it as a strategic asset for improving business forecasts in order to gain management buy-in, for instance.

Additionally, as remote working

In a recent survey it was found that small scale deployments of AI and ML have increased from 21% to 24%.

Companies will invest in AI and ML powered analytics as a strategic asset for improving business forecasts.

will continue into 2021, spending on cloud-centric infrastructure and applications will continue to be crucial so that businesses can remain competitive and become more technologically resilient.

At Heriot-Watt University, we have already reprioritised our technology spending inspired from the Building our Commonality programme – a project that seeks to enhance collaboration across our five campuses in the UK, Dubai and Malaysia as we aim to move towards becoming a more globally connected university.

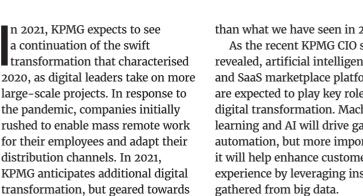
What this means is putting our students needs and those of our colleagues, at the heart of how our services will be redesigned in the future, and also finding global solutions by promoting knowledge, information exchange and crossworking between our teams and directorates, and most importantly, finding single Heriot–Watt way of doing things.

In 2021, we will focus on ensuring the best utilisation of advanced IT infrastructure and cutting-edge teaching and learning technologies at our brand-new campus. We are equally focused on enhancing our network and security systems and invest more in developing our teams' cybersecurity skills.



DIGITAL TRANSFORMATION WILL MOVE INTO LARGE **SCALE**

KPMG anticipates additional digital transformation in 2021, geared towards larger investments and larger projects in cloud adoption, ICT consolidation.



and ICT consolidation. Such initiatives are further fueled by the government's vision to digitalise their ecosystem, while retaining their current policies regarding data protection. The associated cybersecurity and data governance imperatives will necessitate a more prudent tempo

larger investments in cloud adoption

than what we have seen in 2020.

As the recent KPMG CIO survey revealed, artificial intelligence and SaaS marketplace platforms are expected to play key roles in digital transformation. Machine learning and AI will drive gains in automation, but more importantly, it will help enhance customer experience by leveraging insights gathered from big data.

Even before the pandemic, customer experience was paramount to a company's competitive standing. In 2021, making it robust yet scalable will be crucial. SaaS marketplace platforms will play a large part in business transformation, given the large breadth of their applications and the government's venture to modernise our digital ecosystem.



WEJDI HARZALLAH. Partner, Head of Digital Strategy, KPMG Lower Gulf.

In 2021, making customer experience robust yet scalable will be crucial.

KEY TAKEAWAYS

- Companies rushed to enable mass remote work for employees and adapted distribution channels.
- In 2021 KPMG anticipates additional digital transformation.
- Cybersecurity and data governance imperatives will necessitate a more prudent tempo than what we have seen in 2020.
- Artificial intelligence and SaaS marketplace platforms are expected to play key roles in digital transformation.
- Machine learning and AI will drive gains in automation and enhance customer experience.

Even before the pandemic, customer experience was paramount to a company's competitive standing.





BRENT HAYWARD, CEO, MuleSoft.

IT SPENDING MORE TIME KEEPING LIGHTS ON THAN INNOVATION

Majority employees think IT is spending more time keeping lights and go on to say their organisation's IT department is a blocker on innovation.

uleSoft, announced findings of The State of Business and IT Innovation report.

The global survey of 1,739 line of business employees in organisations with at least 250 employees revealed only 37% of organisations definitely have the skills and technology to keep pace with digital projects during the Covid-19 pandemic.

The vast majority 82% of LoB employees believe they need quick and easy access to data, IT systems and applications to do their jobs effectively and remain productive.

Access to data is critical as more than half 59% of LoB users are involved in identifying, suggesting or creating new ways to improve the delivery of digital services externally, such as building an online self-service portal or a customer-facing mobile application. Yet less than one-third 29% think their organisation is very effective in connecting and using data from multiple sources to drive business value.

This report also sheds light on the Covid-19 pandemic leading to an increase in digital initiatives by an

average 11–23%, highlighting what is hampering the pace of business and the ability to meet customer expectations.

A third 33% of LoBs employees say the Covid-19 pandemic has revealed a lack of connectivity between existing IT systems, applications, and data as an inefficiency when it comes to digital delivery.

Almost three in ten 29% of LoB employees say a lack of digital skills across the business is also an inefficiency when delivering digital projects.

More than half 51% of LoB employees are currently frustrated by the speed at which their IT team can deliver digital projects.

In light of increasing operational inefficiencies, it is not surprising that more than half 54% of LoB respondents say they are frustrated by the challenge of connecting different IT systems, applications, and data at their organisation. Many view this weakness as a threat to their business and the ability to provide connected customer experiences.

LoB employees are well aware

A third of employees say pandemic has revealed a lack of connectivity between existing IT systems.

of the repercussions of failing to connect systems, applications, and data. More than half 59% agree that failure in this area will hinder business growth and revenue.

The majority 59% of LoB employees agree that an inability to connect systems, applications, and data will negatively impact customer experience — a fundamental prerequisite for business success today.

Three in five 60% respondents admit that failure to connect systems, applications and data will also hinder automation initiatives. This comes at a time when a growing number of organisations are looking to automate business processes via capabilities, such as robotic process automation RPA.

The majority 58% of LoB employees think IT leaders are spending more of their time keeping the lights on rather than supporting innovation. Furthermore, 44% go as far as to say they think their organisation's IT department is a blocker on innovation.

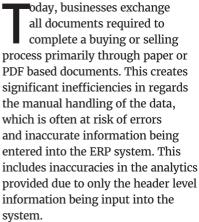
More than two-thirds 68% of respondents think that IT and LoB employees should come together to jointly drive innovation in their organisation.

An overwhelming majority 80% of respondents think it would be beneficial to their organisation if data and IT capabilities were discoverable and pre-packaged building blocks, which allow LoB employees to start creating digital solutions and deliver digital projects for themselves.



CEOs FEAR AMAZON WILL DOMINATE THEIR SPACE OF BUSINESS

For business leaders who are not identifying transformation opportunities, their organisations will fail to prepare for the next digital disruption.



Essentially, business transformation is the complete migration to a digital world whereby company resources are used to optimise operations instead of handling manual transactional processes, and by analysing accurate data obtained by digital means. To achieve this, both digital migration and profound business transformation is required.

We can place businesses in three categories: growth, risk reduction or cost reduction. Quite often we find that businesses fall within a combination of all three.

To drive growth, technology plays a fundamental role in creating scalability, flexibility and resilience. Technology too plays an essential role in mitigating risk. It allows businesses to identify potential risks, measure the probability and the possible impact it may have on operations.

Finally, businesses may invest heavily in technology which,

although may seem costly in the short term, in the long term it drives cost reduction across entire operations, replacing manual processes with automation.

Many CEOs today fear that Amazon will enter and dominate their space of business. This means that for many business leaders who are not constantly identifying the transformation opportunities, their organisations will fail to prepare for the next digital disruption.

Whether this is coming from inside their industry or due to external factors, this is a major factor that needs to be considered.

Given the pace of change today, businesses leaders should be ready to steer constant change to stay ahead of competition and to survive in an economy that is continually evolving.

Technology heads in modern day organisations are business-oriented people. They form part of the leadership team and influence business decisions at the same level of those heads in operations or finance. Their role in most cases is to bridge the knowledge gap and to constantly educate colleagues and customers in the art of the possible, with the use of adequate technology tools.

Keeping consistency in the information communicated across the business is key to successful business transformation.

There are four main reasons for failure in digital transformation projects. These are:



LUIS ORTEGA, Managing Director, Middle East Africa Asia, Pagero.

Technology may seem costly in the short term in the long term it drives cost reduction across entire operations.

- Poor vendor advice
- Organisations not prepared for intelligent future
- Challenging to retain talent
- Lack of continuous improvement culture

In essence, organisations needs to be agile by breaking down their digital transformation strategy into smaller, iterative, digestible pieces where they can find incremental improvements whilst establishing a culture of continuous innovation. This helps to position themselves as a digital challenger within the competitive market landscape.





HIDETOSHI KANEKO, Director and Division Head, System Solutions and Communications Division, Panasonic Marketing Middle East and Africa.

USAGE OF TECHNOLOGY CAN HAPPEN ANYWHERE AT ANY TIME

Technologies like AI and IoT are not standalone solutions but elements of a larger solution, bringing overall functionality and value for business.

igital operations are more important than ever and many businesses are transforming how they operate. As the industry emerges from a chaotic year, 2021 seems to be the year wherein we rebuild, however, there is a slim chance that we will return to the old way of doing things. The industry will see increased digitisation of business functions.

The technology industry is expected to reach \$5 trillion in 2021, with the regional IT sector expected to make up to 5% of this. A huge part of this will be business adopting new technologies as remote work, automation and contactless technologies become normal.

The entire approach to enterprise IT is changing. For one, businesses are placing much more emphasis on strategic IT, this means that

technology is a driver for business objectives rather than simply playing a supporting role. The other big change is the nature of technology in the marketplace, especially emerging technology.

The use of technology can now happen anywhere at any time, and more energy is being directed into the solutions that go on top of that platform. Broadly speaking, technologies like Internet of things or artificial intelligence are not standalone solutions but elements of a larger solution, often bringing new capabilities that enhance overall functionality and value for businesses.

With access to technology no longer limited by location or constrained to one's workspace, we will see more efforts pouring into creative solutions, further expanding

The technology industry is expected to reach \$5 trillion in 2021, with the regional IT sector expected to make up to 5% of this.

Every industry will go through digitisation be it retail, education or healthcare.

the opportunities for technology manufacturers.

Almost 20% of the technology industry will be covered by various emerging technologies, such as IoT, smart appliances & homes, AI, robotics and many automating technologies. Every industry will go through digitisation be it retail, education or healthcare.

Solution providers, like Panasonic expect to see increased demand for solutions like automated entrance management, social distancing and occupancy management in retail.

For education sector, solutions like lecture capture over IP technology, devices such as 4K projectors and interactive displays, for livestreaming or download are going to see high demand. According to the World Economic Forum, the global education technology market for online education was projected to reach \$350 billion by 2025.

Another area of growth is in assistive robotics in healthcare.

Responding to market demands and their sustainable success in the coming year, Panasonic's solutions will focus on addressing needs of each business in the new normal.

Specifically, some of the products that you will see more and more would be IoT-enabled devices and products in both residential and B2B arenas that would bring forth convenience and comfort as well as AI-driven imaging video products and solutions, presenting solutions for security, safety and health under the new normal.





THIERRY NICAULT, Regional Vice President, Middle East and Africa, Salesforce.

AI MERGED WITH CX EXPECTED TO BE REGIONAL GAME-CHANGER

In the UAE, 76% of marketers are leading customer experience initiatives, with 94% using AI with the top use case resolving customer identity.

s the Middle East begins to emerge from the pandemic, 81% of service decision—makers are accelerating their digital transformation initiatives, according to Salesforce's State of Service Report. In the UAE, 79% of sales leaders say their digital transformation has accelerated since 2019, according to the Salesforce Fourth State of Sales Report.

In 2021, Salesforce's new Global Stakeholder Series: Future of Work Now, research study finds that 60% of respondents expect working from

81% of service decision-makers are accelerating their digital transformation initiatives.

home to become the new norm. But over one third of non-remote workers globally say they do not have the technology to effectively work from anywhere.

In this hybrid working world, access to data is vital. However, only 37% of organisations definitely have the skills and technology to keep pace with digital projects during the Covid-19 pandemic, according to MuleSoft's The State of Business and IT Innovation report. The vast majority 82% of LoB employees believe they need quick and easy access to data, IT systems, and applications to do their jobs effectively and remain productive.

In 2021, Middle East organisations that digitally transform on the cloud will see the biggest business benefit. The UAE is leading digital business innovation – with 91% of UAE customers expecting their companies to go digital, according to the Salesforce State of Connected Customer Report.

Artificial Intelligence combined with customer experience solutions

will be a game-changer for Middle East organisations. In the UAE, 76% of marketers are leading customer experience initiatives, with 94% using AI with the top use case resolving customer identity, according to the Salesforce State of Marketing Report.

Across the Middle East, the Salesforce Einstein AI platform is helping organisations to save time and boost productivity – across call centers, supply chains, boardrooms, and customer experiences.

In 2021, the Middle East's market segments leading digital transformation will include financial services, manufacturing, retail, communications and media, healthcare and life sciences, and government.

As the coronavirus vaccine continues to rollout, the Middle East could also see a rebound in the real estate, retail sector and the travel, tourism, and hospitality sector.

In real estate, Property Finder, the UAE's leading real estate and rental marketplace, has digitally transformed with Salesforce to send contracts, make forecasts, and enhance contacts. During the crisis, Property Finder has also used cloudbased Salesforce solutions to enable remote work from day one.

In retail, Chalhoub Group, the leading luxury retailer has leveraged its strategic relationship with Salesforce to enhance customer e-commerce experiences in its digital transformation amid COVID-19.

In travel and tourism, Seera Group, the leading travel group in the Middle East, is streamlining customer interactions with the Salesforce Service Cloud solution. And Almosafer, the leading omnichannel travel brand in Saudi Arabia, has deployed a fully-integrated travel booking retail technology using Salesforce solutions.



COMMODITY MARKET BUOYED BY EVERYTHING RALLY INTO 2021

Global markets flushed with cash, speculation across markets, super cycle in commodities led by China, have seen Bloomberg Commodity Index rise by 9%.



OLE HANSEN, Head of Commodity Strategy, Saxo Bank.

ommodity markets maintained their strong momentum ahead of year-end as the so-called everything rally continues to be fed supportive news. Apart from the weaker dollar and vaccine optimism lifting the prospects for 2021, the market is also being supported by speculation about more near-term stimulus from governments and central banks.

These developments highlight the current challenge where markets are pricing in a brighter tomorrow while the pandemic is still raging across many countries, especially in winter-hit regions across the northern hemisphere where the prospect for improvement – vaccine or not – is unlikely to occur until warmer weather arrives in March and April.

The combination of a global market flushed with cash, driving wild speculation across markets, and the potential for another super cycle in commodities led by China and its unstoppable appetite for raw materials, have seen the Bloomberg Commodity Index rise by close to 9% this quarter.

Still on track for an annual loss, mostly due to heavy losses in energy during the early stages of the pandemic, the prospect for 2021 is looking increasingly bright.

The combination of the green transformation driving demand for key industrial metals, including silver, a weaker dollar, increased demand for inflation hedges, a pickup in fuel demand as global mobility recovers and not least rising demand outside China as governments go on a spending spree to support jobs. Adding to these the risk of elevated food prices as the weather becomes more volatile.

The ongoing everything rally this past week was particularly noticeable in metals. Leading from the front we find industrial metals where HG copper topped \$3.6 per lb and LME copper \$8000 per T for the first time in seven years. That strength has been filtering through to semiprecious metals, with silver trading up by more than 7% on the week after breaking key technical levels, both against the dollar and against gold.

Rising demand, especially from China, looks set to remain strong in 2021 when the rest of the world emerges from the Covid-19 cloud, thereby raising concerns about available supply following years of under investments. The metals rally in 2020 has been the sharpest in a decade with Goldman Sachs seeing echoes of the spike in early 2000's

when Chinese demand started a near decade-long super cycle.

One of the main obstacles for a commodity rally during the past decade has been the ample availability of raw materials. Oversupply during the past decade and especially during the past six years kept the commodity sector as a whole in a state of contango where the spot price, due to ample availability, trades cheaper than deferred prices.

Since 2014, a portfolio of 24 major commodities carried a negative roll yield which at times was as high as five percent on an annual basis. From an investment perspective, this headwind combined with a generally strong dollar and low inflation reduced the attraction of the sector.

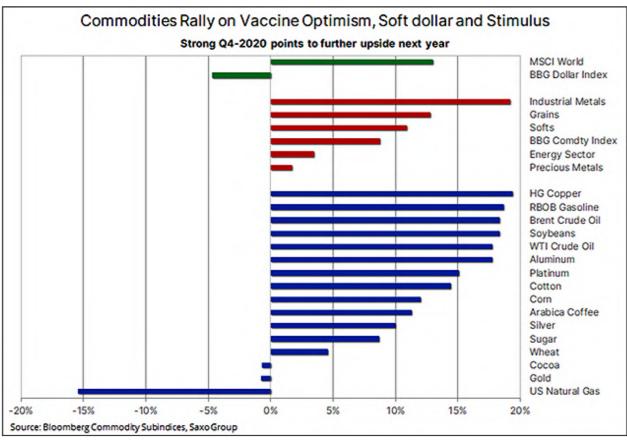
In recent months, however, the roll yield has turned positive with the change so far being led by the agriculture sector where key crops have rallied strongly in response to lower production and rising demand.

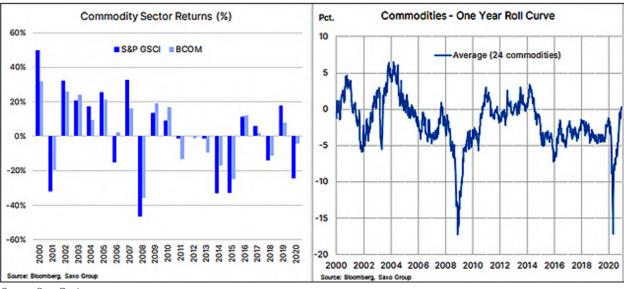
Looking ahead to 2021 the expected pickup in demand as well as the reflation theme look set to underpin the sector, especially markets where supply may struggle to meet demand. We are focusing on copper, platinum and soybeans to mention a few.

Nothing ever goes in a straight line, especially when it comes to commodities. And while a bullish outlook for 2021 is growing we also have to acknowledge that the rally over the past few months has been driven by a very optimistic vaccine outlook driving the dollar down and stock markets higher.

With this in mind we may have







Source: Saxo Bank

reached levels that raise a few questions as 2021 gets under way. Not least in the oil market where Brent crude oil popped above \$50 per B for the first time since March. This during a period where the only bright spot is strong demand from China and India while lockdowns continue to impact fuel demand elsewhere.

In their latest oil market reports for December, OPEC, IEA and EIA all warned that the rebalancing of the global oil market may take longer than previously expected. Following a demand loss of 9.2 million barrels per day in 2020, the three forecasters now see a 5.8 million barrel per day recovery in 2021 with the IEA seeing the oil glut staying until end-2021.

Having rallied non-stop since the early November vaccine announcements, Brent crude oil has now recovered 61.8% of the January to April collapse. Given the nearterm outlook for supply and demand, the rally is likely to pause with \$50 per barrel being the level to gravitate around until an actual improvement in demand becomes more visible.





PETER GARNRY, Head of Equity Strategy, Saxo Bank.

HOW THE WORLD NAVIGATED GREATEST CONTRACTION SINCE 1930S

As the stimulus to fight the biggest economic contraction since the 1930s erased losses from late March, high levels of activity continued throughout 2020.

n a rollercoaster year that surprised analysts and market participants alike, US technology companies attracted the highest trading volumes among Saxo Bank investors in the UAE and around the world in 2020.

The strict lockdowns and prolonged work-from-home trend which arose from the Covid-19 pandemic suited the business models of the US tech companies, reflected by the Nasdaq-100 being up more than 40% for 2020.

EV-companies ruled supreme as the best performers of 2020, with Tesla up more than 640% and Nio also referred to as the Chinese Tesla skyrocketing by an astonishing 1069%.

This year was all about the online vs offline world as technology companies were catapulted into the future by the Covid-19 pandemic while many physical industries such as aviation, travel, leisure, hospitality and automobiles came

KEY TAKEAWAYS

- Saxo Bank welcomed more than 200,000 new clients throughout the year.
- US technology companies top list of most popular stocks amongst UAE investors in record-breaking year.
- Tesla led Saxo Bank's UAE list, followed by Apple, Nio, Microsoft, and Amazon.com.
- 2020 will be remembered for the rise of Tesla as its market value surged 646%.
- Tesla reached a market value of \$590 billion, ending the year as the biggest stock inclusion in the history of the S&P 500 Index.
- The year will be remembered for the fastest equity market rebound in modern history driven by aggressive policy action.

Covid-19 has amplified the participation rate of retail investors in equity markets.

under significant pressure due to the severe restrictions and lockdowns.

2020 will also be remembered for the rise of Tesla as its market value surged 646%, reaching a market value of \$590 billion and ending the year as the biggest stock inclusion in the history of the S&P 500 Index. Part of the Tesla story was the increase in EV sales globally despite the pandemic and the rise of green transformation stocks highlighting a powerful new theme in financial markets.

Investors across the world turned to financial markets as net buyers following the March global stock market crash and historically swift recovery powered by the Federal Reserve pledge to shore up the economy.

As the all-out stimulus to fight the biggest economic contraction since the 1930s quickly erased losses from late March, high levels of activity continued throughout 2020 and Saxo Bank welcomed more than 200,000 new clients throughout the year.

The year will be remembered for the fastest equity market rebound in modern history, following a sharp 34% selloff in just 23 trading days during February and March, driven by aggressive policy action across the world.

Covid-19 has amplified the participation rate of retail investors in equity markets, a trend that was already underway before Covid-19 and mainly driven by younger people. The growing influence of retail traders has altered equity markets and created a new environment that has made it more difficult for traditional institutional investors to navigate.

HIGHLIGHTS OF **2020**

Saxo Bank's most traded stocks 2020 YTD return % 15/12/2020

+646% Tesla + **70**% Apple

+1069% Nio

> +33% Microsoft

UAE's most traded stocks 2020

- Tesla
- Apple
- Microsoft
- Amazon
- Nio

GCC's most traded stocks 2020

- Boeing
- Facebook
- Zoom Video Communications
- Alibaba
- Moderna

+67% Amazon.com

49

Top traded UAE and global stocks

Tesla

Many analysts thought Tesla peaked back in the beginning of February. However, this was only the beginning of what would be an extraordinary year for Elon Musk. While a 646% increase brings the company into bubbly territory, a new climate friendly Biden administration could mean that there is more in store for the king of EVs.

Apple

Apple started on the wrong foot but made a swift recovery in the first months of the year, and it takes more than a pandemic to keep customers from acquiring the latest gadgets, as the latest iPhone 12 appears to be one of the top-sellers in the company's history.

Microsoft

The strategic shift towards cloud-based services has paid off. If the work-from-home trend grows as expected, Microsoft will be a key facilitator for years to come. This is also highlighted in the stock, which gained 33% in 2020.

Amazon

While many physical stores hit a brick wall, Jeff Bezos' everything store did not skip a beat and hired 175,000 people to accommodate the boom in online orders. However, regulators around the globe are setting up roadblocks, which could mean trouble in 2021.

Nio

While Tesla is trying to gain a foothold in China, Nio is already there. 2020 put a spotlight on the Chinese EV company, which rose astronomically 1069% during the year. While Musk makes the headlines, Nio benefits from the tailwind. Next step is punching their way into the European market.



SECURING HYBRID CLOUD WILL BE DIFFERENTIATOR

Organisations need to consider the security aspect of their hybrid cloud architecture, which will drive secure digital transformation in 2021.

s the pandemic has peaked, Middle East businesses have done more digital transformation in the past three months than in the previous three years! Amongst surveyed organisations, 79% want to learn more about digital transformation and cloud security, according to a recent Trend Micro survey of 2,064 business and IT decision-makers.

In 2021, digital transformation will continue to accelerate, and require businesses to protect employees, customers, and partners working at home due to COVID-19.

Organisations need to secure remote workers – especially in protecting home networks, remote working software, and cloud systems, according to Trend Micro's 2021 predictions report Turning the Tide.

Cloud technologies, especially in enabling remote workers, retail, and e-commerce, are driving digital transformation across the Middle East. However, organisations also need to consider the security aspect of their hybrid cloud architecture, which will drive secure digital transformation in 2021.

As organisations move away from securing the perimeter – they are moving to the cloud and into people's rooms, with VPN for work, cloud and app-based solutions will keep on seeing strong adoption.

The Middle East already has a large number of business transforming to digital domain, and the region will

see more apps launching related to e-commerce.

Digital transformation is being led by cloud technology, cloud adoption, and anything that can move beyond an organisation's footprint or hold of an organisation in their architecture. Security for the cloud is being adopted by the Middle East's government and public sector, banks, healthcare, education, and retail sectors.

It is not a disruptive technology, but how it became part of almost every workspace over the past year has been web conferencing. While many Middle East organisations had web conferencing tools, these kinds of technologies will continue to see strong take-up and support making people's daily lives easier.

In 2021, Trend Micro is planning to launch further solutions in our product portfolio across the MENA region, to support security among organisations and aligned with nationwide digital transformation visions.

In MENA, Trend Micro is seeing strong success on its XDR solution, which is a cross-detection and response platform that moves beyond EDR technologies to bring together security for endpoints, servers, the cloud, and networks for cross-detection and response.

Trend Micro will continue to support the region's secure adoption of cloud solutions, as cloud can deliver the biggest boost in digital transformation. Many Middle East



BILAL BAIG, Technical Director GCC, Trend Micro.

Digital transformation is being led by cloud technology, cloud adoption, and anything that can move beyond an organisation's footprint.

organisations are already adopting hybrid cloud as the foundation of their digital transformation, and the key differentiator will be securing the hybrid cloud.

Trend Micro provides exceptional cybersecurity solutions, from endpoint to network to servers to cloud and hybrid cloud. As Middle East customers begin or accelerate their journey to the cloud or hybrid cloud, Trend Micro will be there to secure these customers' cloud environments.



Modernizes your approach to secure access

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.

For more info, contact your authorized distributor,
Mindware FZ LLC at rsa@mindware.net | www.mindware.net | www.rsa.com

WHAT ARE THE TAKEAWAYS FROM THE COVID EXPERIENCE

The most important takeaway for all will be inculcating the humility to re-learn and to re-start, says Niranjan Gidwani.



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

User experience with intelligent automation has become even more critical

ntil now, our world has always been referred to as the VUCA World, a world of Volatility, Uncertainty, Complexity And Ambiguity. VUCA is an acronym drawing from the leadership theories of Warren Bennis and Burt Nanus.

However, taking inputs from a renowned strategic trainer, Captain Raghu Raman, who is also an armed forces veteran, the world is now become a RUPTured world. RUPT standing for Rapid, Uncertain, Paradoxical and Tangled. The world, which was earlier complicated, has now turned more complex. Covid has come as a wakeup shock. This world has learnt huge lessons from the Covid experience, most of them good and positive, yet some negative and selfish as well.

From countries, to politics, to governments, to cities, to boardrooms, to houses, to families, to healthcare, to children, a new level of preparedness has already started gaining rapid momentum. For almost all countries and sectors, changes will be very highly dependent on technology. Digital will mandatorily be a part of mainstream strategy across the board, and this will also require all generations of people to think differently, regardless of age, caste, creed, colour, race. Digital has, and will continue to make inroads in all areas of life, whether business, government, healthcare or security.

Ecommerce and omnichannel has been fast forwarded by 4–5 years just in the past few months. Old decision-making styles may work in some cases, and up to a point, but will not be relevant for too long in a rapidly changing world.

The most important takeaway for all will be inculcating the humility to re-learn. And to re-start with the spirit of a Start Up. And while doing so, the new breed of leaders must realise that while performance is mandatory, if we cannot periodically disconnect, we cannot lead. Creating a culture of burnout is opposite to creating a culture of sustainable creativity. This mentality would need to be introduced as a leadership and performance-enhancing mentality, starting from schools.

As the world will continue with the remote working model, user experience with intelligent automation has become even more critical. Organisations are, and will continue to realize more and more the value of cloud. The Op-ex model, which leads to cost effective solutions, is becoming more prominent. In order to attain scalability in business, Uniformity, Simplicity and Standardisation will become the key.

Covid has also acted as a catalyst for other global challenges like climate change and social inequality. Several months of lockdown have actually created a positive impact

For almost all countries and sectors, changes will be very highly dependent on technology

on nature, air, water, plant and animal life. National leaders will have to increasingly be more and more answerable for issues that have global repercussions. The process is slow, but the positive takeaway is that Covid has brought a lot of these issues more into the open.

The pandemic has also become an opportunity for corporates to shift from a purely self-serving profit objective towards a more inclusive mindset of all round growth of all its stakeholders. As can be seen, supply chain models are beginning to shift. More localisation of production is likely to happen, beginning with critical items like medicines, communication equipment, and likely to extend to food and dairy supply. These will become essential areas of economic and national security. Needless to say, localisation may drive up costs. But some amount of localisation is here to stay for a few years.

Covid has also helped countries in realising that they need to rapidly improve internal competencies in various disciplines. Those businesses and organisations who have started valuing their employees and business partners as humans rather than faceless entities will reap better long-term success.

Covid has actually thrown up the

difference between petty leaders and organisations, who constantly work for their own self-interest, and those who have demonstrated unprecedented social responsibility and philanthropy while compromising on their profits in these times. The socially responsible organisations during Covid will turn out to be better brands, and without realising, may have invested well in intangible marketing of their organisations as brands.

At the society and family level, Covid has added immense value. Globally, a realisation has dawned upon working men as to how tiring and thankless a job it is for women to look after home and family till the last day of their lives. It has given so called macho men a taste, a realisation that thankless, unpaid work at home is more strenuous, more difficult to manage and juggle, with no formal appraisal processes, no motivational speakers to reward the womenfolk.

And for working mothers, it has shown how much more difficult it is to be a working parent and also manage house and children without external help, even for a few months.

During the crisis, a realisation has dawned among almost all that a handful of family, friends and neighbours are far more valuable than thousands of superficial networking contacts or followers on social media. The real positive that has come out starkly in these times is that the value of flesh and blood social networks far supersede all else.

The rich and affluent hopefully will be more mindful and appreciate the value of the less privileged masses who some of us label as migrants. Posting videos of household chores and different kinds of meals has been fun for a few days or weeks, but as the weeks extend into months, the dignity of labor is surely going to be valued more. More of us have got wiser to the difference between having material possessions and being a capitalistic addict.

At the student community level, it is amazing to see how well, how responsibly majority of the students and fresh graduates have taken this difficult phase in their stride, without getting any serious and sustained assistance from the older generation of mentors.

It is incumbent upon all of us to keep this new generation intelligently occupied and engaged, as sometime down the road, they will all be our new breed of customers whose buying patterns would be impacted by the Covid experience, and would need to be factored in.

The most amazing positives of the Covid experience have been the medical fraternity, the essential workers, the police and security, the fire brigade, the last-mile ecommerce delivery guys, and all those who need to keep the country, city, essential services running 24x7. A lot needs to be learnt from these energetic, passionate, committed yet exhausted workers.

As is truly said, the Chinese word for Crisis is made up of two characters – one denotes danger, and the other denotes opportunity.

Many people are convinced, and truly believe that the only things we need for success are talent, energy and personality. The Covid experience has taught us that, over the long haul, who we are as a race is more important than who we project or appear to be.

Old decision-making styles may work in some cases, but will not be relevant for too long in a rapidly changing world

HOW SERVICE DELIVERY WILL EMERGE STRONGER THAN BEFORE

We will see digital innovation and investment spike among service organisations, asserts Sarah Nicastro at IFS.



SARAH NICASTRO, Field Service Evangelist, IFS.

The ability to react nimbly to quickly changing business criteria relies on a strong, cohesive digital infrastructure

n a year fraught with such fear, turbulence, and complexity as 2020, it has sometimes taken effort to see the positives. As someone who cares deeply about this industry, one of those positives for me has been witnessing how leaders have risen to the challenges of this year with grit, resilience, and fortitude. They have shown true compassion for their co-workers and customers alike, bonded together by a deepened sense of empathy.

Beyond the individual level, however, the challenges of this year have forced growth upon service organisations. Elements of increased open mindedness, greater creativity and agility, a collective surrender of comfort zones, and recognition of the criticality of both people and digital tools will spur these companies forth as 2021 takes hold. Here are three predictions for how:

Digital innovation spikes

Our world quickly turned virtual as Covid struck, and the leaders I have spoken to fall into two camps: those who had made significant traction in digital transformation and were relieved they had, and those who had lagged behind for one reason or another and felt the pain of lacking tools that would aid greatly in business continuity and decision making.

The moments of service that matter most, the ability to react nimbly to quickly changing business criteria, and the capacity to expand and evolve service offerings all rely on a strong, cohesive digital infrastructure. In 2021, we will see digital innovation and investment spike among service organisations. Those who have already made progress on their digital transformation journeys will be looking to build upon their strong foundation, and those who have lagged will work hard to catch up.

An IFS study of more than 3,000 executives from six regions across the world who weighed in on their organisation's plans to invest in digital transformation technologies in automation, artificial intelligence, IoT and more, expressed that, globally, over 50% plan to increase spend on digital transformation initiatives.

In data released in October, 2020, Gartner stated that top performing enterprises are accelerating digital innovation and leveraging emerging technologies to come out stronger on the other side of the Covid-19 pandemic, which has arguably been the most significant turn in 2020, according to Gartner's annual global survey of CIOs. 2021 will be a race to digital, with the spoils going to those organisations that can maintain the momentum built up during their response to the pandemic.

Gartner, with findings of a survey conducted online from June through July 2020, polling 402 respondents across the US, UK, Germany, Australia, Singapore and India, points to increased investment in IoT, stating that, Despite the disruptive impacts of Covid-19, 47% of organisations plan to increase

It is the digital laggards who are expected to make the boldest moves as they play catch up

their investments in the Internet of Things. Another Gartner, Inc. poll of roughly 200 business and IT professionals on September 24, 2020 revealed that 24% of respondents' organisations increased their AI investments and 42% kept them unchanged since the onset of Covid-19.

IDC, a provider of global IT research and advice, explores how laggards, which it refers to as digital resisters, are catching up, saying that the pandemic was a wake-up call for the digital resisters. The firm's study shows 64% of organisations will either be early adopters of new technology or aggressively seek out emerging technology, a departure from past recessionary behaviour. It is the digital laggards who are expected to make the boldest moves as they play catch up. 53% of digital resisters, the least digitally mature organisations, are planning to seek out emerging technology compared to the average of 29%.

Servitisation journeys speed
Servitisation has been the industry
buzzword for the last few years,
but has real progress taken place?
I believe so, and I believe 2021
will speed servitisation journeys.
The concept of servitisation on
paper, that product manufacturers
compete on service offerings rather
than commoditised products,
sounds simple, but in reality, it is a
monumental shift in how a business

thinks, sells, performs, and delivers. And monumental shifts take time. Munters, for example, who is on the journey to servitisation, shares insight on both the potential but also the complexities.

However, Covid has brought together several forces that collectively will make strides toward servitisation. First, it has created greater customer intimacy, companies have learned more about not only what their customers want, but how they operate. This greater understanding inevitably leads to the discovery of additional opportunities to provide value. Many manufacturing companies I have spoken with have seen a heightened interest in service offerings, with customers wanting to maximise the lifespan of their current equipment to avoid capital expenditures. As such, they have become increasingly open to subscription models and premier service offerings, which paves the way for servitisation

I am not saying that we will see the full potential of servitisation realised in 2021, but I believe we will see a quicker pace of progress than we have the last few years as these factors, and others, play out. A Forbes article discusses some other reasons contributing to the move toward XaaS business models for manufacturing in a post-Covid world, including revenue resiliency

Covid has brought together several forces that collectively will make strides toward servitisation

and employee safety.

Field service becomes anywhere service

Remote service capabilities have been the most sought after as a result of the pandemic, providing business continuity as travel bans and quarantine restrictions were put in place. But the value of remote service spans far beyond surviving Covid and, in 2021, our concept of field service will be replaced with one of anywhere service. As remote service takes hold and becomes the standard first line of defence for organisations, we will realise that the initial service visit can be done from anywhere.

Organisations will recognise the benefit of leading with a remote-first approach that provides far faster response times, increases the odds of remote resolution, and improves first-time fix rates when field service is necessary because of the insight gleaned in advance. Remote service empowers the customer by engaging them in the service process aiding in quicker resolution, and it empowers technicians by eliminating unnecessary trips and travel time allowing them to better leverage their expertise.

In no way do I believe that field service will disappear. Rather, the use of anywhere remote service to diagnose issues and resolve problems that do not require a technician's time or skills onsite will contribute to the progress toward more strategic service and allow for far more optimal use of resources. Freeing up the time and energy of technicians by eliminating service work than can and should be done remotely will give them an opportunity to focus time in the field on value-add work, sharpening their skills as a trusted advisor, which is precisely what will propel the company forward in its service objectives.

In 2021, we will see how navigating the challenges of 2020 results in a leap forward to exponentially speed the service evolution in the coming years. And that is something I am eager to witness.

AVEVA'S PREDICTIONS FOR THE INDUSTRIAL SECTOR

0

Digitization will deepen and Cloud usage will mature



Unified data will act as a source of truth to guide teams on the critical factors that determine business resilience

Cloud is a necessity for digital transformation



Accelerates time to value



Increases collaboration



Reduces costs

THE PO

AVEVA's to

predictio

industri

in 2

3

Sustainability will be embedded within businesses



Leveraging **Industry 4.0** and digital twin capabilities, companies will remodel their operations to source more locally, drive transparency and cut energy use and emissions

Increasing resource-use efficiency and enhancing technological innovation offers opportunities to:

Reduce costs

Increase competitiveness

Promote transparency

AVEVA'S PREDICTIONS FOR THE INDUSTRIAL SECTOR

Artificial Intelligence will broaden and deepen



Al applications

will increasingly be supported by devices and sensors connected through the **IIoT**



The combination of **IIoT** and **AI** has begun the next wave of performance improvements



WER OF

UR

echnology ns for the al sector 2021



By the end of 2024, **75%** of enterprises will shift from piloting to **operationalizing AI**, driving a **5X** increase in streaming data and analytics infrastructures.

Cartner

Asset Performance Management will become mainstream



Companies will use the **IIoT** to their advantage to collect data from diverse remote assets, enabling the view of real-time and historic **operational data** alongside **predictive** and **prescriptive analytics**

Five ways **APM** enhances

operations



Real-time operational data

Historical asset information

Predictive analytics

Prescriptive analytics

Enhanced performance



90 DAYS MILESTONES

62**Φ SESSIONS**

6000• C-SUITE ATTENDEES FROM 32 COUNTRIES

100 INTERNATIONAL AND TOP INDUSTRY LEADERS.

PARTICIPATION OF OVER

COUNTRIES



OVER SATISFIED PARTNERS AND SPONSORS

TECH LEADERS | CIOS | IT DIRECTORS | INNOVATORS | EDUCATORS VENDORS | ACADEMICIANS AND INVESTORS

BROUGHT TO YOU BY

BUSINESS TRANSFORMATION



CYBER SENTINELS THE TITANS

ORGANIZED BY





FOLLOW US: Global CIO Forum





