BUSINESS TRANSFORMATION

THE CHANGE TO FUTURISTIC BUSINESS

GREGG OSTROWSKI
Executive CTO,
Cisco AppDynamics.

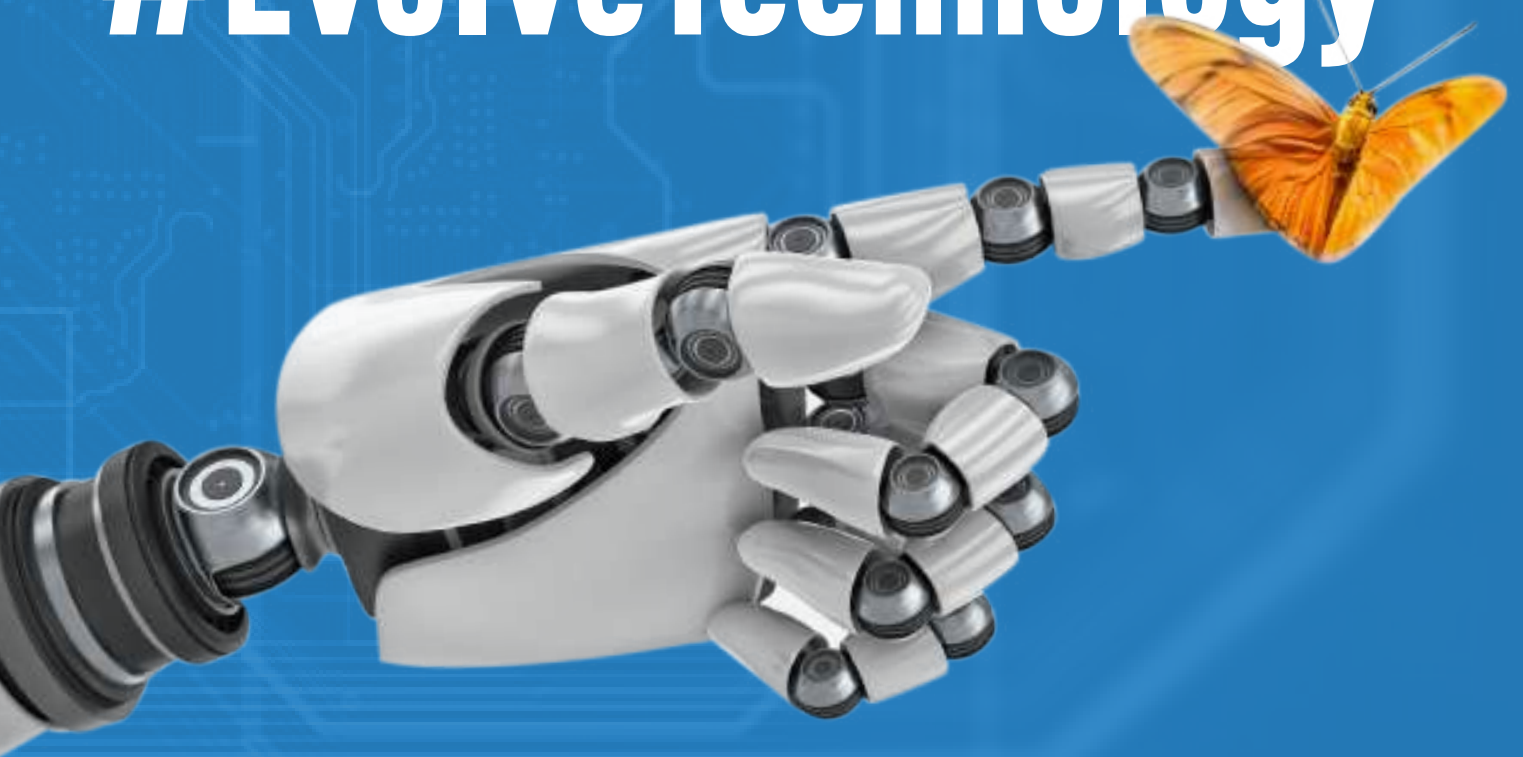**FULL-STACK OBSERVABILITY**

WHY IT PERFORMANCE IS IMPACTING DX

Observability of the entire IT stack is
imperative to improve digital experience.

THE IT STACK AND
DIGITAL EXCELLENCE

The bane of the IT industry has been its legacy of siloed working across all its functions. Before the start of this decade, the IT estate used to be neatly classified into systems, software, and services. These three divisions had hard lines in between themselves and even within each of them itself.

Says Gregg Ostrowski at AppDynamics, inside the IT estate, the way things have worked historically, each of the teams has been responsible for managing a technology silo, using their independent observability tools. Whenever there is an IT failure, the teams create a war room scenario of sorts, using their independent observability tools that work within their silos, and may say more often than not – their domain is not the culprit.

You are kind of putting yourself in a point of – I want to prove myself innocent, instead of fixing the bigger issue,says Ostrowski. The bigger issue for the business is typically the customer, and for the IT estate it should be driving business outcomes and driving better and better user experience.This is enabling all the teams to work together to quickly resolve technology issues but also enabling another key area, which is to resolve using business context.

The move to the cloud and the adoption of cloud computing platforms and cloud technologies has integrated the front office, middle office, back office inside enterprises. The rigid silos created by the foundations of legacy technologies have been disrupted leading to transformation of the IT estate and its functioning.

The next step for enterprises is to get visibility into this complexity. You cannot drive business outcomes and business decisions without a clear understanding of the full stack ofapplications that are now sprawled out. Technology teams are still really underwater. And ITis still in a position of trying to get a tighter interlock with business. I do not think we are fully there yet, says Ostrowski.

In our second lead feature for this month, we look at how sustainability is being adopted by a leading manufacturing entity in UAE.Digital transformation is essential for bottled water producer, Mai Dubai's business of delivering high-quality products to the markets. In light of this, operations in Mai Dubai's facility are automated with practically no human intervention.

From the arrival of raw materials into the Mai Dubai warehouse to the loading of the final product onto the trucks for dispatch, the processes are automated through cranes and conveyors. Additionally, Mai Dubai runs a 100% solar-powered smart factory at Al Quadra, including the state-of-the-art Super Combi technology.According to CEO Alexander van 't Riet,Mai Dubai has accomplished net-zero energy consumption for the past two consecutive years.

Turn these pages to read more about features, latest news, and thought leadership. Happy reading.

Arun Shankar
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GOVERNMENTS MUST UNDER PROMISE, OVERDELIVER IN BLOCKCHAIN

Some blockchain initiatives are less efficient or effective in getting to an outcome when compared to alternative technologies or approaches.

ARTHUR MICKOLEIT
Director Analyst, Gartner.

Governments worldwide have been trialling blockchain initiatives as a transparent and secure solutions for transactions or digital interactions. By using blockchain, governments can permanently store asset data and transactions pertaining to land, property, businesses and vehicles on a public ledger, guaranteeing data integrity and high levels of security.

The Federal Office for Migration and Refugees in Germany is piloting the use of blockchain to allow coordination of asylum procedures across a wide network of relevant agencies and institutions. The United Nations has developed a blockchain-based service to validate pension entitlements of its retirees around the globe. However, the largest number of governments blockchain projects remain in experimentation or exploration mode.

Prior to this year, there were far more public-sector blockchain projects in pilot or proof of concept than implemented into production or in production, according to the Gartner 2020 survey of blockchain consultancy and technical service providers. In 2021, the bulk of government initiatives 73% were in an exploration or a piloting phase with uncertain outcomes, according to a sample of 87 government projects.

This is because some blockchain initiatives are less efficient or effective in getting to an outcome when compared to alternative technologies or approaches. In fact, Finland realised this around its MONI financial assistance scheme for asylum seekers.

In addition, public blockchain technologies are diverse, and most of them are still insufficiently mature. The 2021 Gartner Hype Cycle for Blockchain shows that 70% of technologies listed are still at or before the peak of hype.

To get projects moving, try to reduce the pressure to deliver tangible results by setting initial expectations deliberately low. This is true especially for governments with less of a track record in this area. It is better to underpromise and potentially overdeliver, considering that most public-sector blockchain initiatives today still serve exploration and capacity building.

Gartner predicted that by 2021, at least 5% of government entities would adopt blockchain as a transparent, authoritative ledger for some official records. Several blockchain-based registers have moved into large-scale piloting or even production, such as the Verifiable Organisations Networkbusiness register in Canada, or the land and real estate registers in the country of Georgia and India's state of Telangana.

Government leaders must be realistic about the largely uncertain outcomes of their blockchain projects. Focus on pragmatic blockchain use cases means identifying use cases that have the greatest chance of taking a blockchain project beyond the POC phase. Success also requires exploring alliances to extract long-term value from blockchain engagement.

The German federal government is facilitating cross-industry consortia to explore different digital identity uses of the future, including decentralised and self-sovereign identities SSI. Collaborating as part of an alliance helps every involved actor move beyond the narrow value of private enterprise blockchain initiatives.

Above all, before embarking on any blockchain project, conduct a blockchain relevance test to determine the suitability of blockchain for the given initiative, and determine the optimal technologies for supporting any use case. ◼

EMPLOYEE EXPERIENCE TO REPLACE CUSTOMER EXPERIENCE

While customer experience is no less important than it has been, in 2022 employee experience will take centre stage and it simply must.

Much of what is taking place in services is a continuation and maturation of key trends. This is because we are at a level of sophistication with technology and innovation in service that the excitement is not in any singular next big thing. It is in the nuance of mastering the layers of change that come with ongoing evolution and transformation.

While customer experience is no less important than it has been, in 2022 employee experience will take centre stage. It simply must. The Great Resignation will force companies to reflect on everything from their company culture to the strength and quality of their leadership to the employee value proposition to how much or how little opportunity exists for career development, and much more.

Organisations will be forced to take responsibility to get more creative in how – and whom – they hire. Leaders will need to do and give more in the form of mentorship, encouragement, and recognition. The masses are realizing that the stellar customer experience they aim to deliver is impossible without engaged and satisfied employees. In 2022, service organisations must do what it takes to understand what employees want and need to be happy and they

SARAH NICASTRO
VP of Customer
Advocacy, IFS.

must work tirelessly to deliver that.

From a technology perspective, software has the potential to act as a great enabler or a massive deterrent. This is evident not least in the ability for workers to efficiently carry out their jobs, but even more so in the experience and satisfaction levels created by the software. A platform that offers an intuitive UI and consumer grade experience while also providing meaningful insights, and access to remote resources at the touch of a button will significantly improve your employees' experience.

DIGITAL IDENTITIES

In 2022, service organisations will gain more clarity around the digital continuum. Digital is not something that needs to be done, but rather something that needs to become a part of each company's identity. This means eliminating siloes, combining disjointed approaches and strategies, and moving beyond fragmented systems and tools.

Digital as a part of a company's identity means it is within the business' DNA. It is part of every conversation, every function, every role. Digital leadership is strong and digital reputation is considered.

Digital is being leveraged to streamline internal operations in a way that enables the best customer experience as well as efficiency, and it's being used externally as a part of a company's value proposition. As a company masters a foundational level of capability, they look for layers of sophistication and intelligence to layer on.

SERVICE VALUE

Customers do not want service. They want uptime, outcomes, peace of mind. They want the complexity that goes into making

> **In 2022, service organisations will gain clarity around the digital continuum**

it work to be invisible. They do not want to buy things – they want knowledge and insights and perspective that helps them be and do better.

Whether we refer to this evolution as Servitisation, the move to delivering outcomes, As-a-Service, or the subscription economy, it means that service organisations need to re-evaluate how they are doing business and how they are talking about service.

Companies need to equip themselves with the technological underpinnings that allow for guaranteed outcomes and need to be reconsidering their identity.

This evolution is not possible without first releasing all legacy thinking and habitual practices and focusing objectively on what your customers are seeking. It is also not possible without the technological sophistication that allows for impeccable asset intelligence and data collection, optimal utilisation of resources, a seamless customer experience, and the ability to derive business intelligence that feeds new value propositions.

This journey is not one that can happen overnight, but in 2022 we will see more companies take leaps and bounds of progress because the market simply demands it. ∎

LOOKING FOR LASTING CHANGES IMPACTING RETAIL

Amid so many operational challenges, ranging from staffing, supply continuity, government action, business impact, it is hard to stay focused on strategy.

At retailers around the world, Omicron is writing a fresh chapter in managing in adversity, playbook. Amid so many operational challenges—ranging from ensuring staffing and supply continuity to anticipating government action and its business impact—it's hard to stay focused on strategy, just as it was early in the pandemic.

But executive teams must again look beyond the immediate task of keeping society equipped and fed. In recent conversations with sector CEOs globally, six imperatives in particular kept emerging as strategic priorities for the year.

LASTING CHANGES TO CONSUMER BEHAVIOUR

Sure, some consumers have gone back on decisions made in lockdown, such as the purchase of overly ambitious gym equipment or a move to off-grid isolation in the deepest countryside. Yet there is no doubt that how we live, and work has changed profoundly since Covid emerged in 2020.

The exact nature of those changes is not yet fully understood, although many CEOs will have felt the impact in traffic that stubbornly refuses to return to 100% of pre-lockdown levels. In the year, retailers will need to anatomize the new behaviour patterns of their shoppers with precise segmentation and alter their marketing accordingly.

FULLY ADAPT TO THE NEW REALITIES

We have all learned ways of doing more with less during the pandemic: achieving a 20% uplift in sales without adding headcount, say, or handling the same volume of sales with

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Middle East Head of
Consumer Products and
Retail Practices, Bain &
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MARC-ANDRÉ KAMEL
Partner and Global Head
of Retail Practice, Bain &
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KEY TAKEAWAYS

- The exact nature of those changes is not yet fully understood, although many CEOs will have felt the impact.

- Retailers will need to anatomize new behaviour patterns of their shoppers with precise segmentation.

- We have all learned ways of doing more with less during the pandemic.

20% fewer employees. With many businesses and consumers likely to face rising cost pressures in the year, efficiencies from new ways of working need to be realized to their fullest extent, think cost savings in the double digits, percentage-wise.

But adaptation is not just about streamlining. It covers an array of questions executive teams need to ponder, such as How do we reset our asset base over the long term?and how can we continuously improve our omnichannel capabilities?

INNOVATE ON THREE FRONTS

In the year, innovation in all its forms will be crucial, but a few stand out. One is exploration of adjacent business models. For an apparel retailer, that might mean entering the second-hand clothing market. For a grocer, it could be dark kitchens and hot food delivery. The second form is technological innovation that improves efficiency. The third relates to innovations that promise the boldest advances in the digital shopping experience.

That potential can come wrapped in disorienting hype—as with some non-fungible tokens. But just consider all the possible uses of NFTs when today's omnichannel shopping further virtualizes into the metaverse. Digital inventory will likely have its day.

RETAIN AND RECRUIT TALENT

The flux in the retail market at the start of the year is hard to overstate. At even the most elite global retailers, vacant positions can run as high as 20% of the workforce. Meanwhile, executive teams are trying to predict and nurture the skills needed to keep up with the evolution of e-commerce. It all adds up to a great opportunity for retailers with a strong people-centric strategy.

> "
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> "

FOSTER BUY BETTER

Consumers may well need to buy less in some cases but focusing on buying better can give retailers continued commercial momentum. Another challenge: improving sustainability without creating insupportable cost increases.

SCALE-DRIVEN MANOEUVRING

The pandemic has only heightened the strategic importance of scale. That need will continue to power activist investments and other mergers and acquisitions activity. Virtual scalealliances between noncompeting retailers could be a potent way of pooling resources for tech investment, for instance.

The frenetic start to the year is unlikely to be followed by a sudden lull: Turbulence could well be one of the few constants this year. That only increases the importance of companies codifying what they have learned about managing in adversity throughout the year—so they can adapt the playbook quickly for the next unexpected twist.

But for all its operational challenges, the year will also present opportunities for those executive teams that can remain focused on the bigger picture. ◾

NICHOLAS WATSON
Co-founder and CEO, Udrive.

$ 1M FROM 1M CUSTOMERS OR TEN CUSTOMERS?

The success of businesses in a sharing economy is based on their ability to create novel services and individualised experiences at scale.

Sharing has been a common and popular method of distributing and obtaining resources in our society. While everyone is familiar with the concept of sharing, the sharing economy is a phenomenon that began with the Internet and has evolved as a natural component of digital transformation.

With practically every industry undergoing a digital transformation, organisations are rethinking their revenue models to allow for more frequent engagement with customers.

Before the digital sharing economy, businesses were the primary providers of services and products in the formal economy. Today with real-time information, people experience new roles

KEY TAKEAWAYS

- KPMG reports almost 50% of car owners today will no longer want to own a vehicle by 2025.

- ResearchAndMarkets claims four out of every ten car journeys will be via car share by 2025.

- Serving customers manually is costly and should be reserved for complex customer engagements that have high-value output.

- Technology can help streamline an experience while changing the dynamics of the business model.

as providers of services or goods in their peer networks. Businesses in the sharing economy are emerging in more sectors and, within a few years, will disrupt the entire business ecosystem through so-called creative disruption.

According to an analysis by the Wall Street Journal in 2013, Uber's value had topped $50 billion, making it worth more than 80% of the S&P 500 companies, while Airbnb was valued at

$24 billion. A related study by PwC shows that while in 2013, the sharing economy companies in the five sectors where the new business model is the most prevalent earned sales revenue of $15 billion, by 2025, this will have risen to $335 billion, so half of the revenues in these markets will go to companies with a sharing-based model.

The same concept applies to the car-sharing industry. For instance, with a car-sharing company, an illiquid asset such as a car, usually only available to one person, can now be fractionalised through digitisation by usage per minute or meter, allowing anyone with a license to drive it.

The rise of the sharing economy has enabled new forms of urban mobility. The idea of owning a car has evolved into creative leasing models, fractional ownership, and other forms of on-demand transportation.By 2026, the number of users in the car-sharing segment is expected to reach 60.7m and the global car-sharing market will reach $103 billion by 2025, with a CAGR of 17.2% during the forecast period by Valuates.

Additionally, KPMG reports almost 50% of car owners today will no longer want to own a vehicle by 2025 and a separate report by ResearchAndMarkets claims four out of every ten car journeys will be via car share.

Serving customers manually is a costly process and should be reserved for complex customer engagements that have a high-value output. In fact, several complex industries are progressively demonstrating that a strong brand that provides outstanding friction-free service may replace the perceived requirement to have a human-

to-human interaction.

Not all businesses are suitable for sharing or a collaborative business environment, and in retrospect, the definition of sharingchanges every year. As a result, the meaning of sharing may need to be reformulated constantly. For example, is a restaurant a sharing concept? Many people go to the same location, eat the same meal, and share the resources that the restaurant provides.

The success of businesses in a sharing economy is based on their ability to create novel services and individualised experiences at scale. According to a PwC report, sharing economy operators will receive 50% of revenue share in key sectors affected by the sharing economy by 2025, up from 5% in 2013.

Technology can help streamline an experience while changing the dynamics of the business model and revenue-cost streams in the process. The question is, do we generate one million dollars from one million customers or ten customers, and which approach provides the best revenue option with a streamlined customer experience? While a premium service will exist in any industry, there will always be a need for cost-effective services.

The shared mobility trend has multiple benefits for both the environment and everyday urban life and is emerging as an investment trend for the future. The need for shared mobility was driven by increasing traffic congestion in cities that caused pollution, and more importantly, change in consumer behaviour. To address these issues, car-sharing retains the potential to provide easy access and address any gaps in the current transportation system. ■

YESTERDAY'S TECHNOLOGY CAN'T MANAGE TOMORROW'S SERVICES

To help service providers implement service lifecycle automation for 5G and edge-based services, entities need an open, standards-based solution.

5G and multi-access edge computing are complementary technologies that promise to transform communications. 5G offers high-performance and low-latency transmission, while multi-access edge computing moves compute and storage resources to the network edge – closer to end-users, humans, and machines IoT – to significantly reduce latency.

45 million 5G connections are expected to be activated by 2025 across MENA, accounting for 6% of total mobile connections in the region. Multi-access edge computing provides both an IT service environment and cloud computing capabilities to help enable the real-time enterprise.

Today, service providers are deploying 5G and multi-access edge computing to provide on-demand 5G edge services. These will support new, high-quality digital experiences, from ultra-low latency services that improve gaming and virtual, augmented reality experiences, to Industry 4.0 automation that will let enterprises evolve toward efficient light-infrastructure models.

Regional service providers need to consider the following strategies in order to win the 5G race and achieve intelligent automation:

ECOSYSTEM APPROACH

To assemble the best mix of cloud, connectivity, and software resources, service providers are pursuing these market opportunities in an ecosystem approach that includes hyperscale cloud operators, a myriad of software vendors, and system integration partners.

The service providers, of course, bring the converged fixed and wireless network infrastructure, the hyperscalers provide the distributed cloud infrastructure, the software provides the service agility, and the systems integrators ensure all the systems and software work together.

Service providers must be able to dynamically assemble all of these ecosystem components – infrastructure, edge compute resources, and applications – to provide on-demand services; however, their legacy Operational Support Systems and operational processes cannot meet this requirement. Instead, open, multi-domain automation is required to realise the combined promise of 5G and multi-access edge computing.

DATA ANALYTICS AND AUTOMATION

Traditional operations environments are designed for a world of pre-defined, static services, and rely on manual interaction with legacy OSS systems to design, provision, and assure services – a process that takes weeks or even months.

And the use of proprietary systems makes it expensive and difficult to incorporate new services, vendors, and elements into the OSS framework.

AZZ-EDDINE MANSOURI
General Manager, Ciena Middle East.

- Service providers are deploying 5G and multi-access edge computing to provide on-demand 5G edge services.

- Open, multi-domain automation is required to realise the combined promise of 5G and multi-access edge computing.

- Traditional operations environments are designed for a world of pre-defined, static services, and rely on manual interaction.

- Managing the service lifecycle from planning to activation, orchestration, and assurance is a huge challenge.

The 5G world is completely opposite to this. It is all about being dynamic, so service providers need cloud-native support systems that are open and standards-based, programmable, and driven by models, catalogues, and business intent.

AUTOMATING 5G EDGE
To help service providers implement service lifecycle automation for 5G and edge-based services, entities need an open, standards-based solution that automates the three key phases of the 5G journey:

PREPARATION AND PLANNING
What cannot be seen cannot be automated. Initiate the 5G automation journey with real-time insight into existing network and service resources, informed by auto-discovery and federation with pre-existing inventory systems.

AUTOMATED OPERATIONS
Automated 5G service lifecycle management, including orchestration, assurance, and optimisation - end to end across the RAN, xHaul transport, and 5G Core in a seamless continuum.

MONETISATION WITH NETWORK SLICING
Productised end-to-end network slicing solution that automates the design, creation, monitoring and modification of customisable slices from end-to-end across the 5G RAN, xHaul transport, and 5G Core.

To sum it up, managing the service lifecycle from planning to activation, orchestration, and assurance is a huge challenge for all kinds of service providers. It is especially difficult in 5G networks because of the difficulties of conducting these processes in

> **45 mn**
> 5G connections are expected to be activated by 2025 across MENA

real-time for thousands of dynamic services across physical, virtual, and cloud-based resources. It is effectively impossible using traditional operational processes and legacy OSS systems – yesterday's technology can't manage tomorrow's services. Analytics-driven automation is required.

The ecosystem approach to 5G – which incorporates Service providers, hyperscalers, software vendors, and systems integrators – demands a comprehensive end-to-end network approach to automation. The solution is an open and standard-based path on the journey to 5G which gives them the ability to quickly build a scalable and agile multi-vendor 5G network, and efficiently roll out new on-demand slice-based services from end-to-end across multiple domains.
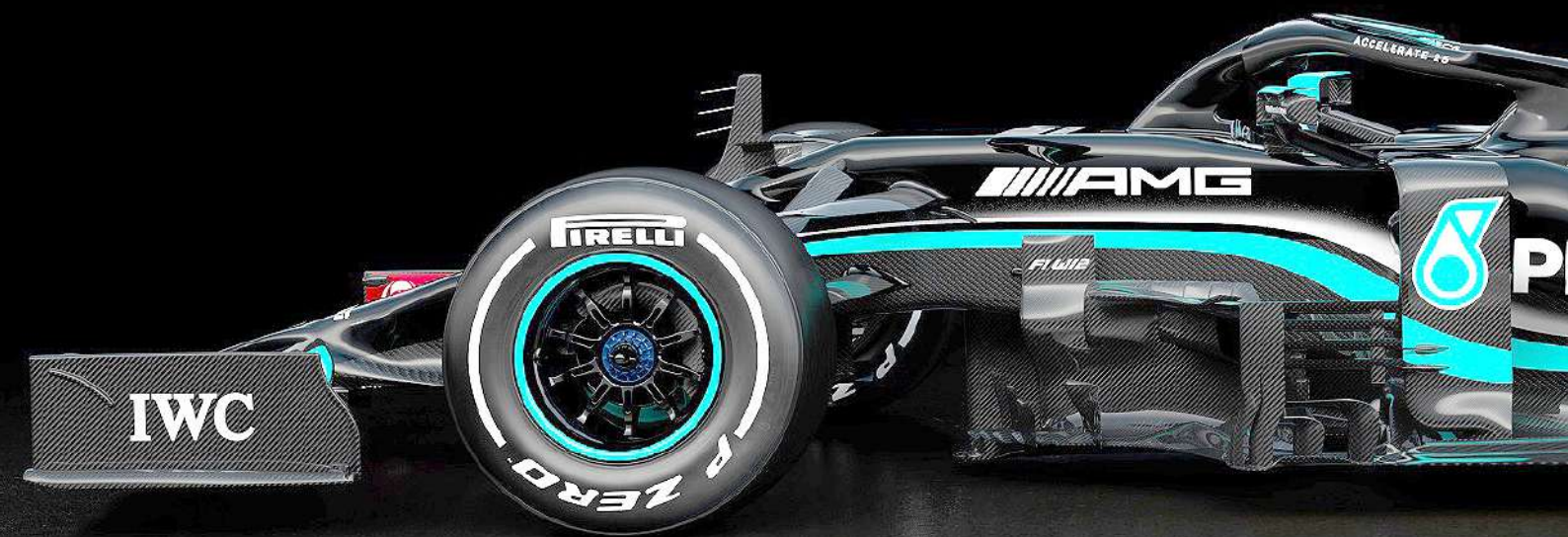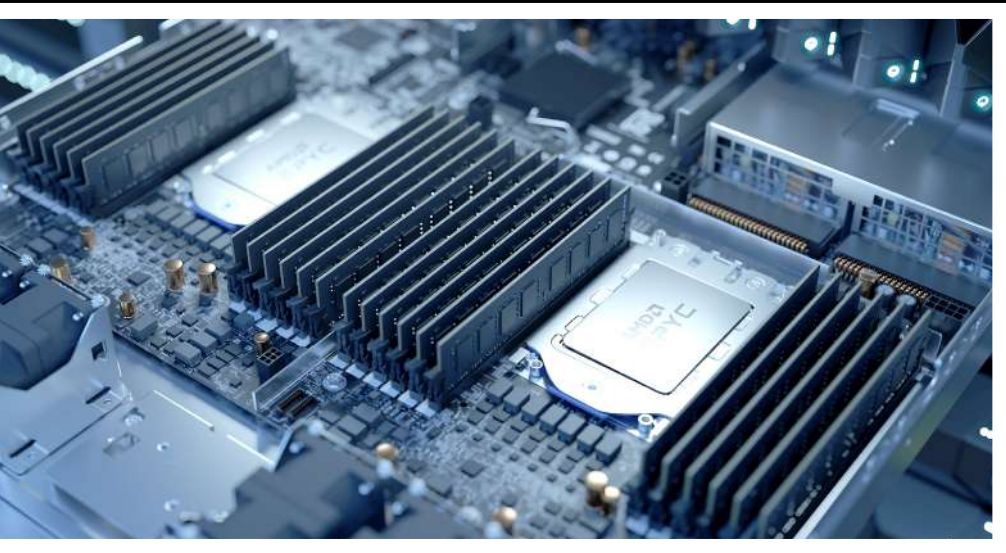
AMD DELIVERS 20% IMPROVEMENT IN COMPUTATIONAL FLUID DYNAMICS FOR F1

Mercedes-AMG Petronas Formula One Team has showcased how AMD EPYC processors have improved aerodynamics testing capacity, contributing to the Mercedes-AMG Petronas team winning its eighth Constructors' Championship in the 2021 racing season. By using AMD EPYC processors, the team was able to achieve a 20% performance improvement for computational fluid dynamics workloads that were used to model and test aerodynamic flow of their F1 car.

For F1 teams, having the most effective computational analysis of aerodynamics can mean the difference between winning and losing a race. With AMD EPYC processors, the Mercedes-AMG F1 team can iterate on vehicle design faster and more efficiently than their previous system.

By using AMD EPYC processors, the Mercedes-AMG Petronas F1 team is pushing the boundaries of what is possible with computational fluid dynamics by developing groundbreaking aerodynamics while delivering the price-performance required to meet budget regulations put in place by the Fédération Internationale de l'Automobile.
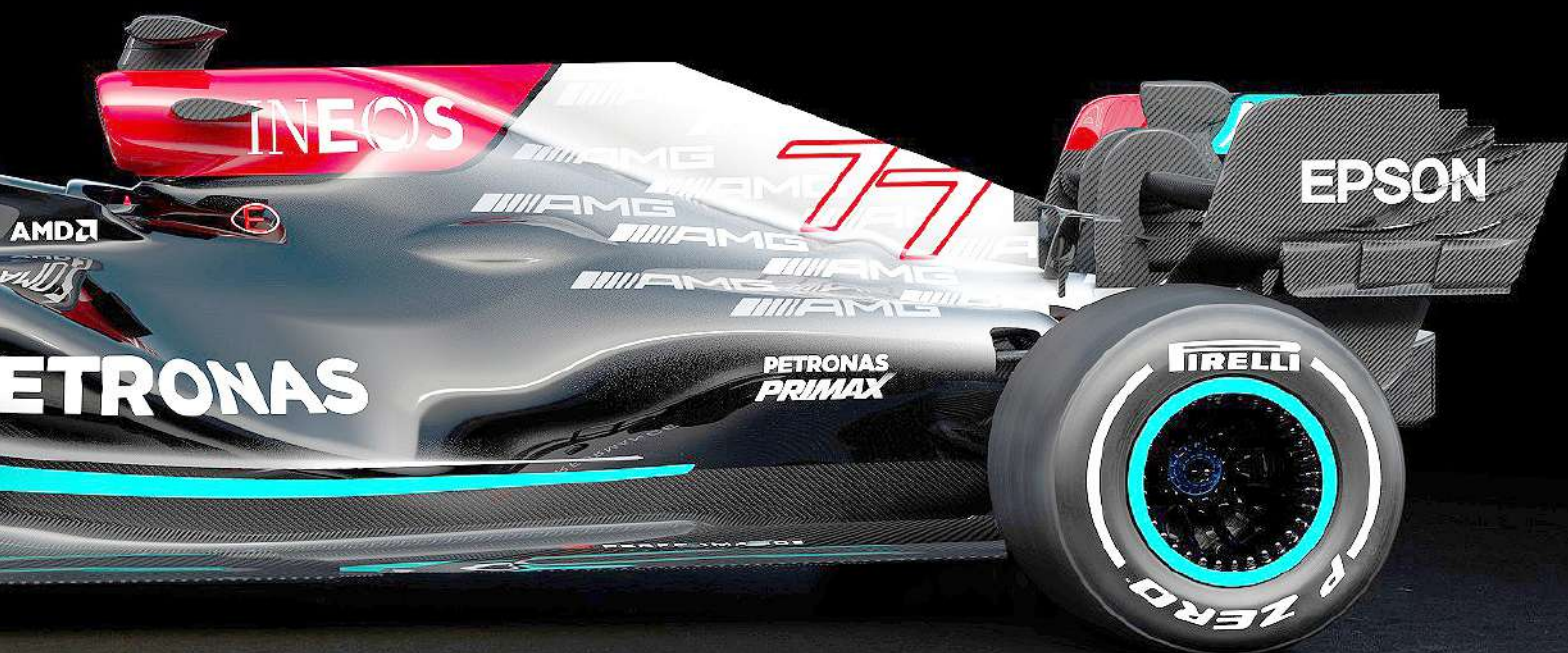
BENTLEY LOOKING FOR 100 ENGINEERS TO LAUNCH NEW ELECTRIC MODELS EACH YEAR, FROM 2025

Bentley Motors announced a recruitment drive for 100 talented engineers as the luxury marque accelerates its forward-thinking Beyond100 strategy, the boldest plan of its kind in the sector. A key responsibility will be to support delivery of the ambitious Five-in-Five plan, which commits Bentley to launching a new electric model each year, from 2025.

Whilst the positions cover multiple disciplines of engineering and research and development, approximately 50% are focused on electrical competencies as Bentley aims for full electrification of its product range within eight years.

IGOAI stages virtual summit on sustainability, marking 50 years of Bahrain and India collaboration

International Group of Artificial Intelligence in partnership with GEC Media Group and Embassy of India in Bahrain, successfully hosted a virtual summit on The Role of Artificial Intelligence in Sustainability and Renewable Energy on 28 April. The conference focused on the rise of artificial intelligence and its wide impact on numerous sectors and sustainable development. The virtual summit continued for two hours.

By now global organisations have understood the importance of tracking, measuring, and reporting scope 1, scope 2, and scope 3 emissions, and the importance of 2030 and 2050 milestones. In order to reach net zero by 2050, emissions must be halved globally by 2030.

Organisations therefore have a clear and urgent need to measure the full scope of their emissions before they can effectively manage them. While progress is being made in direct environmental impacts, only 15% to 40% of reporting companies are engaging with their suppliers on climate change, deforestation, and water security, amongst others. It is urgent that companies mobilise measurements and action down the entire supply chain to achieve the scale required to avert environmental crisis.

THE EVENT WAS JOINED BY TOP INDUSTRY LEADERS AND PARTICIPANTS INCLUDING:

- His Excellency and Ambassador, Piyush Srivastava, Ambassador of India to the Kingdom of Bahrain
- Dr Jassim Haji, President, International Group of Artificial Intelligence
- Vineet Agarwal, Partner at SG Analytics
- Dr Shahnawaz Khan, Assistant Professor at the School of ICT, Bahrain Polytechnic
- Dr Chiranjiv Roy, Senior Vice President for Data Science & Analytics at SG Analytics
- Sini Raj Pulari, Faculty of EDICT at Bahrain Polytechnic
- S Hussaini, CEO Almoayyed Computers Middle East
- Moderator, Arun Shankar, Editor GEC Media Group
- MC, Dalal Buhumeida

Speaking at the event, His Excellency and Ambassador, Piyush Srivastava, Ambassador of India to the Kingdom of Bahrain congratulated the international group of artificial intelligence for selecting such a relevant and interesting topic.

He also added, "As we all know India and Bahrain enjoyed deep rooted historic and civilisational ties and people to people connect. India is also one of the largest trading partners of Bahrain."

Dr Jassim Haji, President, International Group of Artificial Intelligence praised His Excellency and Ambassador, Piyush Srivastava, Ambassador of India to the Kingdom of Bahrain for his presence at the event and his participation. He also highlighted benefits to both countries since activity started in India in the eighties.

ACHIEVING SUSTAINABLE DEVELOPMENT GOALS THROUGH DATA AND ANALYTICS

Vineet Agarwal, Partner at SG Analytics highlighted ESG matters now more than ever and said, "Today more than 80% of the global companies are reporting their physical market and climate related risks with all the stake holders and we have also seen a massive change here over the last decade and so." He added, there is a huge impact of climate related events on global economy.

AI FOR SUSTAINABLE FUTURE

Speaking at the event, Dr Shahnawaz Khan, Assistant Professor, School of ICT at Bahrain Polytechnic said, "Sustainability is meeting the need of the present without compromising ability of future generation to meet their own needs. Nowadays, almost 140 developing countries in the world are meeting their development needs." He further stated that regarding sustainability there are three different aspects including environmental aspect, economic aspect, and social aspect.

ANALYTICS AND SUSTAINABILITY

Dr Chiranjiv Roy, Senior Vice President, Data Science & Analytics at SG Analytics remarked artificial intelligence is the end product, while analytics is what you build. He also talked about the data science lifecycle.
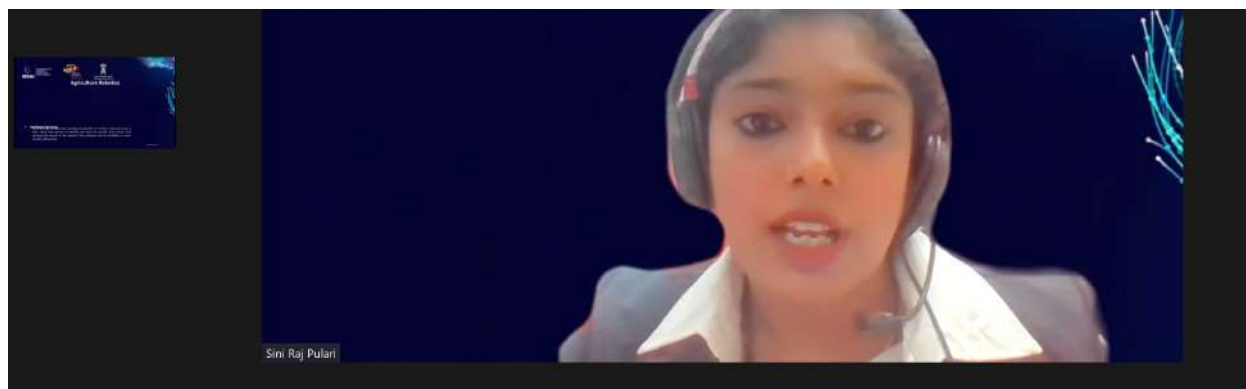
ARTIFICIAL INTELLIGENCE IN AGRICULTURE SECTOR

While addressing the webinar, Sini Raj Pulari, Faculty of EDICT at Bahrain Polytechnic said we are at beginning of a golden age of artificial intelligence, but we have still only scratched the surface of artificial intelligence. She also talked about the major issue to be addressed in agriculture sector and said, "When we talk about the lifecycle of agriculture there are different stages which comes out with problems but when we look at the traditional issues which we always face due to climatic factor, poor quality crops, these are the very common issues in agriculture sector."

QUESTION AND ANSWER SESSION

Vineet Agarwal, Dr Shahnawaz Khan, Dr Chiranjiv Roy, Sini Raj Pulari and S Hussaini, joined virtually for the question-and-answer session. The questions from the attendees included:

- What are the robotic and AI solutions suitable for small scale farming in India and GCC?
- How do I implement a cost-effective solution using AI and robotics for large scale farming in India?
- As a start up in AI, how should I select the use case and get funding?
- How can I build personalization in education?
- Please recommend how to build speed, scale and adoption of AI applications in sustainability and renewable energy
- Are technology vendors investing in building application solutions for sustainability?
- What are the negative sides of AI in sustainability and politics?

  Dalal Buhumeida ended the virtual summit with her closing speech and vote of thanks.

Business Transformation Asia organises virtual summit on AI in Healthcare

Business Transformation Asia successfully hosted a virtual summit on 'The Next Wave of Transformation in Healthcare with Artificial Intelligence' on 29th April 2022. Artificial intelligence has revolutionised the way industries work these days. Healthcare has not remained untouched by the applications of artificial intelligence.

Speakers and participants of the event included:

- Prof Dr Ashok Choudhary, Clinical Lead and Senior Consultant, Dept of Hepatology, Gastroenterology and Liver Transplant, Naryana Superspeciality Hospital, Gurugram (Haryana).
- Dr Sushil K Meher, Head IT Health, AIIMS.
- Dr Ashok Sharma, PhD Additional Professor, Department of Biochemistry, National Cancer Institute-India AIIMS.
- Malavika Shanker, President, Southeast Asia of GEC Media Group.
- Santosh Nair, Head of Innovation and Process Consulting, APAC Siemens Healthineers– Moderator.

ABILITY AND INABILITY OF ARTIFICIAL INTELLIGENCE ON TRANSFORMING HEALTHCARE

Speaking on Artificial Intelligence in Healthcare, Prof. Dr Ashok Choudhary, Clinical Lead and Senior Consultant, Dept. of Hepatology, Gastroenterology and Liver Transplant, Naryana Superspeciality Hospital said, "Artificial Intelligence in healthcare has either been used or is trending in all aspects. Artificial intelligence in healthcare is a need-based solution and it can be accurate, responsible, and objectified."

He also highlighted the drawbacks of AI in healthcare including Accountability, Ethical, Legal Issue, Fear of insecurity, need more clinical practise.

DIGITAL HEALTH TRANSFORMATION THROUGH AI: CURRENT PROSPECTS IN INDIA

Speaking on the cycle of innovation, Dr Sushil K. Meher, Head IT Health, AIIMSsaid, "Presently, the Gene and Biotechnology is playing a major role while it is coming for artificial intelligence again. It is putting an extra layer of technology which can be used for the healthcare services. In the 21st century, the information technology, and the knowledge management system for healthcare all are in place as a revolving of the technology."

He also discussed about the major challenges in healthcare sector including Complexity, Threat of Human Jobs, Cost, Workflow, Competing Priorities, Regulation, Legal, Liability, Human Touch.

CLINICAL APPLICATION OF AI IN GENOMICS - CURRENT STATE AND FUTURE DIRECTIONS

Dr Ashok Sharma, PhD Additional Professor, Department of Biochemistry, National Cancer Institute-India AIIMS started his speech with a brief description of Artificial Intelligence and said, "Artificial Intelligence is basically a simulation of the human intelligence process by machines, especially computer systems. It also refers to the multiple technologies that can be combined which helped machine learning, language processing, knowledge representation, expert systems."

He added that the Artificial Intelligence play a crucial role in genomics. It helps in simplifying genome interpretation by integrating predictive methods with the growing knowledge of genetic disease.

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Web3, blockchain, NFT, Metaverse, solution provider BEDU announces UAE launch

BEDU, Dubai's foremost pioneer in Web3 technologies and solutions, announced its UAE launch along with a pledge to empower businesses, governments, and individuals with the tools and knowledge they need to 'build the next digital frontier'.

BEDU was formed to bring expertise and investment from around the world to the UAE to accelerate the realisation of the vision for Web3, blockchain, Non-Fungible Tokens and the Metaverse.

BEDU's leadership and technical teams collectively aggregate decades of international experience working with governments, brands, and businesses. Khaled Al Huraimel is a leading Emirati tech entrepreneur, AI thought leader and a strong advocate for digitalisation, having founded several start-ups as well as serving on several boards.

Matti Zinder, Co-Founder and President of BEDU is a successful serial entrepreneur and investor having founded multiple high-companies and business groups in over 30 years of technology-driven business success. He is also the founder and Chairman of an early-stage VC fund and serves as Chairman in a number of high-tech businesses across the digital media and cyber realms. And Misha Hanin, Co-Founder and CEO of BEDU is a highly experienced technology leader with 30+ years of experience in tech-projects and enterprises. He is also one of the nearly 500 trained Microsoft Certified Masters in the world.

BEDU operates under two business verticals: BEDU Labs and BEDU World. BEDU Labs is an "NFT factory" that provides turnkey solutions for clients interested in pursuing the potential of the Web3 arena. Services include planning, creation, deployment, and promotion of Web3 and NFT projects, as well as coaching for digital creators on how to safeguard their intellectual property.

KHALED AL HURAIMEL
Co-founder and Chairman of BEDU.

BEDU operates under two business verticals: BEDU Labs and BEDU World

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Nissan opens prototype production facility for laminated all-solid-state battery cells

Nissan unveiled its prototype production facility for laminated all-solid-state battery cells, which the company aims to bring to market in 2028. This prototype facility, within the Nissan Research Centre in Kanagawa Prefecture, is aimed to further promote the development of all-solid-state batteries.

Under its long-term vision, Nissan Ambition 2030, Nissan aims to launch an EV with all-solid-state batteries developed in-house by fiscal 2028. It plans to establish a pilot production line at its Yokohama Plant in fiscal 2024, with materials, design and manufacturing processes for prototype production on the line to be studied at the prototype production facility.

Nissan believes all-solid-state batteries can be reduced to $75 per kWh in fiscal 2028 and to $65 per kWh, thereafter, placing EVs at the same cost level as gasoline-powered vehicles.

All-solid-state batteries are expected to be a game-changing technology for accelerating the popularity of electric vehicles. They have an energy density approximately twice that of conventional lithium-ion batteries, significantly shorter charging time due to superior charge, discharge performance, and lower cost thanks to the opportunity of using less expensive materials.

With these benefits, Nissan expects to use all-solid-state batteries in a wide range of vehicle segments, including pickup trucks, making its EVs more competitive.

NFT-based, play-to-earn game Ankots of Misteria launched on Huawei Cloud

The beta version of the NFT-based, play-to-earn game Ankots of Misteria has launched on Huawei Cloud, promising gaming enthusiasts in the Middle East a new, exciting and rewarding gaming experience. The launch comes as NFT gaming or play-to-earn games are becoming increasingly popular in the Middle East.

AoM explores the monster battling genre. Unique in its gameplay style, it is the only round-based strategy title in the market and follows a similar style of auto-battler gameplay as the hugely popular Web 2.0 game Teamfight Tactics. By featuring in-game characters, virtual lands and battle equipment as NFTs that are cleverly interconnected with their in-game utility, AoM offers a high ceiling of skilled gameplay and competitive playability.

AoM is the latest chain game to be launched on Huawei Cloud, the industry-leading cloud platform. Huawei's public cloud service brand delivers elastic cloud servers, cloud databases, security, software development services, and scenario-based solutions to global customers, the ideal platform for complex, graphic-intensive games targeting global audiences.

With its major development milestones achieved, AoM has set its next goal at reaching over 10 million users globally soon after the game's official launch. The publisher is hopeful of achieving this milestone thanks to the game's robust distribution strategy, meeting the Apple AppStore policies, being available for download to players globally through APKs, and having multi-platform support, ie playable on web,

> *AoM has set its next goal at reaching over* **10 million** *users globally*

iOS, Android, Windows and Mac systems.

The Polygon eco-system highly recommends this project, even participating in its private round investment through its SubDAO Polygon Studios. AoM is also in talks with Indie.GG, a subsidiary of Yield Guild Gaming in India, for investments and marketing related partnerships. Several widely popular exchanges have also shown interest in the game, taking up the title to investors and introducing the game to their user bases.

With a strong roster of over 100 game developers with rich experiences in the strategy and role-playing genre, a constant seasonal gameplay updates plan in place, a community-focused direction, and a soon-to-be developed cross-chain asset transaction support model, AoM promises continually enhanced gameplay and highly rewarding in-game earnings.

CallisonRTKL draws attention to productive living with technological infrastructure in Egypt

CallisonRTKL, a global cultural agency specialising in architecture, planning and design, has published a report forecasting the future of the built environment and the key factors that will shape the residential market developments. According to the report, the brief for the home is changing. The need now is for productive living environments with the technological infrastructure to support residents. Consequently, a new era is driving hybrid lifestyles and hybrid working cities.

In Egypt, 17 smart cities are being developed that will be totally reliant on technology. In addition to the smart cities, Egypt is working on several projects to increase the broadband coverage to remote areas in the country. This supports Egypt's Vision 2030 which emphases the importance of increasing innovation for the development of more connected buildings and cities, driving national development, economically and environmentally.

CRTKL has developed a number of projects in Egypt including the Children Cancer Centre in Cairo, the Mall of Egypt, Almaza City Centre, Cairo Festival City and its mall expansion.

According to the report, three new concepts are driving residential development.
- The Home of Things
- Residential meets hospitality meets healthcare
- The Hybridised model or a Universal Building

Indian automotive OEM, Mahindra & Mahindra releases first set of NFTs

Mahindra & Mahindra announced its entry into the NFT universe, with the release of its first tranche of tokens, becoming the first Indian automotive OEM to enter this space. NFTs are at the forefront of blockchain technology and have captured the interest of the digitally savvy and constantly connected generation. The entry of Mahindra into the NFT universe is yet another testimony of their continued focus on digital initiatives in the country.

The first NFT offerings from Mahindra will be based on the iconic Thar and will be released in collaboration with Tech Mahindra. Thar exemplifies the Mahindra promise of Explore the Impossible. Additionally, its larger-than-life imagery is suited to the futuristic, socially wired landscape of NFTs. This first-ever series comprises four NFTs that will be put up for sale via an auction starting the 29th of March 2022, on Tech Mahindra's NFT marketplace christened 'Mahindra Gallery'.

All proceeds from the auction will go towards Project Nanhi Kali, to support the education of underprivileged girls in India. Access to education helps the girl child in fulfilling her dreams and lays the foundation for an equal society.

CP GURNANI
MD and CEO, Tech Mahindra.

VEEJAY NAKRA
Chief Executive Officer, Automotive Division, Mahindra & Mahindra

JIMMY ZHAO
CEO of Chain X Game.

Revoland first blockchain-based game built on Huawei Cloud with support from the platform

Gaming enthusiasts in the Middle East can look forward to a brand-new gaming experience this month with the launch of the much-anticipated blockchain-based game Revoland on the Huawei Cloud. The game integrates all the advantages of traditional mobile games, with a high degree of completion and entertainment to create an authentic "social gaming experience" and profit model.

Revoland is a blockchain-based multiplayer online battle arena game where players can gather friends to form a team, fight with others, and earn token rewards for their individual skills. Revoland's gameplay combines players' individual skills and teamwork to challenge themselves in various game modes, with attractive ranking rewards that are updated monthly.

Revoland is the first chain game built on Huawei Cloud with full support from the industry-leading cloud platform. Huawei's public cloud service brand delivers elastic cloud servers, cloud databases, cloud security, software development services, and scenario-based solutions to global customers. Revoland built on the Huawei Cloud promises a differentiated gaming experience to gamers worldwide.

Revoland demonstrates the rapid progress of blockchain-based games, a segment referred to as GameFi. The game goes beyond traditional blockchain card games, adding a variety of changes

Revoland is the first chain game built on Huawei Cloud with full support from the industry-leading cloud platform

to the gameplay that allows crypto players to reap the benefits of 'play to earn'.

With Revoland, publisher Chain X Game targets not only investors and blockchain enthusiasts but also hardcore gamers. Chain X Game's first project, Puppy Planet, was a huge success, completing multiple milestones in just three months. This success and momentum allowed the developer to bring brand-new and intense "play to earn" gaming experience to Revoland.

MOBA games are currently a significant segment of eSports and have brought new excitement to the sector in recent years. Insiders expect GameFi, which combines high-quality game production capabilities with a deep understanding of blockchain, to drive the next era of gaming.

Technology Innovation Institute launches NOOR, world's largest Arabic NLP model

(Left to Right) Dr EbtesamAlmazrouei, Director, AI Cross-Center Unit, TII and ProfMérouaneDebbah, Chief Researcher, Digital Science Research Center and Artificial Intelligence Cross-Center Unit, TII.

Technology Innovation Institute, a global research centre and applied research pillar of Abu Dhabi's Advanced Technology Research Council, announced the launch of NOOR, the world's largest Arabic natural language processing model to date.

TII's team of advanced researchers and Artificial Intelligence specialists at its AI Cross-Centre Unit, joined forces on this initiative with LightOn, a technology company that unlocks extreme-scale machine intelligence for businesses, to revolutionise Arabic NLP models. The NOOR model carries out varied, cross-domain tasks simply from natural language instructions.

To build NOOR, researchers at TII designed an end-to-end pipeline for the collection of high-quality data, including crawling, filtering, and curation at scale. TII's specialists also built optimised services for extreme-scale distributed training and serving – to deliver applications with efficient inference and model specialisation.

NOOR's training dataset is the world's largest high-quality cross-domain Arabic dataset, combining web data with books, poetry, news articles, and technical information to significantly widen the applicability of the model.

Participation in metaverse popular in Middle East, GCC countries finds Oliver Wyman

The Gulf Cooperation Council is undergoing a region-wide 'digital paradigm shift', according to insights released by global management consulting firm Oliver Wyman. The new research looks at the eight digital trends defining the GCC's future which are expected to shape the region in 2022 and beyond.

The trends identified by Oliver Wyman are:

- Investment-powered digital transformation: Ambition backed by hard cash
- Citizen-centric digital services: Private sector innovations inspire e-government's approach
- The power of 'cloud-first': multi-cloud affords several key advantages
- Achieving cyber resilience: A growing problem inspires sector growth
- Future-proof data governance strategies: Early investments reap rewards
- Expanded AI adoption and innovation: Emerging technologies are coming to the fore
- A new dawn for digital government currencies: Early indicators point to rising interest and expanding prevalence
- Entering the Metaverse: The next big technology platform emerges

JAD HADDAD
Partner and Head of Digital at Oliver Wyman IMEA.
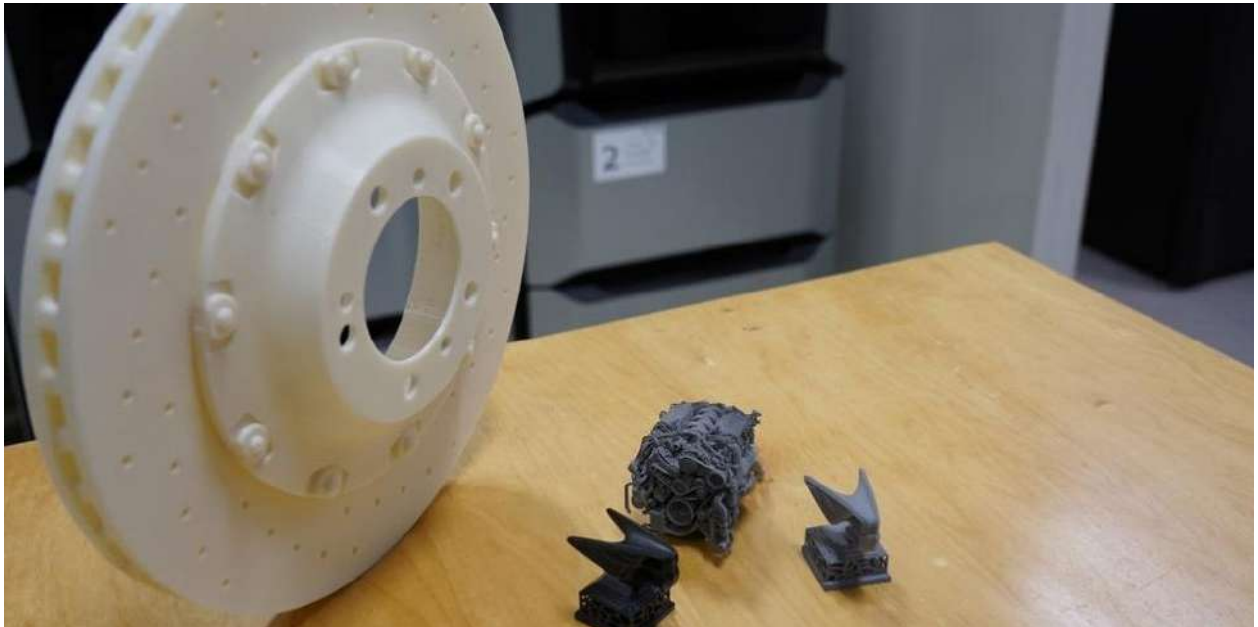
Bentley Motors investing £3 Million to double 3D printing manufacturing capacity in England

Bentley Motors has shared details of the impact of a £3 Million investment to double its Additive Manufacturing capacity at the company's headquarters in Crewe, England, where all Bentley models are built. A state-of-the-art AM facility has been applied to a wide range of uses, producing more than 15,000 components in 2021 alone. This expansion will also enable Bentley to utilise advanced technology to create 3D printed vehicle components and even greater personalisation in customer cars.

The AM systems convert 3D CAD models into physical components and is recognised as one of the fastest developing technologies in the world. Bentley's innovative research and development team has already identified a wide variety of items to print, including on-the-job assisted tools for manufacturing colleagues, such as lightweight sanding blocks in Bentley's iconic wood shop.

Additionally, historically accurate tooling equipment needed to make parts for the Bentley Blower Continuation model was created, and even face shields provided to the healthcare sector due to the Covid-19 pandemic.

AM has been employed to create physical components for several prototype Bentleys, including full-scale powertrain models and aerodynamic wind tunnel models. The advanced techniques have also been used to produce parts for the record-breaking Bentley models that were driven in the demanding Pikes Peak Challenge in America.

The latest methods help speed up product

The AM systems convert 3D CAD models into physical components and is recognised as one of the fastest developing technologies

development, allowing Bentley to produce a profusion of parts without the need to outsource. It is part of the company's ground-breaking Beyond100 strategy, targeting sustainable mobility leadership by reinventing every aspect of the business.

The state-of-the-art AM equipment installed enables a 50% cost saving on parts and by operating around the clock, the facility is capable of producing thousands of components in over 25 different material options. Bentley colleagues from across the company are now being offered training in AM to understand how they can benefit from using the state-of-the-art process in their work.

ORACLE

No Planet B: How Can Businesses and Technology Help Save the World?

People in the UAE are frustrated with the lack of progress society has made toward environmental, social, and governance (ESG) initiatives.

86% in UAE frustrated and fed up with lack of progress made by businesses in sustainability

People around the world are demanding more progress on sustainability and social efforts and are looking to businesses to step up, according to a new study by Oracle and Pamela Rucker, CIO Advisor and Instructor for Harvard Professional Development. The study of more than 11,000 consumers and business leaders across 15 countries including the UAE found that people are fed up with the lack of progress society is making towards sustainability and social initiatives, want businesses to turn talk into action, and believe technology can help businesses succeed where people have failed.

The events of the past two years have put a spotlight on sustainability and social efforts, with people worldwide fed up with the lack of progress and calling for businesses to step up:

- 99% of people in the UAE believe sustainability and social factors are more important than ever and 94% said the events over the past two years have caused them to change their actions.
- 97% believe society has not made enough progress. 47% attribute the lack of progress to people being too busy with other priorities, 43% believe it is the result of more emphasis on short-term profits over long-term benefits, and 42% respondents in the UAE believe people are too lazy or selfish to help save the planet.
- 51% in the UAE believe businesses can make more meaningful change on sustainability and

The events of the past two years have put a spotlight on sustainability and social efforts, with people worldwide fed up with the lack of progress

social factors than individuals or governments alone.
- 86% are frustrated and fed up with the lack of progress by businesses to-date.
- 94% believe it's not enough for businesses to say they're prioritizing ESG – they need to see action and proof.
- 96% UAE respondents believe businesses would make more progress towards sustainability and social goals with the help of AI, and 74% even believe bots will succeed where humans have failed.

Businesses need to prioritize sustainability and social issues and rethink how they use technology to make an impact – or risk facing major consequences.

General Motors Middle East's carbon reduction driven by solar panels at Distribution Centre

Driving towards a global vision of Zero Crashes, Zero Emissions and Zero Congestion, General Motors Africa and Middle East – GM AMEO is doubling down on its carbon footprint reduction across its Middle East Operations, Supply Chain and Distribution network.

Through a series of sustainability initiatives across its Middle East facilities, GM has confirmed it is currently saving 330 metric tons of carbon dioxide – CO2 per year, rising to a saving of approximately 2,000 metric tons of CO2 annually by 2024 – totalling a 95% operational carbon footprint reduction annually.

By 2035, GM operations in the UAE will have reduced carbon emissions by approximately 24,000 metric tons, equivalent to planting approximately 876,000 trees, from a 2022 baseline.

GM Middle East's carbon footprint reduction will be spearheaded by the installation of solar panels at GM's Middle East Distribution Centre, the highest energy generating facility for GM in the UAE.

The solar power project is scheduled to be complete in 2023 with 13,000 square meters of the latest-technology solar panels achieving 100% solar power for this facility.

AMANA completes Al-Futtaim Auto Park including installation of solar photovoltaic system

Regional leader in design-build construction, AMANA has completed building the 14,000-sq m Al-Futtaim Auto Park in Al Ain, including the installation of a solar photovoltaic system. The solar PV system is expected to generate 800 MWh of energy, which is equivalent to 5,571 trees grown over 10 years. AMANA's strong and diversified portfolio of capabilities, beyond standard industrial contracting, enabled a seamless and successful installation, even as construction of the building was ongoing.

AMANA built the state-of-the-art Auto Park in Al Ain – a complete showroom and workshop for servicing motor vehicles, powered by renewable energy. Its 487.9 kWp solar PV plan is expected to generate 800 MWh of energy, whilst offsetting 334 metric tons of carbon dioxide during its first year of operation.

The project is the first automotive facility to operate all brands under one roof, as well as being the only multistorey automotive facility in Al Ain which can hold almost 70 new and used cars on both floors. Its end-to-end offering includes commercial vehicles, in addition to passenger cars, new and used, for sale, leasing, and renting.

With almost 500,000 square meters of industrial buildings and associated rooftops constructed yearly, AMANA Contracting, and Steel Buildings is a pioneer in building rooftop solar power plants. AMANA was one of the first contractors approved by DEWA – Dubai Electricity and Water Authority to provide installation and maintenance services for solar energy systems in early 2015. This classification coupled with AMANA personnel certified by DEWA as "solar PV expert" makes AMANA the go-to contractor of choice for designing, installing and maintaining roof-mounted solar power plants.

JIHAD BSAIBES
CEO, AMANA Contracting Group.

98%
say sustainability and social factors are more important than ever

89%
said that events over the past two years caused them to change their actions

85%
stated frustration and felt fed up with the lack of progress by businesses to date

92%
want to see more accountability from businesses

What is holding businesses back from reaching their ESG goals?

94% Saudi businesses facing major obstacles when implementing ESG initiatives

People around the world are demanding more progress on sustainability and social efforts and are looking to businesses to step up, according to a new study by Oracle and Pamela Rucker, CIO Advisor and Instructor for Harvard Professional Development. The study of more than 11,000 consumers and business leaders across 15 countries including Saudi Arabia found that people are fed up with the lack of progress society is making towards sustainability and social initiatives, want businesses to turn talk into action, and believe technology can help businesses succeed where people have failed.

The events of the past two years have put a spotlight on sustainability and social efforts, with people worldwide fed up with the lack of progress and calling for businesses to step up:

- 98% of people in Saudi Arabia believe sustainability and social factors are more important than ever and 89% said the events over the past two years have caused them to change their actions.

- 97% believe society has not made enough progress. 40% attribute the lack of progress to people being too busy with other priorities, 43% believe it is the result of more emphasis on short-term profits over long-term benefits, and 34% respondents in Saudi Arabia believe people are too lazy or selfish to help save the planet.

- 47% in Saudi Arabia believe businesses can make more meaningful change on sustainability and social factors than individuals or governments alone.

- 85% are frustrated and fed up with the lack of progress by businesses to-date, and 92% believe it's not enough for businesses to say they're prioritizing ESG – they need to see action and proof.

- 95% Saudi respondents believe businesses would make more progress towards sustainability and social goals with the help of AI, and 79% even believe bots will succeed where humans have failed.

Landmark Group secures sustainability linked loan funded by Standard Chartered

Landmark Group, the UAE-based conglomerate with more than 2,200 outlets and 42,000 employees in Middle East, India and South East Asia, announced signing of first sustainability-linked loan amid a pledge to transition towards sustainable finance for the majority of its operations. This marks the first time a private sector company in the UAE signs a bilateral sustainability-linked loan.

Landmark Group also signed up to Standard Chartered's Sustainable Account proposition, integrating sustainability into to its banking operations. Deposits in Sustainable Accounts are referenced against sustainable projects funded by Standard Chartered across its dynamic Market footprint.

These projects, aligned to the Bank's Green and Sustainable Product Framework, address some of the world's biggest long-term threats, including climate change and financial exclusion.

In a meeting between Landmark Group's Chairwoman and CEO Renuka Jagtiani and Standard Chartered Bank, Group CEO Bill Winters, the company made a commitment to convert all its treasury products with the bank to sustainable wherever possible. In a first for the region, Landmark Group has committed that the benefits from any sustainable financing will be deployed towards further sustainable initiatives.

According to guidelines set by the Loan Market Association, sustainability-linked loans incentivise the achievement of ambitious, predetermined performance objectives. The borrower's sustainability performance is measured using predefined sustainability performance targets, as measured by predefined key performance indicators.

Jaguar Land Rover to reduce emissions by 46%, vehicle emissions by 54% by 2030

These targets represent Jaguar Land Rover's commitment to 2030, followed by a second-decade ambition for net zero emissions across supply chain, product, and operations by 2039, as part of its Reimagine strategy. To achieve this, the company will decarbonise across design and materials, manufacturing operations, supply chain, electrification, battery strategy, circular economy processes, and up to end-of-life treatment.

To support its mission, Jaguar Land Rover has introduced the new role of Sustainability Director, appointing Rossella Cardone to drive its transformation and support François Dossa, Executive Director, Strategy and Sustainability.

Jaguar Land Rover first announced its commitment to the SBTi as part of its support for COP26, the climate change summit held in November 2021.

ACWA Power operates Sakaka, a 300MW solar facility, and is also working on constructing Sudair, a 1500 MW solar PV project

Developer of hydrogen plants, ACWA Power signs agreement with Saudi Power Procurement

ACWA Power, a leading developer, investor and operator of power generation, desalinated water and green hydrogen plants, and the Saudi Power Procurement Company, the principal buyer, signed a power purchase agreement to develop the 700 MW Ar Rass solar photovoltaic independent power plant in Saudi Arabia's Al Qassim province. The agreement was signed in the presence of His Royal Highness Prince Abdulaziz bin Salman bin Abdulaziz Al Saud, Minister of Energy of Saudi Arabia.

Under the terms of the agreement, ACWA Power will sell energy produced by the project to SPPC for a period of 25 years. Valued at $450 Million, Ar Rass is the largest PV project that has been tendered as part of Saudi Arabia's National Renewable Energy Programme to date, for which ACWA Power has been earmarked to deliver 70% of the total 58.7 GW target.

ACWA Power will hold a 40.1% stake in the facility, along with 20% by the Water and Electricity Holding Company, a wholly owned PIF Portfolio Company, and 39.9% will be owned by the State Power Investment Corporation from China. When fully functional, the project will produce energy to power around 132,000 homes in central Saudi Arabia.

In the Kingdom of Saudi Arabia, ACWA Power currently operates Sakaka, a 300MW solar facility, and is also working on constructing Sudair, a 1500 MW independent solar PV project with Saudi Aramco and the Water and Electricity Holding Company, a wholly owned PIF Portfolio Company, which is considered the largest of its kind in the Kingdom of Saudi Arabia and one of the largest solar energy projects in the world.

BCG, SAP to provide Net Zero solutions using BCG CO2 AI, SAP Product Footprint Management

Boston Consulting Group announces a partnership with SAP, a market leader in enterprise application software. The joint transformation offering will allow companies to identify the business value in sustainability, setting the right climate ambitions and powering an actionable sustainability roadmap.

The SAP and BCG partnership will help companies tackle the generational challenge of climate change and respond to increasing investor pressure and ever stricter regulations. Research from analyst firm IDC shows that sustainability has become a top business priority.

To help companies accelerate on their net-zero emissions journey with an up to 40% emissions reduction potential, BCG and SAP will enable companies to integrate leading-edge carbon-tracking measurement

CHRISTOPH SCHWEIZER
CEO, BCG.

and intelligence into their core business operations and strategic decision making. Combining two market-leading solutions in BCG's CO2 AI and the SAP Product Footprint Management solution, the partnership targets Scopes 1, 2, and 3 via BCG's CO2 AI as well as an integration into core SAP software through SAP Product Footprint Management.

Al Futtaim's Trading Enterprises presents Volvo C40 Recharge, first pure electric design

Al-Futtaim's Trading Enterprises, the official distributor of Volvo Cars in the UAE, presents the C40 Recharge, the automotive brand's latest manifestation of its commitment to a zero-emission future.

The C40 Recharge has all the benefits of an SUV but with a lower and sleeker design. It is based on the CMA vehicle platform and the first Volvo model in history designed as pure electric only. Following the introduction of the XC40 Recharge and now the C40 Recharge, Volvo Cars will roll out several additional electric models in coming years.

Already by 2025, it aims for 50% of its global sales volume to consist of fully electric cars, with the rest hybrids. By 2030, it plans for every car it sells to be pure electric.

The rear of the C40 Recharge features a striking rear-end design to go with the lower roof line, while the new front design introduces a new face for electric Volvos and includes head lights with state-of-the-art pixel-technology.

Inside, the C40 Recharge provides customers with the high seating position that most Volvo drivers prefer, while it is available with a range of colour and deco options unique to the model. It is also the first Volvo model to be completely leather-free.

The propulsion consists of twin electric motors, one on the front and one on the rear axle, powered by a 78kWh battery that can be fast charged to 80% in about 40 minutes. It offers an anticipated range of around 420 km, which is expected to improve over time via over-the-air software updates.

The C40 Recharge comes with one of the best infotainment systems on the market, jointly developed with Google and based on the Android operating system. It provides consumers with Google apps and services built-in, such as Google Maps, Google Assistant and the Google Play Store. Unlimited data enables superior connectivity, and the C40 Recharge will receive consistent software updates over the air.

Range according to the realistic WLTP and EPA driving cycles under controlled conditions for a new vehicle. Real-world range may vary. Figures are based on preliminary target. Final vehicle certification pending.

Pulse installing 100 EV charging stations in Abu Dhabi with community Mawaqif parking lots

Expanding upon the national sustainability drive, Pulse, a UAE-based smart-mobility solution provider, is deploying a spectrum of fast electric vehicle chargers across Abu Dhabi that will take 15 – 75 minutes to charge an average range of 400 km. In the past, EV users didn't have access to a fast-charging network in Abu Dhabi.

Residents of Abu Dhabi can find the Pulse EV charging stations at their community Mawaqif parking lots located near parks, cafes, restaurants and key places of interest.

The inauguration was attended by HE Saeed Mohamed AlSuwaidi, Managing Director of Abu Dhabi Distribution Company; HE Mr Abdullah AlMarzouqi, director-general of the Integrated Transport Centre; Abdulaziz AlShamsi, Customer Service Executive Director of Abudhabi Distribution Company, and Ramiz Alaileh, director of sustainability and energy efficiency at the Department of Energy Abu Dhabi.

Pulse aims to deploy 100 EV charging points in the run-up to the conference and has, to date, helped power more than 50,000 clean kilometres, amounting to a reduction of 12 tonnes of carbon emissions. Its existing EV charging station has witnessed a total energy consumption of 8.3 MW.

Pulse uses a portfolio of the latest EV charging hardware to deliver a smooth EV experience that can charge up to three vehicles simultaneously

Pulse uses a portfolio of the latest EV charging hardware to deliver a smooth EV experience that can charge up to three vehicles simultaneously. The company has charging stations at strategic locations across Abu Dhabi and is the UAE's first and only car-agnostic electrical charging network. Users can download the application 'Pulse Charge' from the App Store and Google Play to identify charging station locations as well as to reserve, charge and pay for the services digitally.

The agreement, which covers all UAE public schools, is the largest myON governmental implementation in history

UAE Ministry of Education to use myON to improve English standards in Emirati schools

The UAE Ministry of Education, Knowledge Hub, a leading provider of learning solutions in the UAE and throughout the Middle East, and Renaissance, the creator of the myON digital reading platform, have signed an agreement to launch a project which aims to improve English reading standards for the 380,000 students in primary and secondary Emirati schools.

The agreement was signed by Dr Sameera Alhosani, Curriculum Director for Humanities and Languages at the UAE Ministry of Education, Surekha Kembhavi, CEO of Knowledge Hub, and Joan Mill, Managing Director of Renaissance International at the Ministry of Education in Khalifa City, Abu Dhabi.
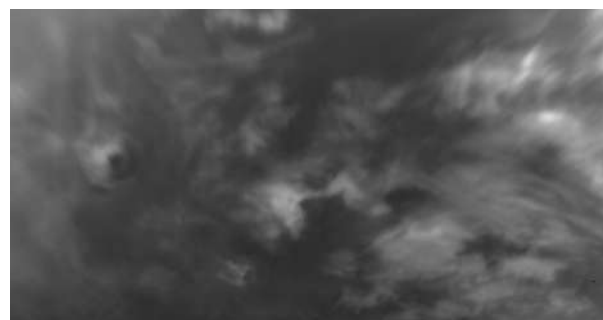
For the UAE Ministry of Education, this project drives the continued improvement of English literacy standards in the country. This is in line with the UAE Centennial 2071 and the Ministry's strategic vision of an innovative education. The agreement, which covers all UAE public schools, is the largest myON governmental implementation in history and comes after two successful pilot schemes run in the country.

Emirates Mars Mission releases 57GB from Hope Probe collected September-November 2021

The Emirates Mars Mission "Hope Probe" captured new observations about Mars atmosphere in its third batch of scientific data collected by the probe's instruments during its mission in Mars' orbit, between 1 September and 30 November 2021. Coverage and quick look images from all the Hope Probe's instruments can be accessed on the Emirates Mars Mission's website.

The data from the third batch included more than 57 gigabytes of information, images, and data about the Red Planet's atmosphere, which were captured by the probe's scientific instruments, making the total data released by the Hope Probe equivalent to 827.7 gigabytes.

Within the data, a special high cadence imagery observation took place using the Emirates Exploration Imager camera. The observation was designed to attempt to capture motion and evolution in the atmosphere, where it observed high-density clouds on 22 November 2021.

During the period in which the third batch of data was collected, the Mars Solar Conjunction phase took place, which paused communication, science observations and data collection. This was due to the blocked line-of-sight communication between Earth and missions around Mars, with Earth and Mars being on the opposite sides of the Sun.

During this phase, which happens almost every two years, the Sun emits hot, ionised gas, which interfered with radio signals when communicating with the Hope Probe. As soon as the phase was over, Mars' orbital motion around the Sun allowed the Hope Probe to regain its communication.

Bahrain Airport Services goes real time with SITA Airport Management, Mobile Resource Manager

Bahrain Airport Services has signed a contract with SITA to deploy SITA Airport Management, enabling BAS to manage its ground handler operations as cost effectively as possible and ensure the services are delivered in a timely manner, avoiding flight delays.

A key component of the technology upgrade is SITA Mobile Resource Manager which calculates optimal staffing levels, creates optimized rosters, and gives a real time view of task allocations and activities at Bahrain International Airport.

Through the new system, agents will be offered mobile access to enable data entry at the time and place of their operations. The system can also be used by all BAS staff working on shift rosters.

SITA Mobile Resource Manager provides an innovative way to connect mobile wireless devices in the hands of employees with the back-office systems and people needed to make things happen. Real-time updates improve and accelerate decision-making as events unfold, enabling more effective planning and allocation of resources. Automatic task logging increases the accuracy of billable services, boosting revenue generation and dramatically reducing time spent on charging disputes.

The approach ensures the involvement of ground operations staff by using digital personal devices to replace paper-based records of advocacy services provided to airline customers. This technology will also help BAS to assess all its customers' ground handling service level agreements and deliver a speedier service to the invoicing cycle.

Bake N More Café in Dubai now accepting six crypto payments through Mixin Network

The city has a new one-of-its-kind factory with its retail cafe, Bake N More, where customers can pay for and enjoy their fresh baked goods with cryptocurrency without incurring any transaction fee. Bake N More will be serving freshly prepared all-day breakfast, brewed coffee, breads, baked goods, salads, and unique sandwiches. Bake N More's factory is equipped with an advanced, cutting-edge semi- automated assembly-line production that is operational round the clock and possesses the capacity to produce high volumes of products for the café's partners.

The contemporary café's open-source payment platform is handled by Mixin Network which

MOHAMMAD AL HAMMADI
Owner of Bake N More.

allows customers to pay for their purchases with Bitcoin, Ethereum, Tether and 3 other major cryptocurrencies. All existing payment methods like cash, cards and online payments are accepted.

Mixin Network is adecentralised Web3 platform that brings speed and scalability to blockchain and allows blockchains to gain trillions of TPS, sub-second final confirmation, zero transaction fee, enhanced privacy, and unlimited extensibility.

UAE's ISA migrates mission-critical aviation systems to Oracle Cloud Infrastructure

Oracle announced that Information Systems Associates, a UAE-based provider of advanced technology solutions for global travel and aviation, has migrated its mission-critical systems to Oracle Cloud Infrastructure to build a resilient business operation that can successfully manage fluctuating travel demands resulting from the pandemic.

ISA gains access to OCI's unmatched elasticity and scalability to manage a highly seasonal travel reservation workload, drive cost effectiveness and boost operational agility. During the pandemic, as travel demand plummeted, ISA was able to reduce operational costs on Infrastructure with OCI, without compromising on performance and security. Following the success of this cloud adoption, ISA has initiated a sustained upgrade of its IT infrastructure with OCI's cloud native technologies and platforms.

NICK REDSHAW
Senior Vice President Cloud, Middle East and Africa, Oracle.

Established in 2005 and headquartered in Sharjah, UAE, ISA is a leading information technology company specialized in the aviation industry. It provides customer assets with rapid deployment capability and low set-up costs, allowing companies in the airline, airport, travel, and tourism sectors to yield faster Return on Investment (ROI) while freeing up resources for further or alternate investment.

ISA plays an active role in the global aviation industry, which was severely affected by the pandemic. The need to migrate its core travel reservation application to a highly elastic cloud solution was vital to maintaining profitability and operational excellence.

Al-Futtaim Automotive launches Trade Point B2B dealer portal for spare parts

In line with its customer-centric approach and commitment to keeping the UAE driving towards a more sustainable future of mobility, Al-Futtaim Automotive has announced an all-new innovative digital platform that allows B2B dealers to purchase genuine spare parts, body parts, tyres and battery and lubricant products.

The Trade Point portal provides a one-stop process that optimises the ordering and purchase process while enabling ease, convenience and transparency as well as a single access point for all

Al-Futtaim brands including Toyota, Lexus, Volvo, Honda, Dodge, RAM and Jeep.

Encouraged by the UAE's goals of transformation to a smart city strategy and championing digitalisation, Al-Futtaim Automotive is also invested in offering a seamless digital journey to all our partners.

Al-Futtaim Trade Point will make it easier for dealers to transact with Al-Futtaim Automotive in a safe environment. With the platform integrated alongside all Al-Futtaim internal infrastructure systems, an order placed on Trade Point is picked up within seconds allowing deliveries directly to B2B partners up to four times a day.

Additional features of the platform include simplified payment methods, individual business sales analysis insights and live delivery tracking as well as detailed product information and accompanying images to ensure easy distinguishing.

Angela is open sourcing an end-to-end artificial intelligence model that automatically creates high-quality biographical articles about important real-world public figures
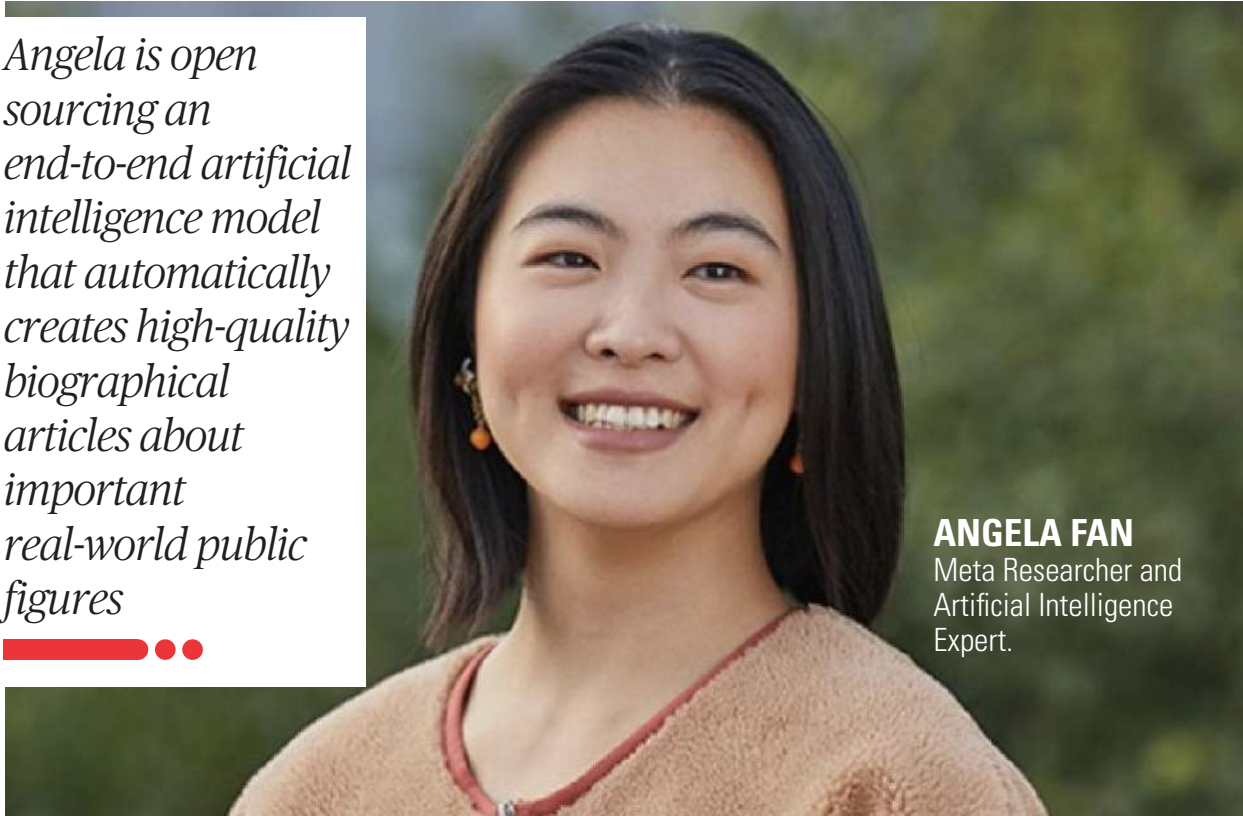
ANGELA FAN
Meta Researcher and Artificial Intelligence Expert.

Solving the problem of representation on Wikipedia using artificial intelligence

At Meta, Angela is working on solving the problem of representation on Wikipedia using artificial intelligence. Wikipedia is often the first stop for many people looking for information about historical figures and changemakers. But not everyone is equally represented on Wikipedia. Only about 20% of biographies on the English site are about women and we imagine that percentage is even smaller for women from intersectional groups, such as women from Africa or Asia and women who work in science.

As a part of her PhD project as a computer science student at the Université de Lorraine, CNRS, in France, Angela worked with her advisor Claire Gardent to develop a new way to address this imbalance using artificial intelligence. Together, they built an artificial intelligence system that can research and write first drafts of Wikipedia-style biographical entries. There is more work to do, but we hope this new system will one day help Wikipedia editors create many thousands of accurate, compelling biography entries for important people who are currently not on the site.

Angela is open sourcing an end-to-end artificial intelligence model that automatically creates high-quality biographical articles about important real-world public figures. The model searches websites for relevant information and drafts a Wikipedia-style entry about that person, complete with citations.

Along with the model, they're releasing a novel data set that was created to evaluate model performance on 1,527 biographies of women from marginalised groups. This data set can be used to train models, evaluate performance, and push the model forward. Angela believes these artificial intelligence-generated entries can be used as a starting point for people writing Wikipedia content and fact-checkers to publish more biographies of underrepresented groups on the site.

The model first retrieves relevant information from the internet to introduce the subject. Next, the generation module creates the text, while the third step, the citation module, builds the bibliography linking back to the sources that were used. The process then repeats, with each section predicting the next, covering all the elements that make up a robust Wikipedia biography, including the subject's early life, education and career.

Angela's model addresses just one piece of a multifaceted problem. Some sources have a bias that must be considered. For example, when women are represented, their biographies are more likely to include extra details about their personal lives.
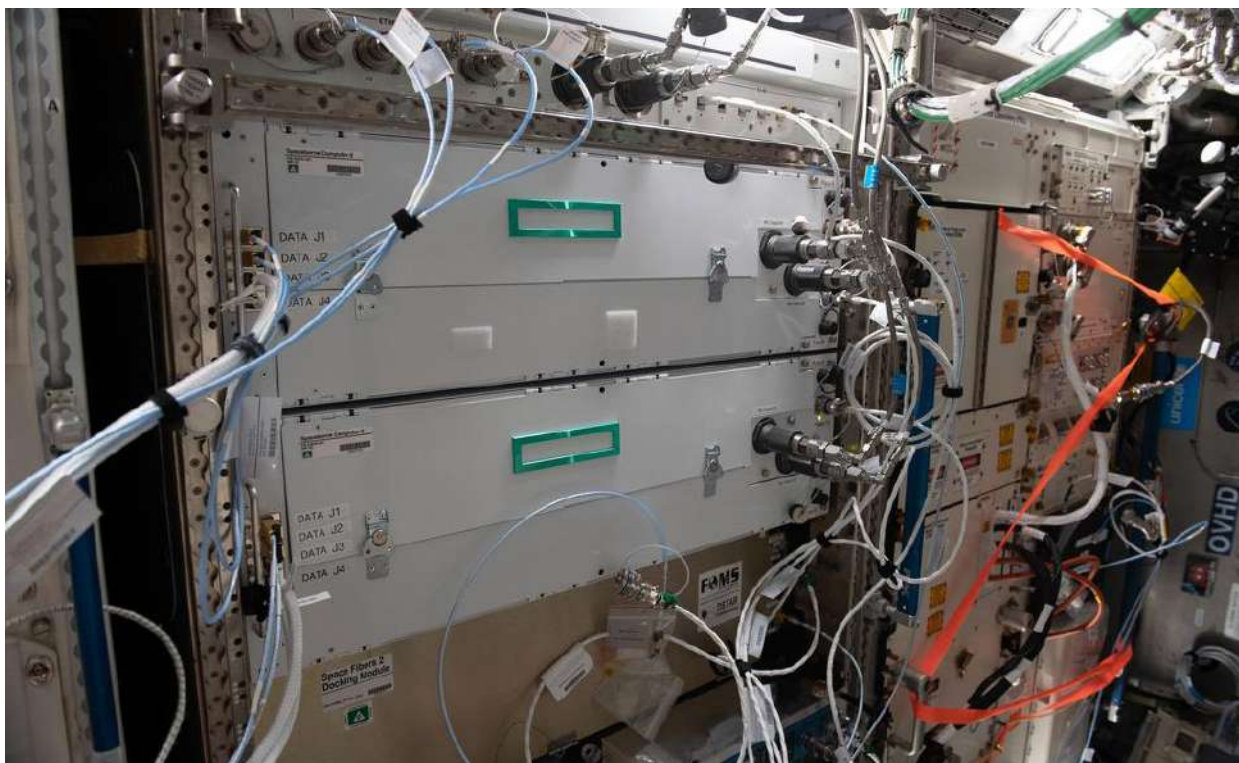
HPE Spaceborne Computer-2 uses Edge processing on board International Space Station

Hewlett Packard Enterprise announced that the HPE Spaceborne Computer-2, SBC-2, the first in-space commercial edge computing and artificial intelligence-enabled system to run on the International Space Station, has successfully completed 24 research experiments, accelerating time-to-insight from months and days to minutes.

The experiments involved real-time data processing and testing of new applications to prove reliability in space as part of an effort to increase autonomy for astronauts. These experiments spanned uses cases supporting healthcare, image processing, natural disaster recovery, 3D printing, 5G, and solutions enabled by artificial intelligence.

HPE launched Spaceborne Computer-2, in collaboration with the ISS National Laboratory, to space in February 2021 and was installed on the ISS in May 2021. The solution is comprised of HPE's edge computing solutions, the HPE Edgeline Converged EL4000 Edge system, which provides a rugged and compact system designed to perform in harsher edge environments, such as space, and the HPE ProLiant DL360 server, a trusted, industry-standard server, for additional high-performing capabilities to target a range of workloads, including edge, HPC, artificial intelligence, etc.

The edge computing capabilities delivered through

> *Researchers onboard can process data in six minutes to gather meaningful insights, compress it to*
> # 92 KB
> *and send it to Earth in just two seconds*

SBC-2 also have the potential to enable astronauts and space explorers to send data to Earth, whether to be further analysed or used in another way, at a radically compressed size and faster speed. Previously, 1.8 GB of raw DNA sequence data took an average time of 12.2 hours just to download to Earth for initial processing. With SBC-2, researchers onboard the space station can process that same data in six minutes to gather meaningful insights, compress it to 92 KB and send it to Earth in just two seconds, representing a 20,000X speed-up.

GREGG OSTROWSKI
Executive CTO,
Cisco AppDynamics.

FULL-STACK OBSERVABILITY

WHY IT PERFORMANCE IS
IMPACTING DX

Observability of the entire IT stack is imperative
to improve digital experience.

BY ARUN SHANKAR

As regional businesses navigate a sea of economic and commercial challenges on the road to post-COVID recovery, technologists know they cannot afford any slip-ups when it comes to delivering exceptional digital experiences, both for customers and employees. Being able to monitor and optimise IT performance at all times has always been important, now it is mission-critical to the business.

"The pandemic forced a rapid acceleration of digital transformation programs and cloud computing initiatives. This left many technologists struggling to get unified visibility across their IT infrastructure and unable to prioritise actions and investment based on what really matters most to end users," explains Gregg Ostrowski, Executive CTO, Cisco AppDynamics.

"As a result, IT Ops teams are constantly firefighting, having to rely on multiple, siloed monitoring tools to manage an increasingly sprawling and complex IT estate."

According to Ostrowski, this siloed model prevents technologists from properly identifying the root cause of any problem. In order to overcome this visibility issue, they are urgently looking to build on their current application monitoring tools and techniques to get a unified view on availability and performance up and down the IT stack for compute, storage, network and public internet, from the customer-facing application all the way into the back end.

"This is why full-stack observability has now become a major priority for businesses all over the world," comments Ostrowski. "Full-stack observability enables IT operations, development, and networking teams to break down the silos and quickly and easily identify anomalies, understand root causes through dependency analysis and resolve issues before they impact customers and employees."

And when IT teams achieve this level of visibility, they can start to be more strategic in the decisions they make and the value they can add to their organisation. In a Cisco AppDynamics report, Agents of Transformation 2021, 99% of UAE technologists reported that it was important to be able to directly link technical performance to business outcomes.

"Full-stack observability allows IT teams to work from a single source of truth for all availability and performance data. And when performance data is connected to real world business metrics, technologists can assess issues based on their potential impact to the bottom line and prioritise their actions accordingly," Ostrowski comments.

JOURNEY TO FULL-STACK OBSERVABILITY

A recent report from Cisco AppDynamics,The Journey to Observability, reveals that 94% of UAE technologists are excited about the potential of full-stack observability and the business benefits it can bring, and 92% believe it could be transformational for their enterprise. Moreover,

WHAT IS FULL-STACK OBSERVABILITY

- Gartner calls the full-stack observability space as application performance monitoring. Full-stack observability is being able to align all of the technologies in the IT estate of an enterprise.

- Full-stack observability is facilitated by interoperable tools from Cisco AppDynamics.

- The way things have worked historically, each of the teams has been responsible for managing a technology silo.

- Whenever there is an IT failure, the teams create a war room scenario, and may say more often than not - their domain is not the culprit.

- Full-stack observability is bringing all the teams together.

CHALLENGES AROUND FULL-STACK OBSERVABILITY

- Inside the IT estate, the number of observability tool sets required to manage performance can range from 50 to 150.

- Looking at observability tool sets, the big challenge is that they have way too many.

- Another problem is observability tool setsare not able to work together, and you have an issue with interconnectivity.

- Technology leaders do not want to buy point solutions any longer and want to buy observability tools that are integrated together.

- Observability tool sets that do not interoperate are putting pressure on the IT staff to build their own integrations.

- Another challenge is skill sets required to successfully leverage full-stack observability.

- When enterprises start migrating to the cloud, it changes their world and changes their perspective of things.

- Managing cloud microservices and cloud hosting infrastructure requires different skill sets.
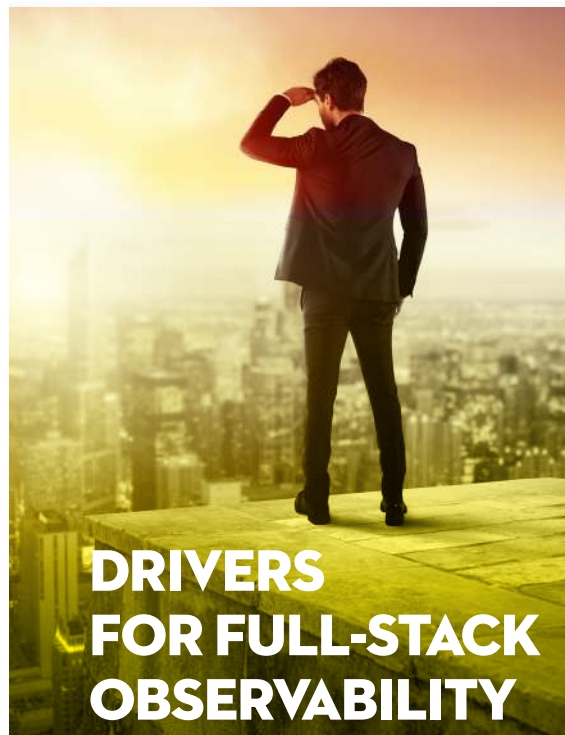
DRIVERS FOR FULL-STACK OBSERVABILITY

- A single legacy application that was built ten years ago, may be split up into a 100 different microservices, spread across a cloud platform.

- Things get more complicated when multiple legacy applications have been sprawled and they are sharing services and entity dependencies.

- Kubernetes in the cloud complicates things still further scaling from 5,000 containers to 150,000 containers in a short period of time.

- Demand for full-stack observability is being driven by cloud native application start-ups and migration of legacy enterprise applications to cloud.

- Along with application sprawl is associated data sprawl and enterprises need towhere their data is.

- Once in the cloud, businesses need to transform their mindset.

- A classic test is the transformation of business context linked to its presence in the cloud.

The six stages of the journey to observability

1	2	3	4	5	6
Prioritizing Application Experience	Visualizing the IT Estate	Connecting IT Performance with Digital Experience	Validating Business Impact	Prioritizing What Matters	Full-Stack Observability with Business Context

The pandemic created a massive shift to digital transformation. It drove adoption of cloud services and adoption of speech transformation. It also created a sprawl of technology and a hybrid environment running across different platforms. The next step for enterprises is to progress stagewise into observability of this complexity. You cannot drive business outcomes and business decisions without a clear understanding of the full stack of applications that are now sprawled out.

the study shows that 98% of UAE enterprises have already started their transition to full-stack observability.

But as Gregg Ostrowki warns, this transition is a complex, multi-stage journey that takes time and requires a holistic strategy that encompasses technical, cultural and structural change.

"The choice of technology and implementation partners become critical here," explains Ostrowski. "Technology partners have a vital role to play in easing the pressure on technologists during this most challenging period and providing them with the support and information they need to build a business case and execute against a strategic implementation programme."

Although the vast majority of organisations are still at the very earliest stages of their transition, those that did start it, are already reporting a very positive impact, both within the IT department and across the wider organisation, as seen in the AppDynamics report.

"94% of IT teams in the UAE that have started implementing observability technology say they have achieved some progress in getting visibility across their whole IT stack over the last 12 months. Technologists are seeing return on investment straight away. This will be hugely important as they look to build momentum and deploy solutions across their IT environment." says Ostrowski.

Amongst these benefits, technologists specifically said that they were achieving:
- Reduced IT operational costs due to the possibility to quickly isolate and tackle performance issues anywhere in the IT stack, 55%

BENEFITS OF FULL-STACK OBSERVABILITY

- Full stack observability helps to isolate issues and ensure that business objectives are not impacted in a negative way.

- Full-stack observability has been built on the principles of visibility, insights and action.

- Even though IT teams may be using a specific observability tool that is very good at its domain, the big challenge is being able to bring together the business context.

- Amongst all the competitive products in the Gartner's quadrant, the big differentiator is broader business context.

- Full-stack observability solutions from Cisco AppDynamics are built at the core to work together, and also work independently.

- Better ability to prioritise IT innovation or activity based on where the biggest business impacts will be, 52%
- Improved IT productivity and less time spent firefighting, 47%

As Ostrowski reflected, over the past year, talk has finally turned to action and organisations across all sectors have made remarkable progress in building out their monitoring capabilities. They now find themselves with a unique opportunity to have a game-changing impact on their organisations. And, critically, they know exactly what they have to do to make it happen.

"When you get to speak to customers, you see that this is only the start! Technologists, and business leaders, have had a taste of what full-stack observability can deliver, both now and in the future, and they are hungry to build on this momentum in 2022 and beyond," says Ostrowski. ■

Organizational benefits of improved visibility across the IT stack

50%
Improved IT productivity / less time spent 'fire-fighting'

46%
Reduced IT operational costs due to ability to quickly isolate and tackle performance issues anywhere in the IT stack

45%
Better able to prioritize IT innovation or activity based on where the biggest business impacts will be

43%
Ability to deploy IT team to more strategic activity

43%
Improved collaboration / better relations across the business

41%
The ability to identify the root cause of any issue quickly and effectively

37%
Reduces complexity and enables us to cut through high volumes of data

30%
Fewer or shorter outages or periods of digital services disruption

What benefits have you seen in your organization by improving visibility across your whole IT stack during 2021? Base: 1024 with significant / moderate progress

Biggest challenges in moving towards full-stack observability

39%
Implementation challenges

37%
Integration issues and concerns

34%
Concerns about increasing complexity as the organization scales

32%
Being able to link technology performance with business outcomes

31%
Lack of skills within the business to deliver observability

28%
Finding suitable partners / vendors

27%
Difficulty proving ROI or building a business case

24%
Too much time spent on reactive 'fire-fighting'

What do you think will be the biggest challenges in moving towards full-stack observability in 2022?

BENEFITS AND CHALLENGES OF FULL-STACK OBSERVABILITY

EARLY GAINS

Many organisations are already seeing positive results from their efforts, with 86% of technologists reporting greater visibility across their IT stack over the last 12 months.

Those that have made progress in the last 12 months report a wide range of benefits, including improved productivity within the IT department, reduced operational costs and ability to deploy IT teams on more strategic work.

With greater visibility into IT availability and performance, technologists are now starting to be able to

identify anomalies and understand the root causes of performance issues more easily. This means they are removing themselves from the constant cycle of firefighting which has characterised most IT departments over the last two years.

Operational costs are falling because availability and performance issues are being addressed earlier and more quickly. Technologists are getting more time to focus on innovation and driving competitive advantage for their organisations.

93% of technologists report that the wider business has been supportive of their efforts to implement full-stack observability, in terms of providing the necessary budget and resources.

Momentum is building in the transition to full-stack observability, and 83% of technologists report some level of confidence that their organisation will reach its observability goals in the next 12 months.

87% of technologists feel excited about the benefits that this technology can bring to their organisation from both an IT and business performance perspective. And 85% believe that the shift to full-stack observability will be transformational for their business.

There is an understanding that the shift to observability requires a holistic strategy which encompasses new ways of working, with greater collaboration between teams and a willingness to trust in a single source of truth for all availability and performance data.

CHALLENGES AHEAD

Looking ahead, 93% of technologists recognise that there is more work to be done to deploy full-stack observability within their organisation. 70% are concerned that their organisation is now behind industry peers in implementing observability solutions.

Technologists believe that by linking technology performance with business outcomes and demonstrating return on investment from their full-stack observability programs, they can make strides towards achieving their goals in 2022.

The implications for businesses that fail to build on their current monitoring solutions over the next 12 months are likely to be severe.

95% of technologists point to at least one negative organisational consequence of missing their full-stack observability goals in 2022. These include reduced productivity within the IT department, an inability to innovate and deliver digital transformation, and spiralling complexity as new applications and IT infrastructure are bolted on to the existing technology stack.

80% of technologists accept that organisations that fail to make significant strides in their journey towards full-stack observability in 2022 will face competitive disadvantage versus their peers.

75% of technologists regard skills as a critical factor in achieving their full-stack observability goals in 2022. 57% point to a need to define new practices and 55% believe that it's vital to identify the right technology vendor.

Technologists are evidently aware that monitoring performance in the cloud requires specific skill sets, particularly due to the shift to OpenTelemetry.

Many technologists are relying on multiple, disconnected tools to monitor IT availability and performance across the IT stack. In most cases, these existing solutions are performing an invaluable job, enabling technologists to identify issues and take appropriate action within a specific domain. But the issue is often a lack of connection and interoperability between these tools which makes it very difficult to understand dependencies across, as well as up and down, the IT stack.

Elsewhere, some organisations have advanced to a more unified monitoring strategy, but they still have little visibility into the impact of availability and performance issues, and they are unable to link these issues to business KPIs in real-time.

Technologists understand that deployment of full-stack observability is a multi-stage journey that will evolve as IT complexity continues to increase within their organisation.

Excerpted from the report, The Journey to Observability by AppDynamics
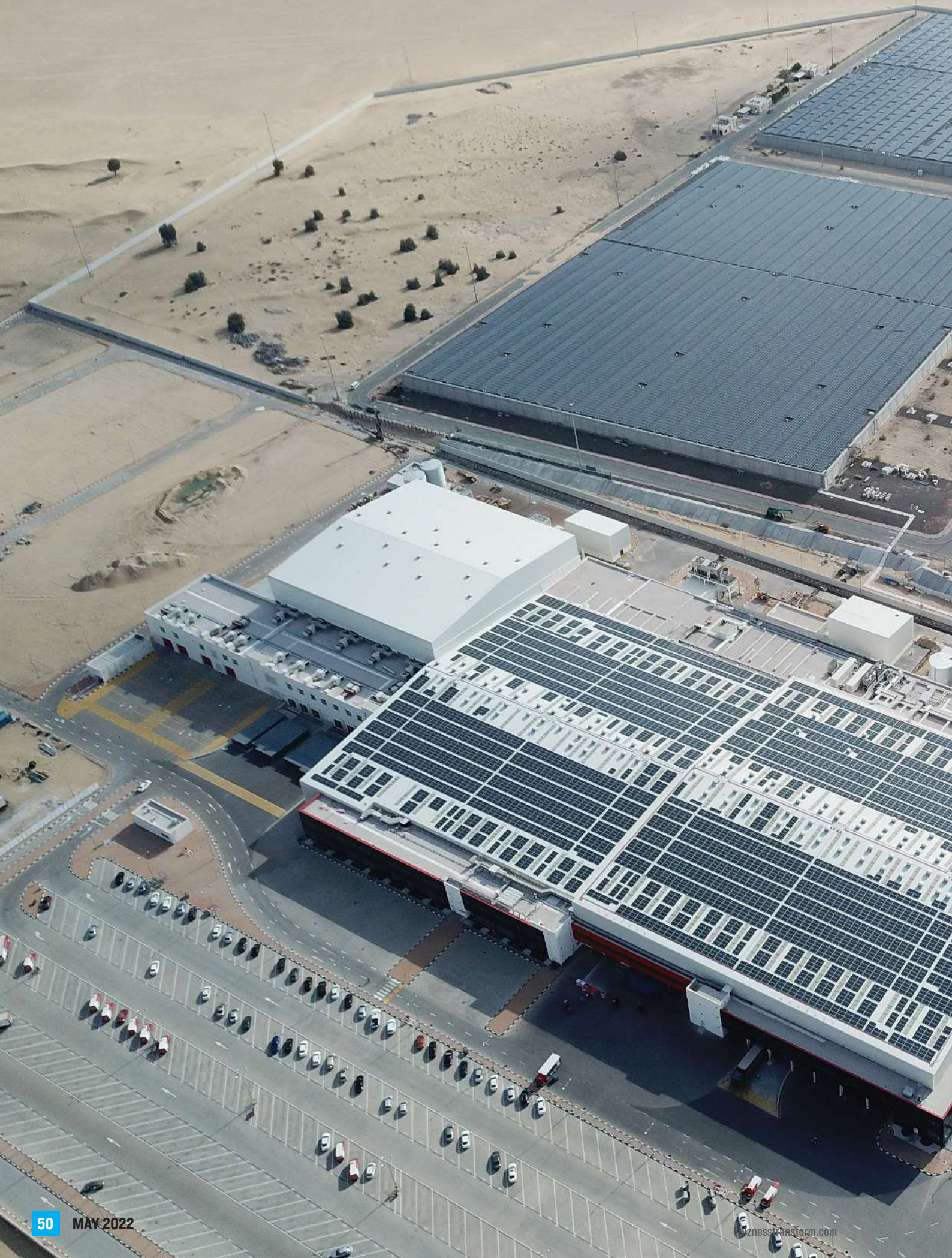
BLENDING DIGITAL TRANSFORMATION, SUSTAINABILITY, MARKETING

Mai Dubai has been building a state-of-the-art plant, strengthening corporate governance, recruiting best talent, and providing predictable services.

Amidst stiff market competition, Mai Dubai recognises the importance of building a distinct brand that delivers value. Mai Dubai efforts have been geared towards this end and have made it one of the leading entities in the bottled water industry. The company's vision is to produce the highest quality drinking water that is balanced with a blend of minerals whilst still being low in sodium. This places Mai Dubai in standing with consumers who associate the term water with life.

Mai Dubai's redbottle is also iconic so is Mai Dubai greenalkaline, both of which help to differentiate Mai Dubai brand from market competitors. Combining these with all Mai Dubai programmes, it is now synonymous with excellence, quality, sustainability, digital innovation and consumer experience.

Leading a rapidly growing organisation is all about priorities and execution. Imagine being at sea whilst building your boat to more than twice its size.That is effectively what the Mai Dubai team has done over the last few years.

Mai Dubai has been building a state-of-the-art plant, strengthening good corporate governance, recruiting the best talents, building the Mai Dubai brand and providing Mai Dubai consumers and partners with predictable services. Mai Dubaiis looking for next best alternative, and trains and

ALEXANDER VAN'T RIET,
CEOMai Dubai.

> " Mai Dubai runs a **100%** solar-powered smart factory at Al Qudra, including the state-of-the-art Super Combi technology "

ACQUISITION OR TRANSFORMATION FOR INNOVATION?

There is space for both transformation and acquisition depending on your company strategy and vision. Acquisitions are a quick way to add to your top line and sometimes bottom line. But mergers or takeovers do take an extraordinary amount of effort and energy from the company. In Mai Dubai's case, it has grown organically and has been outperforming the market since inception. Growing that quick necessitates continuous reinvention of ourselves as an organisation.

ALEXANDER VAN 'T RIET, CEO Mai Dubai.

KEY TAKEAWAYS

- Mai Dubai's red bottle is iconic so is Mai Dubai's green alkaline.

- Leading a rapidly growing organisation is all about priorities and execution.

- Imagine being at sea whilst building your boat to more than twice its size.

- Digital transformation is essential for Mai Dubai's business of delivering high-quality bottled water products.

- Operations in Mai Dubai's facility are automated with practically no human intervention.

provides staff with a nurturing workplace.

Digital transformation is essential for Mai Dubai's business of delivering high-quality bottled water products to the markets. In light of this, operations in Mai Dubai's facility are automated with practically no human intervention.

From the arrival of raw materials into the Mai Dubai warehouse to the loading of the final product onto the trucks for dispatch, the processes are automated through cranes and conveyors. Additionally, Mai Dubai runs a 100% solar-powered smart factory at Al Qudra, including the state-of-the-art Super Combitechnology.

Super Combican produce a maximum output of 86,000 bottles per hour, about 23 bottles a second. Modern industrial technology enables the company to lead the way in raising the competitiveness of the industry.

Anything that can become digital will become digital. One cannot ignore this fact. Clients want to order digital, pay digital and get digital receipts. In manufacturing plants, machine efficiencies are tracked and analysed with advanced software. Even the basic mechanical equipment is digitally enhanced to allow for preventive and predictive maintenance.

For the delivery fleet, truck movements and drivers' behaviour are tracked to ensure safe deliveries. Mai Dubai operations could not be done efficiently without digital innovations.

As sustainability is vital to Mai Dubai success, Mai Dubai has taken initiatives to reduce the environmental impact. The endeavours have been challenging but required in building a sustainable future for all. Over the years, Mai Dubai has been integrating sustainability into its business processes to reduce Mai Dubai carbon footprint.

As a result, Mai Dubai has accomplished a net-zero energy consumption for the past two consecutive years. Mai Dubai is confident that it can achieve more, as it expands its active role in the sustainability goals of Dubai and UAE. ■

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ON FLICKR

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GOVERNMENTS FACE NONTECHNICAL CHALLENGES IN TRANSFORMATION

Siloed strategy and decision making, risk-averse culture and insufficient budgets are the biggest challenges to scaling in digital transformation.

Government CIOs trying to scale digital solutions face a range of obstacles, many of the biggest of which are not technical. Taking direct action on these issues, which can range from breaking down organisational silos to mitigating digital skills gaps and a lack of resources, is critical to digital transformation in government.

If these challenges are left unaddressed, digital government programs run the risk of losing sustained funding and, of course, the ability for organisations to leverage the promised benefits of digital solutions.

Gartner research shows that the majority of governments have yet to scale digital solutions across their organisations. It IS important to understand the biggest obstacles.

CHALLENGE #1 ORGANISATIONAL SILOS

Fifty-one percent of respondents identified siloed strategies and decision making as a high-priority challenge. The subject of organisational silos is a constant concern, as it impacts every aspect of a successful digital transformation, from strategy to funding to implementation. Such silos exist across governments, departments and business areas, and each of them requires a specific intervention.

Action steps
- Clarify roles and dependencies strategies to establish ownership of the digital strategy's development and accountability for its success.
- Establish decision-making principles for prioritising, funding and delivering cross-silo digital initiatives.

CHALLENGE #2 RISK-AVERSE CULTURE

Cultures that resist change are particularly common among frontline and service delivery workforces, which are often risk-averse and see no benefit in making changes to what they perceive as tried-and-true practices.

In this environment, a CIO driving a technology-led transformation faces a particularly acute challenge. To succeed, align your digital transformation programs with business outcomes and make organisational change the core element of such programs.

Action steps
- Work with business leaders across your organisation to assess the cultural impediments and catalysts for digital transformation.
- Roll out a digital leadership professional development programme across the government and within your IT organisation.

CHALLENGE #3 INSUFFICIENT FUNDING

Often, insufficient budgets are symptomatic of siloed strategies and decision making, but they can also result from the perception

DEAN LACHECA
Senior Director Analyst,
Gartner.

KEY TAKEAWAYS

- Align digital transformation programs with business outcomes and make change the core element of such programmes.

- The subject of organisational silos is a concern, as it impacts every aspect of a successful digital transformation

- Direct action to tackle hurdles will include governance frameworks, culture and consensus building, digital upskilling.

- Cultures that resist change are common among frontline and service delivery workforces

of technology expenditure as an operational rather than a strategic investment.

To combat this perception, clearly demonstrate the correlation between your investment in digital technology and the business outcomes it delivers.

Action steps
- Be agile and flexible in order to identify and leverage sporadic funding opportunities, aligning or reprioritising your digital investments with the business-outcome-driven criteria of available funding.
- Articulate your vision for a digitally transformed future that reflects local political prioritiesand is backed by an implementation plan capable of delivering timely results to business leaders.

CHALLENGE #4 DIGITAL SKILLS GAPS

An insufficient depth or breadth of digital skills across the organisation is the fourth most common digital transformation challenge for government CIOs.

Core specialist competencies in areas such as enterprise architecture, cybersecurity, cloud, analytics and digital experience design are vital to successful digital transformation programs. At the same time, it is important to increase the degree of change readiness by developing digital dexterity across the entire organisation.

Action steps
- Offer experiences outside employees' functional silos. Identify experiences that help them understand the multifaceted nature of digital business and build expertise in business areas that are critical to the organisation's digital business plans.

- Create experience-based career paths, not position-based, to provide employees with multiple career path options and cross-functional experiences.

CHALLENGE #5 LACK OF IT-BUSINESS RESOURCES

Twenty-eight percent of respondents cited IT talent shortage as a major challenge, inhibiting adoption among major technology domains such as platform services, security, digital workplace and IT automation. The lack of timely access to IT, business and subject matter experts is often a direct outcome of disconnected priorities, siloed decision making and cultural challenges.

While teaching employees how to use self-service digital, low-code technologies is useful, it takes a lot more to prepare them for complex digital business environments. Building the digital dexterity of IT resources and closing digital skills gaps across the organisation can have a positive impact on resourcing.

However, given the postpandemic acceleration in digital investments across all industries, CIOs will need to make a concerted effort to ensure adequate resources are deployed to the right initiatives in a timely way.

Action steps
- Press for an executive-sponsored digital dexterity programme that invests in communication and education at every level of the organisation to build digital dexterity, and ensure the organisation has the right capabilities and culture to support, not impede the digital programme. ■

MODERNISATION OF BANKING APPLICATIONS ON MAINFRAMES

This is about legacy applications running on them, which are characterised by monolithic architectures, proprietary standards and protocols.

Applications running on mainframes are finding it harder and harder to compete in the digital economy. Cloud-native fintechs and neo banks are taking market share, powered by the faster innovation cycles and lower costs that cloud provides. Mainframe makers have seen what is comingand are refocusing on cloud platforms. But this is a misleading narrative.

Application modernisation is not necessarily an issue of mainframes versus cloud. Many banks still value mainframes for their reliabilityand intend to keep using them. Rather, this is about the legacy applications running on them, which are characterised by monolithic architectures, proprietary standards and protocols. As well as older programming languages that are not helping to attract the next generation of talent.

In other words, modernising applications does not need to mean migrating from

ARMIN M WARDA
FSI EMEA Chief
Technologist, Red Hat.

> When applications are running entirely on a mainframe, there is just one underlying infrastructure to worry about

mainframes. So how does a bank decide the best approach for them?

AMBIGUITY IS OKAY

It can be tempting to analyse this question in binary terms. At one end, the radicalists, who only see the cost and dwindling talent pool associated with their mainframes and want to rip them out as soon as possible. On the other end, the conservatives, who are not ready to

potentially compromise the track record for high security, availability and transaction throughput of their mainframes, especially for core applications.

A more credible characterisation of big banks and financial institutions is of organisations looking for technological efficiencies and wanting to compete for the best talentbut are wary of the risks of moving too far, too fast. They also wantto run down the full value of their investments in current systems and skills rather than writing them off.

That presents far more ambiguity; and the bigger the business, the more ambiguity there is.

What makes sense for one organisation will not be right for another. Big banks and financial businesses will want to define their own modernisation plans and schedules; and for those to flex to changing situations and unpredictability. In other words, they want technology that caters for ambiguity, rather than punishes it.

MODERNISING AN APPLICATION

Broadly, there are five ways for an organisation to modernise an application running on a mainframe. These can include maintaining the mainframeor migrating from it fully or partially to either a hybrid or full cloud deployment.

#1 Replacement

Retire the application, and start from scratch with a new one, requiring implementation, customisation and adoption. Though transformational at an organisational level, this is not strictly modernisation as you are killing the application. That said, there will usually need to be a period of co-existence while data is migrated to the new application and until integrations, customisations and adoption are completed.

#2 Emulation, rehost

Move the application to a less expensive deployment platform, with little or no impact on the application's performance, typically as a temporary measure before retiring it. Again, this is not truly modernisation.

#3 Translation

Rewrite the application code, either automatically

KEY TAKEAWAYS

- Application modernisation is not necessarily an issue of mainframes versus cloud.

- Many banks still value mainframes for their reliability and intend to keep using them.

- Older programming languages are not helping to attract next generation of talent.

- What makes sense for one organisation will not be right for another.

- Big banks and financial businesses will want to define their own modernisation plans.

- Banks want technology that caters for ambiguity, rather than punishes it.

fast but with the risk of inaccuracies or manually more accurate, but slower. This option helps remove legacy programming languages that come with expensive compilers and runtime environments and for which it is difficult to find skilled staff.

Instead, applications can be translated to modern languages that use common open-source compilers and runtime environments, and for which skills are in more abundance. For greater future flexibility, rewrite the code for a cloud-native environment so that the app can run anywhere: in a public cloud, in a private cloud, on servers or on the mainframe.

#4 Refactor

Redesign selected elements of the application to use containers and microservices, while leaving other elements untouched.

#5 Rearchitect, rebuild

Redesign the whole application. In reality, with banks running hundreds of different applications, a mix of these options is likely to be needed. What is more, with all these options but especially 3 and 4, elements of the same application will run concurrently on different mainframes or different environments. And with application modernisation taking time, each will need to be maintained and managed on an ongoing basis.

OVERCOMING COMPLEXITY

All this can bring complexity. When applications are running entirely on a mainframe, there is just one underlying infrastructure to worry about. But as soon as you introduce other deployment models for applicationsand start dividing individual applications

into constituent parts and running them in different places, chaos can ensue. Any economic or productivity benefits you hope to achieve in the long run will be nullified if you cannot orchestrate this complexity in the short-term.

For a long time, it has been this challenge, as much as any other, that has held back big banks and institutions from modernising their applications. But that is all changing with enterprise Kubernetes platforms such as Red Hat OpenShift and the partners that wield its capabilities for their banking and FSI clients. This partnership of technology and expertise is giving banks and institutions the control to modernise on their terms, at their pace.

OpenShift provides the DevOps toolkit to efficiently modernise an applicationor build a new one from scratch. It is environment agnostic, meaning applications and their component parts can be distributed across multiple deployment models, and easily moved between them. This not only enables choice today, but future flexibility.

Should an application modernisation project be stumbling, it can be paused or pulled back to the mainframe, without that work having been in vain. In the same way, an application can be shifted between clouds — private and public — mitigating the risk of vendor lock in.

The urgency for banks and financial institutions to modernise their applications has never been higher. The choice of how to do it has never been greater. The risks have never been lower. OpenShift makes it possible that radicalists, conservatives, and everyone in between can win. ■

MOVING TOWARDS DIGITISATION OF RAILWAY NETWORKS

Data available across rail networks will help maximise resources, provide visibility, move towards potential of integrated next generation networks.

As members and rail companies within the GCC move towards the future, what can they do to further optimise networks and enhance customer experience? GCC members, in particular UAE, have highlighted their aspirations to move towards a more digital environment and, indeed, the answer lies in data.

Used in the right way, the data available across rail networks will help maximise resources, provide clear visibility into operations, and move GCC rail companies towards realising the full potential of an integrated next generation network.

Historically, countries within the GCC have been heavily reliant on oil and gas resources but are now undertaking a strategic programme of development and investment on infrastructure to link the region with heavy rail networks.

Saudi Arabia is the most advanced of the GCC members in heavy rail, followed by UAE, but GCC members are also adding focus to passenger services. Dubai already has a strong light rail metro and Saudi Arabia has six new metro lines shortly coming on line. Metro is also being considered or developed in Doha, Qatar and Abu Dhabi, UAE.

Investment in infrastructure and engineering includes laying tracks, purchasing rolling stock and installing the very latest digital automated

KIRT BAROOAH
Middle East Business Development, AssessTech.

> "Rail networks are complex and there are always going to be unforeseen events"

signalling systems. Indeed, there is a lot of cutting-edge technology being installed with Saudi Arabia having the longest running level 2 ERTMS signalling system in the world. But why is this not enough?

The problem is that, while there is huge investment in infrastructure and engineering, the heavy rail networks are still running on legacy operational systems with phone and email central to communication. This results in cumbersome processes, heavily reliant on people to harvest and react to information, leaving services prone to issues and delays when quick decisions are needed to manage events or incidents outside of planned operations.

Currently, when an event occurs, a phone call is made to the control centre. The response to the situation is always safety focused but depends on the workload and experience of the on-shift control operators, resulting in varying quality outcomes. Processes are manual and when under stress might be conflicting or confusing. This can slow reaction times and deliver less than ideal business responses.

Single source of truth

A single, collaborative data platform would look at all aspects of operations and link all stakeholders with a single source of truth, reflecting the real status of the network. Using such a platform, strategic and tactical control of operations would be strengthened, train and crew resources managed more efficiently, network capacity maximised, and downtime and the impact of incidents minimised.

Live business intelligence would give a high degree of visibility of operations to all stakeholders and collaboratively enable more informed business decisions to be made.

For example, by making what appears to be a counter intuitive decision to delay the departure of a freight service, a conflict with an express passenger train will be avoided in a single section of track several hundred kilometres away and several hours downline. Collectively, such decisions will help maximise network running capacity and keep services moving.

As well as optimising running services, a collaborative digital planning tool will allow for number of what if scenarios to be modelled. For example, how would maintenance regimes be best adjusted to remove line speed restrictions?

What would the effect be of doubling a single section of track? This level of digital planning will be invaluable when creating new capacity around existing traffic flows and a unified data platform will make easy work of what currently is very challenging to achieve through manual planning techniques.

By developing a highly efficient rail network, GCC countries will also support ambitions to exploit other natural resources and further diversify their economies. Such a network, with key strategic rail flows, will support internal markets such as cement and steel and offer a more environmentally friendly solution to the thousands of lorry movements that currently take place.

Collaborative data platform

An enterprise-grade, collaborative data platform will serve all stakeholders. It will not only provide vertical integration to the departments within an organisation, but also horizontal integration into the wider supply chain, extending the opportunity to improve productivity and

KEY TAKEAWAYS

- A comprehensivedata platform offers a way to ensure the impact of events is minimised.

- Saudi Arabia is the most advanced of GCC members in heavy rail, followed by UAE.

- Heavy rail networks are still running on legacy operational systems with phone and email central to communication.

- Processes are manual and when under stress might be conflicting or confusing.

- Live business intelligence would give a high degree of visibility of operations.

- A collaborative digital planning tool will allow for number of what if scenarios to be modelled.

reduce running cost to all stakeholders.

Because each aspect of the operation will be closely monitored and recorded, it will offer the opportunity to improve quality of service. Trends and anomalies will easily be identified, which will in turn drive competency and training requirements for staff, providing a structured framework to upskill the workforce.

The safety regime will be greatly enhanced, as all processes and activities will be recorded and any deviation from a safe method of work easily identified. Incidents and actions will be recorded and as a result, a clear audit trail of events will be available for scrutiny and investigation.

Service level agreements between collaborating partners will become more transparent and supply chain issues more easily rectified given all stakeholders will be receiving the same business intelligence.

A fully digitalised rail network will offer end-to-end visibility and control of goods as they are transported, and any incidents will immediately be visible to key stakeholders and enable a prompt reaction and controlled resolution.

Enhanced telemetry data from running services could enable a switch from time based to a condition-based maintenance regime, ensuring greater reliability, reducing costs and increasing availability, by maintaining assets only when needed.

Digitally recording the movement of every train will allow all services to be compared against an ideal baseline and will provide complete visibility of how teams and individuals perform. By tying this data into a competency system, it will

allow for targeted support and training, to help develop better working habits that are safer, more efficient, economic and eco-friendly.

The platform would also tie in staff rosters, enabling crews to be deployed efficiently while ensuring staff have the right skills and are compliant with health and safety regulations and guidelines.

Rail networks are complex and there are always going to be unforeseen events. A comprehensive, collaborative data platform offers a way to ensure the impact of events is minimised, services are optimised, and new opportunities more readily identified.

Manual, paper-based activities would be replaced by instant analytics and complete visibility into the network though real-time dashboards and reporting, that would empower operators to make more informed decisions and increase the economic potential of rail infrastructure.

All elements of the network, including planning, response to events, capacity, crew rostering and training would be tied together. What if scenario planning would become easy to achieve and investments focussed to produce the greatest potential for growth.

As GCC members look to digitalisation and data as key strategic assets, a fully integrated data platform will bring data, people, and processes together to optimise operational efficiency, customer experiences, and profitability. Ultimately, this future vision of a fully digitalised rail network would enable GCC members to make the most of the natural resources and give the potential to drive growth through multiple areas of their economies. ■

NEW EQE FROM MERCEDES-EQ PRESENTED IN ABU DHABI

The latest all-electric addition to the Mercedes-EQ model range, the new EQE, has been unveiled in Abu Dhabi. This was ahead of the model's official market introduction in the third quarter of 2022. The new EQE is an all-electric luxury sedan that combines noticeably high-quality materials with innovations. The car possesses a 3D High-End Sound System, with the interior featuring Active Ambient Lighting and the use of luxurious materials such as the real wood décor.

With a range up to 671 kilometres and an output of up to 215kWp, the powertrain of the EQE continues to redefine and exceed expectation of an advanced saloon. The arrival of the EQE is the latest showcase of what the future holds for Mercedes-Benz with a carbon-neutral fleet.

(Left to Right) Meagan Kelly Horsman, Managing Director Christie's Middle East; Anthea Peers, President Christie's EMEA; Ridha Moumni, Deputy Chairman Christie's Middle East and North Africa.

Meagan Horsman, Anthea Peers, Ridha Moumni, join Christie's regional senior management

Christies announced two key appointments to its senior management team in the Middle East: Dr Ridha Moumni has been promoted to the role of Deputy Chairman, Christie's Middle East and North Africa, effective immediately, and Meagan Kelly Horsman has been named Managing Director, Christie's Middle East.

Anthea Peers, Christie's new President for Europe, Middle East and Africa, has identified the Middle East market as a strategic priority for the company, and these two important executive announcements underscore Christie's commitment to deepening its investment in this area.

In his new role as Deputy Chairman, Middle East and North Africa, Ridha Moumni will assume responsibility for business strategy across the region, with a strong focus on the Gulf and North Africa amongst other areas. He will work to expand and enhance Christie's profile and portfolio of offerings while also promoting the company's diversified businesses. Ridha was previously Christie's Senior Client Advisor for the Middle East, joining the company from Harvard University's Department of Art History, where he was an Aga Khan Fellow.

Meagan Kelly Horsman brings to Christie's her extensive experience in Collection Management and Development for some of the most important collections in the UAE. Based in the region since 2010, Kelly Horsman worked previously in the primary art market, starting her career in the art world at Bonham's. Meagan has also curated numerous exhibitions, delivered short courses relating to the art sector, and created a curated print fair at Al Serkal Avenue.

(Left to Right) Ruslan Sultanov, Director of Sales, Rixos Bab Al Bahr; Senol Sarisen, Hotel Manager, Rixos Bab Al Bahr; Resat Dalay, Director of Engineering of Sales Rixos Bab Al Bahr; and Ipek Dem, Assistant Director of Sales for MICE.

Rixos Bab Al Bahr appoints Senol Sarisen, Ruslan Sultanov, Resat Dalay, Ipek Dem

Rixos Bab Al Bahr announced the appointment of four new heads of departments to carry out the new vision and continued success of the resort. The five-star resort in Ras Al Khaimah appointed Senol Sarisen as Hotel Manager, Ruslan Sultanov as Director of Sales, Resat Dalay as Director of Engineering and Ipek Dem, Assistant Director of Sales for MICE.

Senol Sarisen will be responsible for overseeing day-to-day operations at the resort. This entails ensuring smooth operations, including team satisfaction, quality of service, guest satisfaction and maximising profit. Senol will be actively working with consulates to recruit new graduates from selected hospitality schools and train them at Rixos Bab Al Bahr.

Ruslan Sultanov, the new Director of Sales, will be responsible for driving profits of the resort and managing stakeholder relations while navigating the post-pandemic recovery of the hospitality sector. Ras Al Khaimah is rapidly gaining new hotels on the map, creating an increasingly competitive environment. Ruslan will also be responsible for strengthening Rixos Bab Al Bahr's position as an all-inclusive concept within key focus markets.

The new Director of Engineering, Resat Dalay, is responsible for ensuring the resort is utilising the best engineering practices and driving continuous improvement across all engineering related areas of Rixos Bab Al Bahr. Born in Turkey, he has nearly four decades of experience as an engineer in numerous sectors, including shipping, construction and petroleum and gas.

(Left to right) David Droga, CEO and Creative Chairman of Accenture Interactive; and Paul Daugherty, Group Chief ExecutiveTechnology and Chief Technology Officer at Accenture.

Paul Daugherty, David Droga, to lead Accenture's Metaverse Continuum business group

To help organisations take advantage of the Metaverse opportunity, Accenture is launching the Accenture Metaverse Continuum business group. The new group will be led by Paul Daugherty, Group Chief Executive, Technology and Chief Technology officer at Accenture and David Droga, CEO and Creative Chairman of Accenture Interactive.

Accenture also operates its own metaverse, the Nth floor, where the company's people participate in new hire orientation and immersive learning or meet and socialise as teams. This fiscal year, the company expects 150,000 or more new hires will work in the metaverse on their first day.

Saif Al Dahbashi appointed as CEO of EDGE Group Entity, AL TAIF

EDGE, the region's leading advanced technology group, and one of the top 25 in the world, has announced the appointment of Saif Ali Al Dahbashi to the position of Chief Executive Officer at its entity AL TAIF, the leading UAE in-country provider of lifecycle support for military land platforms and systems through maintenance, repair and overhaul, supply chain management, technical training and engineering services. AL TAIF is part of the Land division within EDGE Group's Platforms and Systems cluster.

Previously AL TAIF's Chief Operating Officer, Al Dahbashi brings to his new role 17 years of experience in shaping and implementing large-scale transformational programmes across major commercial organisations, including major UAE based companies such as Strata Manufacturing and Mubadala Investment Company.

VICTORIA NIELD
Director of Operations, Marriott Hotel Al Forsan, Abu Dhabi.

Victoria Nield elevated to Director of Operations at Marriott Hotel Al Forsan, Abu Dhabi

Marriott Hotel Al Forsan, Abu Dhabi has announced the appointment of Victoria Nield as the new Director of Operations. Victoria moved into her new role, having previously held the position as Operations Manager at Courtyard by Marriott and Marriott Executive Apartments Dubai Green Community since October 2019.

With a wealth of experience ranging over 20 years, and across multiple positions within Marriott International, Victoria has worked across all functions of Operations and brings vast knowledge and expertise to her new role.

In her new role, Victoria will be responsible for the hotel operation including rooms, food and beverage, and spa and recreation.

Victoria started her career with Marriott International in 2004 as part of Marriott's voyager program at Marriott Worsley Park Hotel and Country Club and has since held many positions including food and beverage manager at Marriott Victoria and Albert Hotel in Manchester as well as playing a key role in the pre-opening of Marriott and Marriott Executive Apartments, Al Jaddaf in 2013.

Rakesh Raicar takes over Cathay Pacific's South Asia, Middle East, Africa operations as Regional GM

Cathay Pacific, the award-winning Hong Kong based airline, has appointed Rakesh Raicar as the airline's new Regional General Manager for South Asia, Middle East and Africa – SAMEA.

Raicar who has over 30 years of experience working with Cathay Pacific, will take over from his predecessor, Mark Sutch. Based in Mumbai, India, Raicar would be responsible for the growth of the airline's business and operations in the said regions.

Raicar began his career with Cathay Pacific in 1992 and has held several roles through the course of his tenure including Regional Marketing and Sales Manager, South Asia and Sales and Country Manager, South Africa and Indian Ocean. His most recent role was General Manager – South West Pacific where he led, developed and executed commercial strategies for the entire region.

Rakesh holds a Bachelor's degree in Commerce from University of Mumbai and a post-graduate diploma in Marketing from the Jamnalal Bajaj Institute of Management Studies.

HE Mohamed Al Hammadi, CEO Emirates Nuclear Energy, recognised amongst top 100

The UAE Peaceful Nuclear Energy Program continues to be recognised as a global success story in tackling climate change through the UAE's sustainable powerhouse, the Barakah Nuclear Energy Plant. The Emirates Nuclear Energy Corporation – ENEC has now passed the halfway mark for full commercial operation of the Plant, with Units 1 and 2 both generating clean electricity every day. Once fully operational, the Plant will be providing 25% of the UAE's electricity needs, completely carbon emissions free.

The success of the Program has recently been recognised, in which His Excellency Mohamed Ibrahim Al Hammadi, Managing Director and Chief Executive Officer of ENEC has been ranked 11th. HEAl Hammadi has led the development of the UAE Peaceful Nuclear Energy Program and the Barakah Plant since its inception. He has been responsible for leading and overseeing the development of the Plant and the wider delivery of the UAE Program as it now transitions into research and development, SMRs, clean hydrogen and other related sectors.

Jobin Joejoe elevated to Deputy MD for Sony's new South East Asia, MEA region

Sony Middle East and Africa has announced the appointment of Jobin Joejoe as Deputy Managing Director, to lead operations in the region. In this new role, Jobin will be responsible for further building on the company's leadership position in the regional market, accelerating business performance to achieve sustainable growth, profitability and value for all stakeholders.

A veteran business leader, Jobin Joejoe brings deep experience and expertise to his role. He has more than 20 years of extensive sales and marketing experience in retail and consumer tech across various business models, including 16 years of experience in the Middle East and Africa region. Jobin joined Sony Middle East and Africa as Country Sales Manager – UAE and Oman in 2007, and since then, has grown consistently within the organization. Most recently, he served as Head of Sales – Sony MEA, where he was involved in driving sales and marketing plans and strategic objectives across various markets in the MEA region.

Thierry Sabbagh takes over Saudi Arabia, continues as Managing Director, Nissan Middle East

Nissan announced appointment of Thierry Sabbagh as President of Nissan Saudi Arabia from April 1st 2022, while continuing his position as Managing Director of Nissan Middle East.

In his new scope, Sabbagh will work alongside the current Managing Director of Nissan Saudi Arabia, Bader El Houssami to lead the business strategy and performance for the Nissan brand in the Saudi market, while Sabbagh continues to spearhead 10 other Middle East markets as Managing Director.

An industry veteran with a deep and diverse understanding of corporate and automotive sectors, Sabbagh brings over two decades of comprehensive experience in sales, marketing, brand, planning and business development operations across MENA.

He joined Nissan in 2018 as Director of Sales, driving the sales performance for the brand across the Gulf, Levant, and North Africa markets, and has been leading the Middle East market as Managing Director since 2019, driving operational excellence and realising the Nissan NEXT business transformation goals in the region to foster sustainable business growth, building on the brand's heritage of 70 years in the Gulf and wider Middle East.

Sabbagh holds a bachelor's degree in Business, Hotel Management in Marketing, from the University of West London and an executive certification in Leadership with Finance from Harvard Business School. He was recently recognized by Forbes Middle East in the Global Meets Local 2021 ranking of the top 50 business leaders in the Middle East.

Honeywell elevates Abdullah Abdulrahman Al-Juffali to Country President Saudi Arabia, Bahrain

Honeywell has announced the appointment of Abdullah Abdulrahman Al-juffali as Honeywell country president of Saudi Arabia and Bahrain. As the country leader, Al-juffali will spearhead Honeywell's regional strategy for Saudi Arabia and Bahrain, focused on the Company's growth pillars of shaping a diversified portfolio of products and solutions tailored for the local market, driving key customer engagements, and building the talent and leadership pipeline.

Al-juffali will be responsible for the continued growth of Honeywell's operations across the company's four strategic business groups: Aerospace, Performance Materials and Technologies, Honeywell Building Technologies, and Safety and Productivity Solutions, along with the Honeywell Connected Enterprise.

He will also oversee the local design and manufacturing of Honeywell technologies that can drive economic diversification and growth, in-line with the localisation and diversification commitments of Saudi Arabia's National Transformation Plan, Vision 2030 and In-Kingdom Total Value Add programs. This includes identifying new technology collaboration and development opportunities with Honeywell's many valued partners.

Al-juffali joined Honeywell in March 2020 as Saudi Arabia country leader for Honeywell Building Technologies, based in Riyadh. Prior to Honeywell he spent more than 10 years at ABB in a variety of roles and brings more than 15 years of international experience in sales, marketing, strategy, finance, and manufacturing in Saudi Arabia and the United States.

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AWS Professional Services Head of EMEA Shared Delivery Team SAP

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Yes! The hardest change but the most powerful is that involving people and culture, starting with the leadership team

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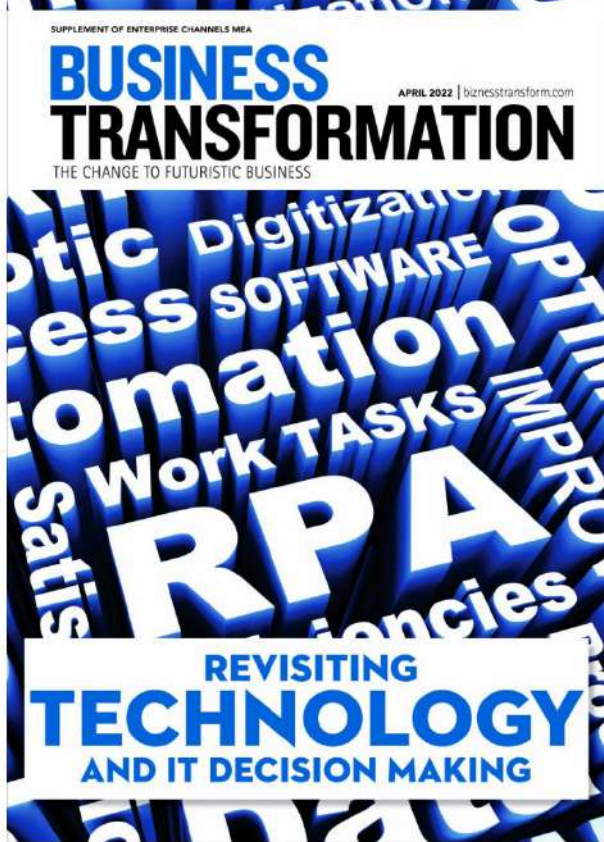
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Treatment Planning team leader at eon Dental
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As always, you are our inspiration ❤

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No more business and IT, technology is part of business

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Phil Le-Brun, Amazon Web Services (AWS).

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Stephan Leuze · 3rd+   1w ···
AWS Professional Services Head of EMEA Shared Delivery Team SAP

Hi Phil, excellent and very relevant article. If companies are changing the organization and merging business and IT and shift focus from efficiency to innovation I believe there is one more "thing" that needs to happen. We need to transform people's mind and hearts by changing leadership, hierarchy, KPI's and company culture ...see more

Like · 👍 2 | Reply · 1 Reply

  Phil Le-Brun · 3rd+   1w ···
  Enterprise Strategist at Amazon Web Services (AWS), Former CIO

  Yes! The hardest change but the most powerful is that involving people and culture, starting with the leadership team

  Like · 👍 3 | Reply

Michael Phillips 迈克·菲利普斯 · 3rd+   1w ···
Chief Information Security Officer ● C|CISO ● vCISO ● Board Advisory ●...

Good insights, which highlight the root causes of Shadow IT! -- Try doing business without IT - 😟 / Simultaneously, technology must enable "business processes" and stop forcing business process to adapt to the inherent limitations of certain technology solutions.

Like · 👍 2 | Reply · 1 Reply

  Jan Guido · 3rd+   1w ···
  Collaborative Leader| Transformation Artist | Strategic & Tactica...

  I fully agree! Technology is meant to serve the business needs; once was Computer 101. Thanks for pointing that out Mike!

  Like · 👍 2 | Reply

Jayasudar Antony · 3rd+   1w ···
IT Application Lead at Progressive Insurance

Thanks for sharing

Like · 👍 1 | Reply

PREPARING FOR PASSWORDLESS AUTHENTICATION

Passwordless solutions use a number of technologies, such asbiometrics and smart credentials, to positively identify users andgrant access to applications without the need to input a password. Theyhave been identified by Gartner as an emerging technology likelyto make a major impact in 2022.By maximizing security while minimizing friction, passwordlessfits neatly into a zero-trust framework that emphasizes seamless,perimeter-less security

Passwords aren't dead yet (unfortunately)

**Experts have predicted "the death of the password" for years.
But passwords still proliferate — and so does password fatigue.**

300
billion passwords are in use worldwide — 40 for every human on Earth[1]

123456
is the most popular password in the world, used on over 100 million accounts in 2021[2]

2 of 3
users reuse passwords on different accounts[3]

Over-reliance on passwords is a costly security risk

Phishing is on the rise
Successful phishing attacks on organizations increased 46% between 2020 and 2021.[4]

Passwords are easy to steal
The number of stolen usernames and passwords increased 300% from 2018 to 2020.[5]

Stolen passwords lead to hacks
81% of hacking-related breaches use stolen or leaked passwords.[6]

Breaches are increasingly costly
The average cost of a data breach in 2021 was $4.24 million, up 10% from 2020.[7]

Graphics courtesy Entrust, The end of WorldPassword Day.

Passwordless technology has enormous potential, and adoption is on the rise

Biometrics adoption is skyrocketing

By 2025, the biometrics authentication market is projected to grow to $93.88 billion.[9]

Remote work is an ideal use case

86% of security professionals say remote workers are the primary user base for passwordless technology at their organization.[11]

Going passwordless reduces IT costs

Eliminating password-related helpdesk requests could save large enterprises up to $1 million in IT costs annually.[10]

Companies are getting on board

66% of organizations not currently using passwordless technology intend to adopt it in the next two years.[12]

But there's still more work to be done

Not all passwordless solutions are created equal.

48%

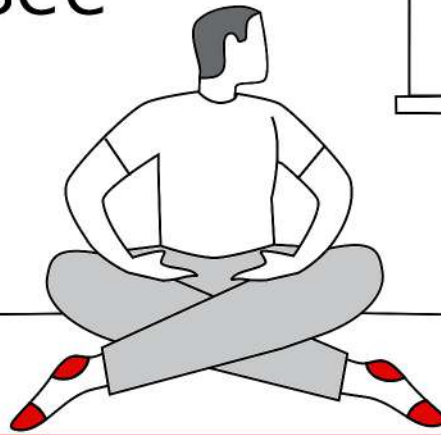of organizations haven't implemented any passwordless solutions[13]

61%

of so-called "passwordless" solutions still use a shared secret, like an SMS code[14]

Graphics courtesy Entrust, The end of WorldPassword Day.

UBS Investor Sentiment

Wait and see

**UAE investors
remain calm** amid
inflation and volatility

Key findings

Russian invasion | UAE investors are
concerned

Inflation continues | More inflation
growth expected

Portfolio shifts | UAE investors look to
crypto currencies, real estate and gold

War in Ukraine

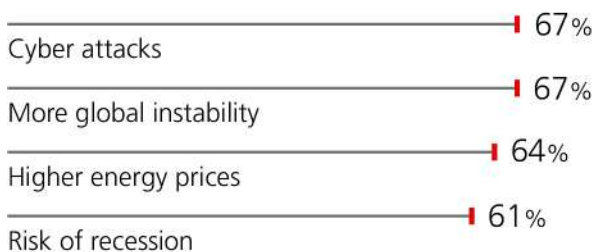Top concerns for UAE investors: Geopolitics jumps to number one

59%
Geopolitical risk
(e.g., Russia/Ukraine)

56% Market downturn

55% Global trade conflict

UAE investors see negative economic impact
from the war ...

Cyber attacks	67%
More global instability	67%
Higher energy prices	64%
Risk of recession	61%

... but also potential reasons for hope.

More European countries joining EU/NATO	76%
Higher confidence in democracy	75%
Stronger NATO alliance	74%
More investment in green energy	73%

Source: UBS Investor Sentiment survey, May 2022.

INVESTORS CONCERNED ABOUT THE WAR

High-net-worth investors remain deeply concerned about the impact of the war in Ukraine on the global economy and rising inflation, according to UBS. 92% investors expect the war to increase inflation, with more than half believing inflation will last longer than 12 months.
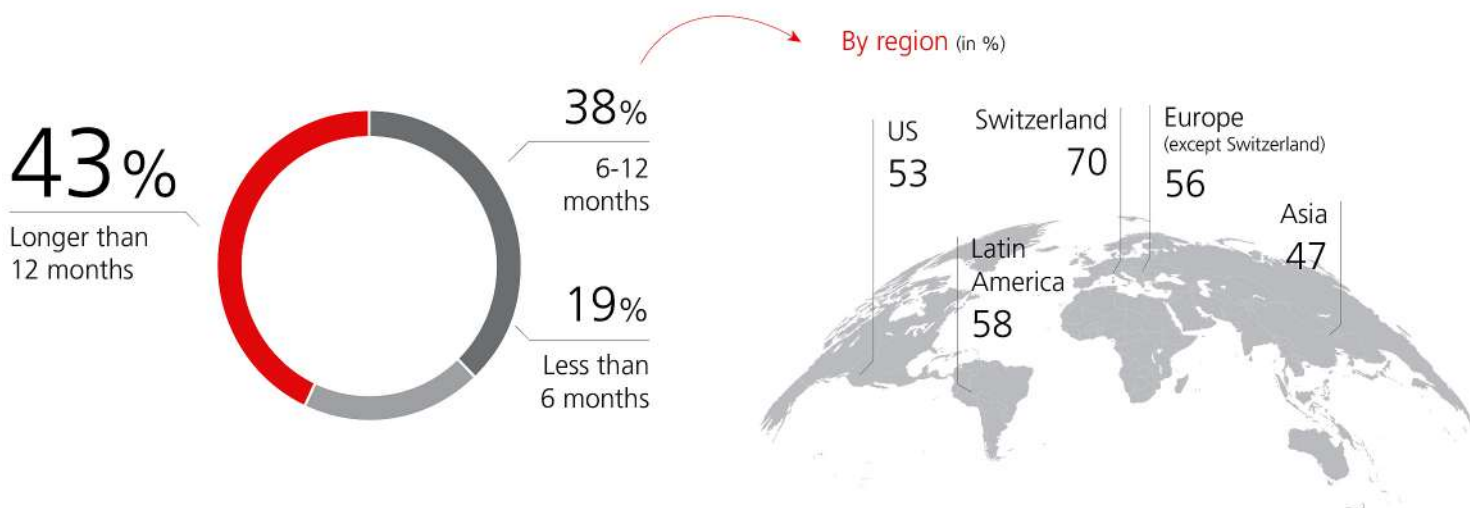
According to half of investors surveyed, market volatility is higher than usual. Most investors foresee a negative economic impact from the war, with 66% expecting higher energy prices, 64% expecting more global instability and 60% concerned about increased cyber-attacks. However, investors are not adjusting their portfolios yet, but are poised to do so should the market decline further. Many are now more likely to consider buying gold, domestic stocks and oil, while technology and energy remain the most attractive sectors in the current market environment.
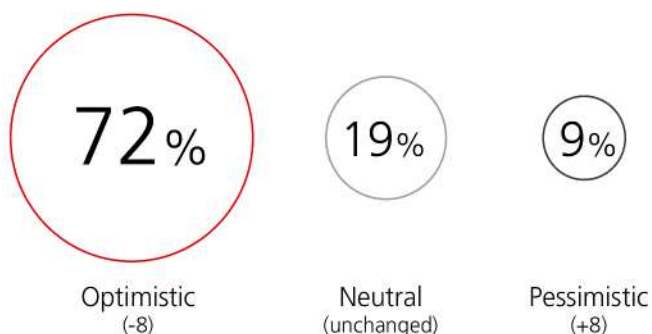
Market expectations
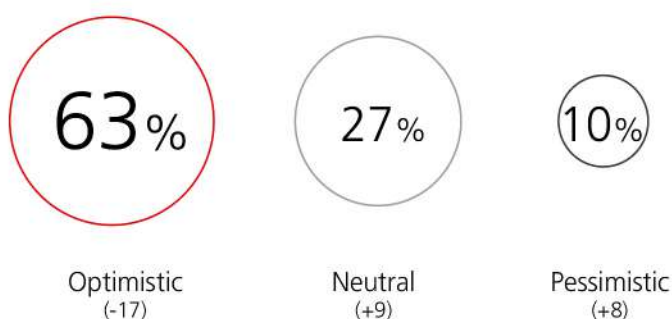
UAE investors expect war to increase inflation

85% Expect an increase

35% Significant increase

50% Some increase

AND

15% Expect no impact

Most UAE investors think inflation will last

43% Longer than 12 months

38% 6-12 months

19% Less than 6 months

By region (in %)

US 53

Switzerland 70

Europe (except Switzerland) 56

Asia 47

Latin America 58

Outlook declines on own region's economy for next 12 months

72% Optimistic (-8)

19% Neutral (unchanged)

9% Pessimistic (+8)

UAE investors' outlook also declines on stock market for next 6 months

63% Optimistic (-17)
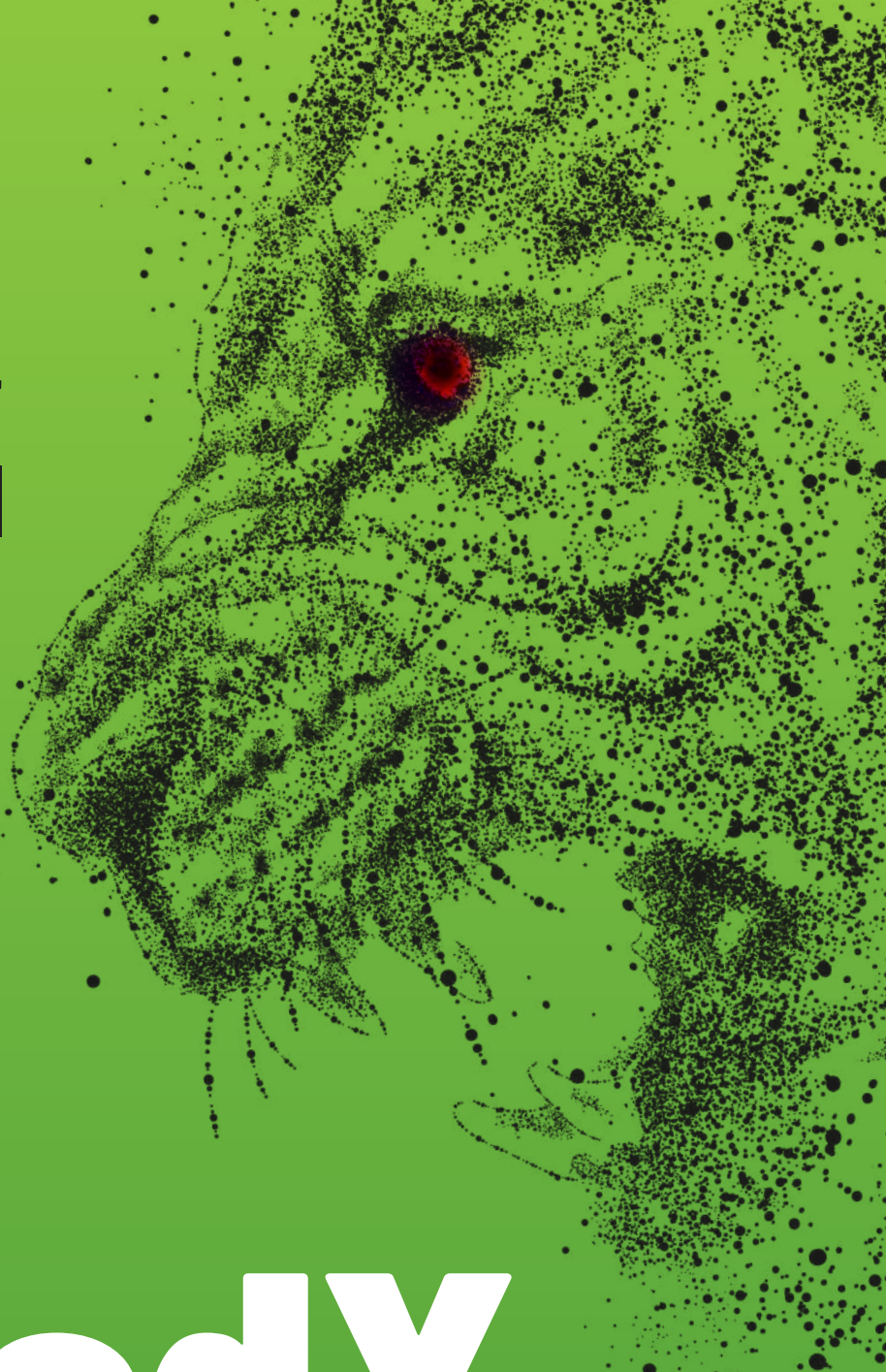
27% Neutral (+9)

10% Pessimistic (+8)

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