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computer news middle east

WHERE TECHNOLOGY MEANS BUSINESS

ISSUE 356 | JANUARY 2022
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LEVITON'S
MANAGING
DIRECTOR ME

REDHAT'S VICE
PRESIDENT CEMEA

EQUINIX'S
MANAGING
DIRECTOR MENA

THE METAVERSE IS 'COLOSSAL'

CIRO ARIANNA, CEO OF COLOSSALBIT TELLS US
MORE ABOUT THE IMPACT THE METAVERSE IS
GOING TO HAVE ON THE GLOBAL ECONOMY.



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**Satya Nadella,
CEO of the US
tech behemoth
said that the
merger will allow
Microsoft to
compete with
other market
players in the
metaverse space."**

EDITORIAL

IT IS A META OF FACT

Firstly, I'd like to take this opportunity to wish all our partners and customers a very Happy New Year!

A strong theme in our first magazine of 2022, is the metaverse, which many tech evangelists have christened as the 'future' of the internet.

Our front cover story interview is with **Ciro Arianna**, CEO at ColossalBit, who earlier this month launched Dubai's very first metaverse restaurant called MetaTerrace.

In a fascinating interview, he outlined the role he believes the metaverse is going to play in the global economy – and likened the new phenomenon to being 'in' the internet as opposed to being 'on' the internet.

In addition to this, in my column I took a closer look at the mega acquisition of Activision Blizzard by Microsoft for \$68.7bn.

Satya Nadella, CEO of the US tech behemoth said that the merger will allow Microsoft to compete with other market players in the metaverse space and compared the excitement around the metaverse as the attitude towards the internet in the 90's.

It is quite apparent that the metaverse is not some technology fad that will crash and burn, this is the next generation of the internet, and it is here to stay!

Rehan Asad, Chief Programme Officer at EXPO 2020, gives us a detailed insight into the planning and execution of their virtual tours, which has incredibly thus far attracted the participation of 50 million people from 192 countries since opening its doors.

However, he was quick to dispel the belief that the virtual tour aspect of EXPO 2020 was fast-tracked in response to the ongoing global COVID-19 pandemic, but as Asad reveals the virtual reality component of EXPO has always been in its DNA.

Saket Modi, CEO at Safe Security penned an exclusive op-ed, which examined why the healthcare industry is subject to so many data breaches and hacks – and offers a remedy to the solution in his thought-provoking piece.

Patrick Smith, EMEA Field CTO and James Petter, General Manager International at Pure Storage gave their predictions from a business and IT perspective for the next 12 months, whilst Sherifa Hady, Vice President of HPE Aruba's channel portfolio outlines the three trends she believes will come to fruition in 2022.

We also have terrific interviews with Leviton, Entrust and IT veteran Phil Andrews talks about the open-source strategy at RedHat, and documents how their product portfolio has diversified over the years.

LEAP kicks off in Riyadh next month, and that promises to be one of the biggest tech events of 2022, and only serves to reinforce the ambitions and aspirations set by the leadership in the KSA to become a major player in the global tech ecosystem over the next decade!

We will have all the coverage from that event in Saudi Arabia, and as always exclusive interviews with some of the most prominent technology and IT leaders in the region in next month's edition of CNME!

Mark Forker
Editor



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CNME rounds up the biggest regional and global developments in enterprise technology, which includes the new collaboration between Uniphore and Cisco that is designed to empower better customer experiences, a new study commissioned by Oracle indicates that 81% of UAE consumers are concerned that global supply chain issues are here to stay – and Acronis appoints Michael Callahan as their Chief Marketing Officer.

10 Shady Youssef, Managing Director at Leviton Middle East, highlighted

the diversity of their product portfolio that is meeting customer demand in the datacenter space.

18 Phil Andrews, Vice President CEMEA at RedHat, tells us more about their open-source strategy and believes cultural barriers are preventing many businesses from achieving their DX goals.

28 Sascha Giese, HeadGeek at SolarWinds, documents the trends that will fuel the IT ecosystem in 2022, and stressed the need for enterprises to invest more in AI and Machine Learning technologies.

32 Rehan Asad, Chief Programme Officer at EXPO 2020, reveals that COVID-19 aside, delivering an unrivalled digital augmented experience has always been the aspiration from the UAE leadership.

40 Hamid Qureshi, Regional Sales Director at Entrust, talks about the challenges facing many enterprises looking to implement PKI into their business operations.


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 FOUNDER, CPI
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 (1959-2015)

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Employee Surveillance Measures Could Threaten Trust and Increase Staff Turnover in UAE, VMware Research Finds

VMware, Inc., a leading innovator in enterprise software, today shared results of a global study that revealed the rise in employee performance and trust established in new hybrid working models could be under threat from an increase in the implementation of remote monitoring measures.

The study, “The Virtual Floorplan: New Rules for a New Era of Work,” found that 90 percent of companies surveyed in the UAE have either already implemented or are planning to implement employee surveillance measures to monitor employee productivity since the shift to hybrid working. Among these organisations, the measures being taken include the monitoring of emails 56 percent, web browsing and collaboration tools 44 percent, as well as video surveillance 36 percent, attention tracking via webcams 34 percent

and keylogger software 28 percent. However, 46 percent of UAE companies that have already implemented device monitoring, and 64 percent of companies who are currently in the process of doing so, are in fact seeing “drastically increased” or “increased” employee turnover.

The research findings suggest there is a delicate balance to be struck as businesses look for new ways to assess employee performance beyond presentism. Among these organisations, the new approach to monitoring productivity has been achieved through the use of performance-focused solutions including regular catch-ups with managers to discuss workloads (54 percent) assessing output and agreed deliverables (54 percent), and using new project management software (56 percent).

Amin Hanafieh, Country Director, UAE, VMware, said: “The results of



Amin Hanafieh, Country Director, UAE, VMware

the survey show the importance for company leaders to take a step back when deciding how to assess employee productivity. While technology was key to enabling the distributed workforce, traditional techniques such as regular catch ups, setting expectations, agreeing KPIs, and keeping open lines of communication can be used effectively to monitor and measure productivity. The focus should be on providing the employees with the tools they need to perform their roles, while agreeing expectations on performance, with the employee’s full buy in”.

stc, awarded for its best internal application across the Middle East

stc was awarded the first place in the enterprise agility award 2021 for its best application that provides solutions for companies, for the internal communication application “HUB” during the awards ceremony that was held recently in Dubai.

stc’s HUB application was crowned the first place as the best internal communication application, achieving the diamond plate of the Entrepreneur award 2021, after competing with a number of competing applications from international companies in the Middle East. The competition revolved around the most suitable applications for work environment that require diversity in the characteristics of its internal applications and the speed of its renewed response to provide a digital communication environment.

The HUB application is designed



internally with the best international practices that provide various services to employees, including employee self-service, task management and follow-up, and human resource operations.

stc’s win reflects the excellence of the internal work environment,

which aims to make the group a “model of excellence” in its internal applications in human resource management by providing a flexible and innovative digital experience for employees, which is reflected in enhancing their productivity.

Red Hat and Celonis Make Hybrid Multicloud a Reality for Intelligent Business Execution



Lars Herrmann, Vice President, Partner Ecosystem Products and Technologies, Red Hat

Red Hat, IBM and Celonis today announced the general availability of Celonis Execution Management System (EMS) on Red Hat OpenShift Service on AWS (ROSA) as a managed cloud service. This enables organisations to take full advantage of the collaboration and unique expertise of each company in a multicloud environment. AWS is the first public cloud platform to offer Celonis EMS

on Red Hat OpenShift, with support for others planned in the near future including Google Cloud Platform, IBM Cloud and Microsoft Azure.

“As cloud strategies mature, we have seen IT organisations establish preferences for specific cloud environments and strategies, which in turn can raise new challenges for SaaS providers. Red Hat OpenShift, available as a consistent cloud service across multiple clouds highlighted by Red Hat OpenShift Service on AWS, enables SaaS leaders like Celonis to deliver greater cloud choice to their customers while relying on Red Hat’s expertise in managing, maintaining and scaling infrastructure spanning multicloud environments. This enhances the customer experience while fostering vendor innovation as they can now focus on core offerings without having to deal with the underlying architectural complexities”, said Lars Herrmann, Vice President, Partner Ecosystem Products and Technologies, Red Hat.

Uniphore Collaborates with Cisco to Enable Better Customer Experiences



Uniphore, the leader in Conversational Automation, announced today that it has joined Cisco SolutionsPlus, an industry-leading partner program that helps enterprise buyers design and implement complete end-to-end customer solutions.

Through Cisco’s SolutionsPlus Program, Cisco’s customers and channel partners can purchase Uniphore’s conversational automation products to enable more efficient, frictionless and secure conversations between customer service agents and customers. For Cisco partners, this means they can resell and upsell, bringing additional customer experience innovation and value to their customers.

In addition to joining Cisco’s SolutionsPlus Program, the companies continue their work on developing new capabilities in AI, conversational automation, and real-time call and sentiment analysis. These types of advances are transforming customer experience across contact centers for global enterprises.

For example, Uniphore’s innovative AI technology dramatically reduces agent aftercall work time, by up to 80% in many cases. Currently, Uniphore’s innovative U-Assist After Call Work solution has been validated as “Cisco Compatible” on Cisco Systems Global Price List (GPL).

Tenable Introduces Tenable.cs to Provide Security from Code to Cloud



Nico Popp, Chief Product Officer, Tenable

Tenable®, Inc., the Cyber Exposure company, today announced the release of Tenable.cs, adding new cloud-native security capabilities to its platform. Coming on the heels of its acquisition of Accurics, Tenable.cs enables organisations to accelerate innovation by aligning development, operational and security teams behind security and resiliency goals.

With the release of Tenable.cs, Tenable will help organisations protect the full cloud-native stack throughout the DevOps lifecycle, from the time applications and infrastructure are defined in code through production usage. Tenable.cs scans Infrastructure as Code (IaC) to detect and remediate any flaws, policy violations and potential breach paths before provisioning to the cloud infrastructure.

“Tenable.cs expands our capabilities further into the cloud stack”, said Nico Popp, Chief Product Officer, Tenable. “Our aim is to enable organisations to embrace both the technical and cultural change that is DevSecOps. This is a natural evolution as services increasingly leverage the cloud and IaC. By analysing this codified state of cloud environments, we enable users to shift security left and address misconfigurations and vulnerabilities before they are deployed”.

81% of UAE Consumers Worried Supply Chain Issues Are Here to Stay

Recent supply chain delays and disruptions have negatively impacted the lives of UAE consumers, leaving them feeling frustrated, angry, and scared that the supply chain nightmare may never end, according to a new study by Oracle. The study surveyed 1,000 UAE consumers and found that worries are worsening across the nation and people are looking to brands to help settle their concerns.

Over the past year, supply chain disruptions have become top-of-mind for many consumers in the UAE and have had a widespread impact on day-to-day life.

- Almost half (42 percent) of people admit they never thought about how products were delivered prior to the COVID-19 pandemic, but now many (61 percent) consider the supply chain when making a purchase.
- 84 percent of people have been negatively impacted by supply chain

issues over the past year, with many UAE consumers unable to purchase certain items due to shortages (36 percent), forced to cancel orders due to delays (37 percent), and even rationing essential items out of fear of running out (28 percent).

People Are Scared That the Supply Chain Disruptions Will Never End

UAE consumers are increasingly worried that supply chain disruptions will continue to negatively impact their futures with many seeing no end in sight.

- 48 percent of people are concerned that ongoing supply chain disruptions will ruin their life plans, such as birthdays, holidays, trips, and purchasing necessary items like school supplies.
- 89 percent of people believe there will be more supply chain disruptions in the future, and (54 percent) are scared that these issues will never end.



If Brands Don't Prepare for Disruptions, They'll Risk Losing Valuable Customers

The supply chain has become a critical part of people's purchasing decisions. Organisations that don't prioritise their supply chains risk declines in customer loyalty and revenue.

- 81 percent of people are willing to pay a premium for smooth and timely delivery of their items.
- 68 percent say delays would cause them to cancel their order and 85 percent say delays or shortages would even cause them to stop buying from a brand entirely.
- Most people (83 percent) understand that supply chains are complex, but 91 percent want more support from brands to help ease their worries.

Genetec is all about the importance of using a unified physical security platform at Intersec 2022

Genetec Inc. a leading technology provider of unified security, public safety, operations, and business intelligence solutions officially announced its participation at Intersec 2022, the world's leading security, safety, and fire protection trade fair, taking place on January 16 – 18, at the Dubai World Trade Centre.

Visitors to the Genetec stand (SA-120), will get to discover the latest security solutions:

- Genetec Mission Control, a decision management system that helps you understand unfolding events and quickly identify the best course of action. It simplifies the response coordination between stakeholders, speeding up incident resolution.

- Genetec Clear ID, a self-service physical identity and access management (PIAM) system that strengthens your security policies while improving the flow of people within your organisation and continuously updating individual access rights based on current attributes. Unified with our access control system, Synergis, this cloud-based solution can be quickly and easily deployed.

- Security Centre Restricted Security Area (RSA) Surveillance brings together different detection and tracking devices under a single visualisation pane. Moving targets are automatically tracked on geographical maps and intuitively displayed so that security personnel can assess and respond to threats in less time.



Firas Jadalla, Regional Director at Genetec

"We are looking forward to meeting our customers and partners in person at Intersec 2022, the perfect forum to discuss with them the strategic advantages of a unified physical security solution for their businesses. They will also get the opportunity to experience first-hand the region's latest security technologies and talk to experts who will guide them on solutions that best suit their needs", said Firas Jadalla, Regional Director at Genetec.

A10 Networks Boosts EMEA Channel Programme with New Hires and Collaborative Partnership Approach



Chris Martin, Channel Sales Leader for EMEA & APAC at A10 Networks

A10 Networks announced the significant ongoing success achieved by its channel programme in 2021, with 23 new strategic partners signed up in the last year and plans to further develop channel initiatives in 2022.

At the start of 2021, A10 Networks refocused its five key strategic channel pillars encompassing building ecosystems, channel enablement, lead generation activities, deal

registration and working with distribution. At the end of 2021, A10 Networks signed up 23 new partners as a result of this laser focus on its channel, which now comprises over 80 partners and 30 distributors.

Chris Martin, Channel Sales Leader for EMEA & APAC at A10 Networks comments: "We've seen real positive momentum in the channel in 2021 despite the pandemic. In fact, our virtual offering has meant that we have consistently grown with no negative impact from COVID-19. But this isn't just off the back of our offerings but also demonstrates how important the channel is in helping customers to protect against the evolving nature of cyberattacks. This increase in attacks combined with the need to operate in a new environment that encompasses both remote and office working and spans both the digital and physical world. It demonstrates just how important it is for enterprises to work with trusted partners".



Linksys, a global leader in home and business WiFi solutions, today announces the launch of its WiFi 6 Cloud Managed Access Point.

The WiFi 6 Cloud Managed Access Point's 4x4 internal antennas deliver safer, more secure and faster WiFi for areas needing to service a high density of concurrent client connections. With the control plane in the cloud and a cloud-native operating system running on the units, zero-touch provisioning, configuration, management, and monitoring are extremely efficient and simple. With access to Linksys Cloud, users can also

Linksys Launches New WiFi 6 Cloud Managed Access Point

scale with no limit to the number of networks and devices managed.

Additional features include:

- **Qualcomm Networking pro Platform 1200:** Next-generation technology transforms business WiFi with its wire-like stability and blazing-fast performance.
- **Media-rich Captive Portal:** Cloud hosted captive portal splash page and a built-in captive portal editor allows users to upload logos and graphics of any size, customised Terms of Service Agreement or even manage Wi-Fi access with an extra passcode at no additional cost.
- **Reduce costs:** Use Cloud Management without recurring license fees and get access to dedicated professional technical support with no recurring fees.
- **TAA compliant:** NDAA and GSA compliant for US government contracts.

Acronis appoints Michael Callahan as Chief Marketing Officer



Michael Callahan, Chief Marketing Officer, Acronis

Acronis, a global leader in cyber protection, announced today the appointment of Michael Callahan as its new Chief Marketing Officer. Callahan joins the team with extensive sales and marketing experience, serving in senior leadership roles at companies such as McAfee, HP, and Juniper, and most recently as the Senior Vice President of Global Marketing for Cofense.

As Acronis' Chief Marketing Officer, Callahan will develop Acronis' global brand position while increasing awareness of the Cyber Protect Cloud Platform. With COVID-19 accelerating digital transformation solutions and the migration to cloud and hybrid solutions, organisations need an effective security solution to stop the always-evolving threats. In addition, Callahan will help expand Acronis' dedication to nurturing the next group of tech leaders with outreach programs around the world, especially in disadvantaged areas.

"I'm very excited to be joining Acronis at a time when the value of our solutions is rapidly gaining traction in the market resulting in exceptionally fast growth that allows us to continue to invest in solutions to our customers' problems. As the world moves towards a cloud-based digital ecosystem, it's more important than ever to make sure cybersecurity solutions effectively stop threats so security leaders can protect their organisations", said Callahan.

LEVITON

LEADING THE WAY

CNME Editor Mark Forker spoke to **Shady Youssef**, Managing Director, Leviton Middle East, to find out how their diverse portfolio of products and solutions are meeting the increased demand from enterprises for cutting-edge datacenter technology solutions in the new digital economy.

Shady Youssef is one of the most decorated and distinguished IT leaders in the Middle East, and in a compelling interview he discusses the trends driving changes in the datacenter ecosystem, the exponential increase in connected devices – and how Leviton’s products are ensuring they remain a market leader.

It has been well documented how the pandemic has accelerated and driven the demand for larger datacenters in the current digital economy we are immersed in.

Youssef highlighted how they have witnessed an increase in the adoption of online entertainment services at home and connected IoT devices, which has rather inevitably led to this exponential growth in data needs.

According to the Managing Director at Leviton, there has been a particularly rapid growth in the Middle East, but claimed Leviton are very well positioned and poised to cope with that growth.

“If we take a closer look at how things are changing then a perfect illustration of that is the fact there is 7.2 billion people on the planet, however, in 2020, there was 50 billion IoT devices connected to networks, now that’s an incredible example of how connected our society has become. As individuals, we all have a smartphone, a tablet at home, and a wearable device and what all these devices have in common is a hunger for bandwidth and our solutions have got the ability to meet these bandwidth demands.

Youssef added that in relation to trends, they have seen the emergence of a lot of edge datacenters and that has been driven by 5G, IoT and online gaming in addition to Hyper Scale datacenters.

“In 2022, the estimated IP traffic is around 20+ zeta bytes, which really is astronomical, and it is the reason why there is so much demand for more datacenters, not only in the

Middle East, but across the world,” said Youssef.

Driving innovation has been in the DNA of Leviton ever since its inception all the way back in 1906, and it continues to be an industry leader. A good example of that has been its leadership in the datacenter space with the evolution of its Category 8 Copper and industry first Single 24 Fiber MTP Connectivity Solutions.

“We were the first company in the industry to have an end-to-end RJ45 category 8 platform approved. Category 8 is specifically designed for datacenters delivering 25/40G Over Copper where the distances between switches and servers are short, and it is essentially an end-to-end solution for datacenters. We were also the first company in the world to have 24 fiber in a single connector, and what that means for our clients is it gives them the ability to migrate from 10G to 40G and 100G which maximizes their return on investment,” said Youssef.

Interestingly, Youssef said that a key component for success in the datacenter industry isn’t limited only to the product, stressing that vendor capacity to support scalable design and solutions.

“What is important in the datacenter ecosystem today is not the product only, of course the product is important, but the capacity of the vendor to bring scalable solutions is critical. Leviton’s capacity is not just products, we are a huge manufacturer, and we have in-house expertise to understand the customer needs and we are able to tailor the right solution specific for them,” said Youssef.

Youssef outlined the impact of its e2XHD solution and said that



Shady Youssef

Managing Director, Leviton Middle East

its ability to give customers flexibility was a gamechanger.

“The e2XHD is a hybrid datacenter platform for fast deployment, so it is like a plug and



What is important in the datacenter ecosystem today is not only the product, but the capacity of the vendor to understand end-user need and position scalable solutions is critical.”

play solution where everything comes from the factory, and it gives you the possibility to put both fiber and copper on the same chassis. It reduces space and the more you can put in the datacenter enables you to get more clients in terms of co-location, which in turn generates more revenue for your company. Flexibility is so important as scalability that it provides for end-users,” said Youssef.

The Managing Director of Leviton Middle East then turned his attentions to their Zone Cabling and white patch panel technologies.

“We launched Zone Cabling

technology in 2003, but what was missing is the adoption. Zone cables have been designed specifically for the challenges in the data center environment by being smaller and lighter than equivalent conventional cables. Zone cables support 10 Gigabit Ethernet (up to 65 meter permanent link), Power over Ethernet, voice, and broadband video transmissions at frequencies up to 500MHz. As we continue to share our expertise and application driven solutions, we have recently seen an increased demand for zone cables. With everyone aligning to Sustainability and Green Initiatives, white panels are gaining traction in the datacenter and that is part of Leviton product portfolio,” said Youssef.

In terms of its success during the pandemic, Youssef credits a motivated and driven team as a key element in its continued market success across the Middle East.

“At Leviton, we evaluate success both internally and externally, but when you see that your company is well positioned to grow, and your team is energized and going the extra mile to ensure success then that is a key metric of success to us. We really succeeded during the pandemic in terms of delivering major critical infrastructure projects in industry verticals such as healthcare and banking, achieved amidst the backdrop of a volatile and unpredictable climate caused by the COVID19 pandemic. This was a huge achievement for us, and we are looking forward to 2022 with great hope and optimism,” said Youssef. **cime**

EQUINIX

A CATALYST FOR CHANGE

Kamil Al Tawil, Managing Director at Equinix MENA, has penned an exclusive op-ed which outlines the role Equinix's datacenter has played in facilitating cloud transformation across the UAE.



Kamil Al Tawil
Managing Director at Equinix MENA

Over the past few years, every organisation has built, or is in the process of building, their digital strategy to scale and provide world-class experiences for their customers, partners, and employees.

Faced with ever-changing environments, businesses had to move faster and be more agile than ever to advance global digital transformation. Digital leaders are shifting from a reactive posture to more proactive, strategic digital transformation initiatives.

For more than twenty years, Equinix has been helping enterprises to use our trusted platform and see the value of Platform Equinix for deploying their business platforms and applications at scale.

With our leading network and interconnection solutions, we help businesses stay connected and expand connections via a dynamic ecosystem of partners,

networks, and carriers. The more we have expanded, the more forward-looking organisations have gravitated to Equinix to bring together and interconnect their digital infrastructure.

Global in nature, we offer solutions spanning a wide range of industries to help enterprises and service providers achieve success in the digital economy. As a result of the latest digital push, industry leaders are now building and interconnecting digital infrastructure to power their success faster than ever.

Without any doubt, a fast-changing environment requires higher standards for security, adaptability and flexibility in IT operations and support. This is putting the spotlight on digital ecosystems, as they enable enterprises to work closely with service providers, partners, and customers to create efficient end-to-end business flows and deliver positive business outcomes.

As businesses are bracing for the long-term impact of COVID-19, one thing is becoming apparent: the ever-growing importance and



reliance on the cloud.

To stay competitive in today's dynamic business environment, a company's IT infrastructure must deliver faster technology solutions to adapt to changing demands placed on it by both the business and its employees.

Unquestionably, the pandemic is pushing the agenda of cloud adoption to the fore, as it enables businesses to handle workloads in a more flexible and cost-effective way.

For those willing to take one step ahead and move into a hybrid multicloud environment, they can enjoy the best capabilities and cost savings that each cloud service

provider offers, and eventually optimise operational efficiency, security and investments.

This means that a holistic approach to managing diverse cloud environments with the ability to access and harness the best of each solution can give businesses the advantage to speed up their digital journey.

There is no one-cloud-fits-all strategy. Organisations need to be more flexible and adapt expeditiously to the new cloud age. This can only be achieved by having a multi-cloud and hybrid cloud strategy that will allow the delivery of flexibility, scalability, and security.

At Equinix, our role is to enable cloud service providers and cloud leaders to expand their platforms regionally and globally. Equinix Fabric allows companies to interconnect between various cloud providers so they can build a cloud strategy around hybrid cloud and multi-cloud access.

As enterprise demands for

ecosystem access, infrastructure performance and network agility increase, customers are choosing Equinix Fabric as their de facto interconnection standard for connecting their digital infrastructure globally on Platform Equinix.

No longer just for cloud connectivity, Equinix Fabric establishes a globally connected footprint of services that enables digital leaders to transform their businesses as they connect to everything and everyone that matters to their business.

With Equinix Fabric integration built into both Network Edge and Equinix Metal over the trusted Equinix platform, digital leaders can bring together all the right places, partners, and possibilities to create the foundational infrastructure needed to succeed.

As we look toward the future and reflect on how to best serve digital leaders, we have set a course to manage our own growth and next-level digital transformation to best support them. **cnm**



At Equinix, our role is to enable cloud service providers and cloud leaders to expand their platforms regionally and globally.”



EDITOR COLUMN

WHY DOES IT 'META' SO MUCH?

CNME Editor Mark Forker examines the biggest tech story that is dominating the global technology industry this month, and that of course is Microsoft's decision to buy Activision Blizzard for a staggering \$68.7 billion, which it believes will give it the building blocks needed to become a major force and market leader in the metaverse.

When Facebook's much maligned CEO and founder Mark Zuckerberg decided to rebrand the social media behemoth as Meta in October 2021, many cynics believed it was a desperate attempt to deflect criticism away from the company, who's brand in many respects

had become completely toxic.

In 2018, the Federal Trade Commission launched an investigation into Facebook's privacy practices after it was revealed that they allowed Cambridge Analytica to access the personal data of over 50 million of their users. The company has also been subject to antitrust lawsuits in both the United States

and in Europe – and many former employees turned whistleblowers have claimed that the social networking platform is unethical and puts profits ahead of the safety of their end-users.

So, when we all started to hear about the Metaverse following Facebook's high-profile rebranding, there was huge skepticism from many quarters.

Microsoft



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The metaverse will feel like a hybrid of today's online social experiences, sometimes expanded into three dimensions or projected into the physical world."

Satya Nadella
Microsoft CEO

At the time of the announcement, Zuckerberg said he was bringing together all his apps and technologies under the company name Meta in a bid to focus on bringing the metaverse to life and to help people connect, find communities, and grow businesses.

However, over the subsequent months that have passed, it has become

clear that this wasn't just a clever marketing ploy from Zuckerberg, and that the metaverse really is the next big thing. This was further evidenced by Microsoft's \$68.7bn megadeal with Activision Blizzard, which is one of the biggest acquisition deals ever made. Microsoft said the acquisition puts them in a strong position to

capitalise on the opportunities presented by the Metaverse.

Now before we take a closer look at that Microsoft acquisition and its implications for the global technology ecosystem, let's first determine what exactly is the metaverse, and why does it matter?

According to Facebook's supremo he said the metaverse would allow humans to do what they can't do in the physical world.

"The metaverse will feel like a hybrid of today's online social experiences, sometimes expanded into three dimensions or projected into the physical world. It will let you share immersive experiences with other people even when you can't be together — and do things together you couldn't do in the physical world," said Zuckerberg.

Our front cover story in this month's edition of CNME features an interview with ColossalBit CEO Ciro Arianna, a blockchain advisory, investment and NFT company that launched Dubai's first meta restaurant called MetaTerrace earlier this month. He believes that the metaverse will allow users to be 'in' the internet as opposed to on the internet.

"Metaverse is simply the internet, but bigger. The internet facilitates the two-dimensional viewing of images, text, and videos.



When we talk about the metaverse, we're describing both a new platform and a new application type, very similar to how we talked about the web and websites in the early '90s."

Whereas, in the metaverse, our experiences will be three-dimensional, multi-sensory, and more. In other words, the metaverse is like being 'IN' the internet, and not ON the internet like we are used to," said Arianna.

Nike and Adidas are other global brands that have made visible efforts to become what some have labelled as 'metaverse ready', however, the recent acquisition by US tech giant Microsoft has really increased focus on the metaverse and it has triggered the interest of Wall Street bankers looking to gain an early advantage in the new market.

Microsoft's decision to acquire Activision for an eye-watering \$68.7bn is seen by many tech analysts as the foundations that are required for the metaverse.

During a keynote address at Microsoft's Ignite Conference in November 2021, the company's CEO drew comparisons between



the metaverse, and the way people looked at the internet in the 90's.

When we talk about the metaverse, we're describing both a new platform and a new application type, very similar to how we talked about the web and websites in the early '90s. It's no longer just playing a game with friends. You can be in the game with them," said Nadella.

Speaking after the acquisition deal was formally announced, Microsoft's charismatic CEO stressed that



the merger would pave the way for the creation of their metaverse platforms.

“Gaming is the most dynamic and exciting category in entertainment across all platforms today and will play a key role in the development of metaverse platforms. When we think about our vision for what a Metaverse can be, we believe there won’t be a single, centralised metaverse. It shouldn’t be. We need to support many metaverse platforms as well as a robust ecosystem of content

commerce and applications,” said Nadella.

However, despite the media frenzy and fanfare over the acquisition, many tech commentators have claimed that the merger faces real barriers over the coming weeks and months, with reports that US regulators are set to run the rule over the finer details of the megadeal, whilst there has also been accusations of sexual harassment and misconduct at Activision, so it’ll be interesting to see how those

investigations pan out.

We know that in the tech and IT climate there is always buzzwords that dominate conversations, and whilst many of these technology fads fade away, it appears that the metaverse is the real deal and when you see the financial muscle being pulled by some of the world’s most powerful and profitable companies, it’s clear that this new phenomenon represents the future of the internet, and in many cases the very future of how our society will function. **cme**



Philip Andrews
*Vice President and General Manager
of Red Hat CEMEA*

A 'SOURCE' OF INSPIRATION

CNME Editor Mark Forker secured an exclusive interview with industry veteran **Philip Andrews**, Vice President and General Manager of RedHat CEMEA, to explore more about their enterprise open source strategy, how their product portfolio has diversified over the years – and the cultural barriers many businesses face when digitising their operations.

Since their inception in 1993, RedHat has established itself as a global leader when it comes to developing open source software products for the IT ecosystem.

In the current economy there is an increased demand for open-source products as businesses search for greater flexibility and scalability in the digital economy, but as Andrews points out many challenges remain.

“If you look at open source per se, it is an extremely innovative way to generate software. However, there is a big gap between creating innovative software and running an enterprise at five-line reliability day-to-day, in which you have got to ensure that you have security patches, and that your software is managed to a level that allows you to run a large enterprise infrastructure safely,” said Andrews.

As Andrews jokingly pointed out, RedHat is renowned globally for being the ‘Linux guys’, but he outlined how the software company has evolved and expanded, and highlighted the role played by Kubernetes.

“We started out with Linux, and as we transitioned through that we ended up creating platforms for virtualization, which led to Linux spawning the containerization movement. Kubernetes was initially created

by Google on open source, however, Kubernetes in itself is quite basic. We put open shift on top of Kubernetes in a bid to make it a finished product for development, deployment, production, and management. If you put open shift in any hardware platform, private cloud, or public cloud then it gives businesses a layer like an operating environment that allows them to move software backwards and forwards. Linux is now probably only about 50% of our business, and the rest of it is all the other technologies that we are involved in, and that gives you an illustration of how our product portfolio has evolved and diversified,” said Andrews.

The RedHat brand is one of the most trusted and reliable in the IT industry globally, but Andrews declared that one of the primary factors in its sustained growth has been its bang for the buck.



We started out with Linux, and as we transitioned through that we ended up creating platforms for virtualisation, which led to Linux spawning the containerisation movement.”

“The reason we have continued to grow is because we represent great value for money. Businesses request for us to do that curating management support job, primarily because if you are a software business and you need to put your software on top on anything, everything that is different will cost you money to setup support on. If you are sitting on RedHat it is a known quantity, and there are 2 or 3 brands of open source software that have enough critical mass, but you as a software business that needs to support your own product, you do not want to be sitting on completely free unknown, because you have to fix that first, before you can find a bug in your own software,” said Andrews.

Another key factor in RedHat’s success, in addition to trust, is the fact that many businesses do not need to worry about continually retesting.

“There are a lot of components to our success, and undoubtedly one of those is trust, but another is the fact that you don’t need to have to worry about retesting, which is particularly important when it comes to the banking industry for example, because as we know it is heavily regulated, and that legislation from the monetary authorities literally forces people to make sure they have got fully supported environments, whether that be hardware or software. When you have got a core banking platform that is fused with a connectivity platform, and operating environments such as container platforms, or operating systems, then you need to have some pedigree from top to bottom in



The reason we have continued to grow is because we represent great value for money.”

relation to supportability and testing, and the consistency is critical,” said Andrews.

There has been an exponential increase in digital transformation since the onset of the pandemic, but many have struggled with the demands of transformation, and we asked Andrews for his opinion on why many businesses have been unable to adapt when embarking upon digitalization.

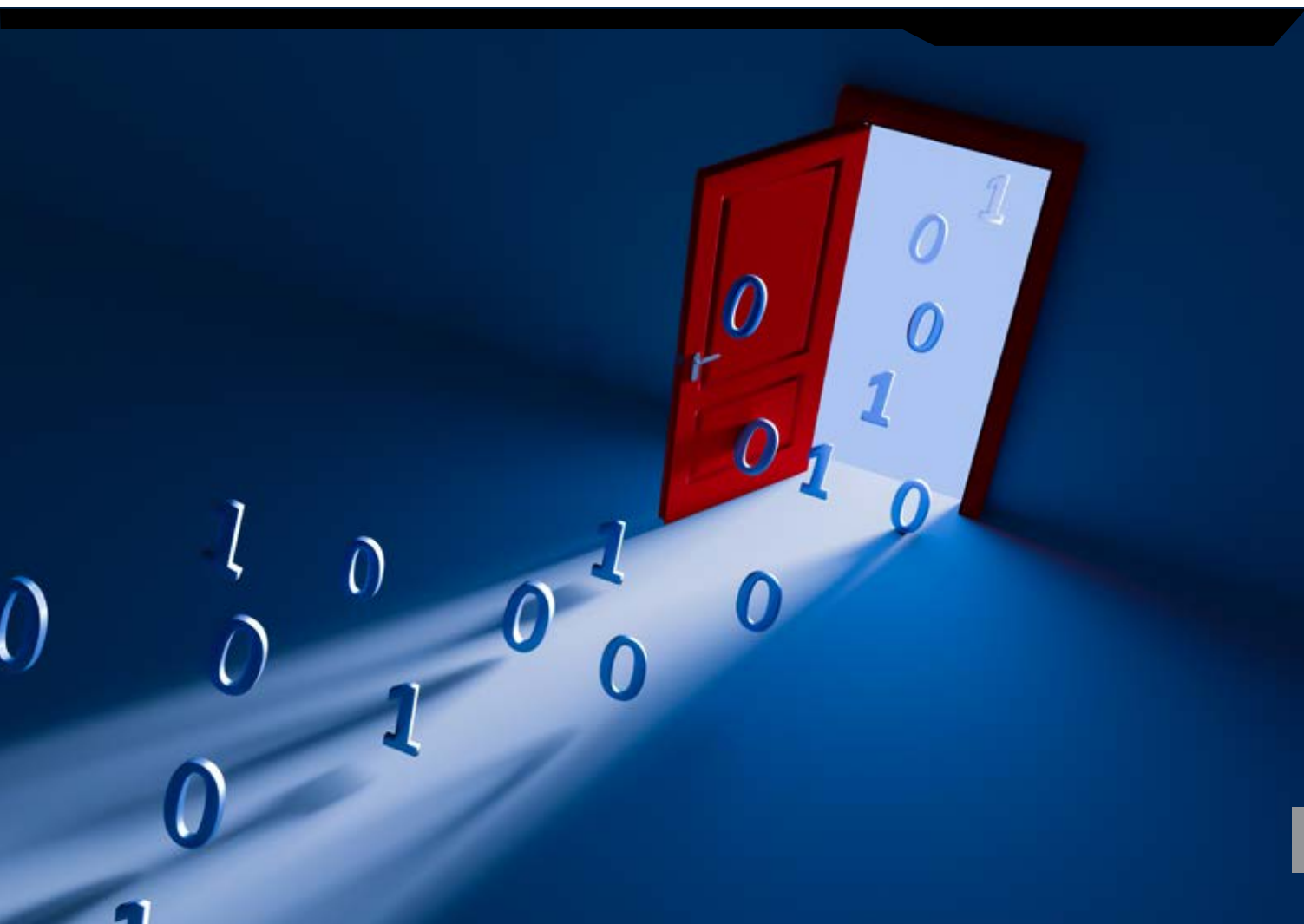
“If you think about what you need to do to digitize your business then you’re going to have to expose your internal systems to your customers on a mobile platform, and somehow you have got to have the capability to build some machinery in the middle of all that, so you can create these innovative programs to access backend systems and programs to deliver banking and delivery services. However, whatever they create around that software will need to access external software, and in many cases will need to link to other suppliers and internal operating environments. For example, you have RedHat in the datacenter, and you have an integration and container platform that you can write new software on, and then you can create an entire innovation hub for connecting your old applications to new applications in the cloud which

allows you to deploy your digital assets on different clouds all over the world, now that’s digitalization,” said Andrews.

Andrews conceded that resistance to change was a major obstacle preventing many enterprises from achieving their digital goals across the Middle East – and stressed the importance of creating internal teams to drive the project.

“If you think about innovation then anyone who wants the change the way an enterprise is run is going to face resistance from those interested in maintaining the status quo, so innovation takes big cultural change, because typically the antibodies come out and try to kill it. Therefore, you’ve got to





try and help train people with new techniques and build multi-cultural and multi-functional teams together to be able to firstly, build viable products, and secondly, be able to use push button architecture to be able to create integration and innovative new programs,” said Andrews.

In addition to this, the visionary IT leader spoke of the critical importance of having ‘digital leaders’ to again drive these new projects.

“We encourage our customers to consider having digital leaders. For example, a lot of our banking clients separated their workforce into groups and provided them with access to systems – and assigned digital leaders to create and assemble

these teams. Fundamentally, what enterprises need to do is help management to understand that doing something different is not an option now if you want to compete. You need to instruct your teams to build what I call digital assets that become products that are managed by people,” said Andrews.

Andrews concluded a wonderful and insightful interview by emphasizing that businesses undertaking their cloud journeys select a partner that has a proven track record of delivering the results that they want to achieve.

“I think that the journey to the cloud in many respects is a journey into the unknown. You need to work with a partner, or

a vendor that you can trust, and that has been there with other companies and done this before. The first thing that we try to determine and establish with our customers is where is the end point that you want to get to? We want customers to have a vision of the end state, and with every project we will move them closer to that. We want to get them to a position where they have an integration strategy and API management, so you can start to add new services that allows you to reuse integrations. You want to make building blocks for whatever may come next, because we know in the current climate you have got to be agile and adaptable to change,” said Andrews. **enme**

ARUBA HPE

WHAT IS TRENDING?

Sherifa Hady, Vice President Channel, Europe Middle East & Africa at Aruba HPE, has outlined what she believes will be the 3 key IT trends to look out for in 2022.

The huge changes brought about by the pandemic were the catalyst for a faster pace of digital transformation across every industry sector. Now it's time for businesses to go from surviving to thriving.

Businesses have been made fully aware of how crucial digital transformation is to their future success and are looking to invest in IT services, support and solutions that match their new needs - distributed workforces, agile IT and all things cloud.

Channel partners who can tap into these trends and offer guidance, services, and

solutions, will be the ones to succeed within this rapidly changing IT landscape.

Here's our pick of the top three trends driving market demand in 2022:

No.1 - Network simplification

Distributed workforces and hybrid-working have led to complexity in IT systems and infrastructure.

Applications and workloads are distributed across data centres and the cloud and at the same time, businesses have pivoted to meet new customer expectations within stores, such as touchless interactions.

The combination of fragmented networks and unyielding demands puts businesses at risk of jeopardising the key benefits of new IoT and cloud technologies.

In 2022, IT teams will need to focus on network simplification, and channel partners can get a step ahead by offering a unified network operating system.

A unified infrastructure, centrally managed via a single point of control, will help IT teams to effectively manage distributed network environments, while also delivering a high-quality user experience within a single architecture.

Network simplification is even more crucial since the pandemic has shrunk many business budgets making it crucial for IT teams to have capacity to manage distributed environments without damaging wider operations.

By offering a unified infrastructure, channel partners can provide customers with new levels of operational simplicity so that IT teams can redirect precious resources to more business-critical areas.

No.2 - Cloud transition support

There is no doubt that the outlook for 2022 is for plenty of cloud. Recent Aruba research found that 83% of IT decision makers were looking to increase their investments in cloud-based networking over the next 12 months and data from Canalys reveals that the channel helped fuel a 33% increase in cloud spend in 2020.

Upgrading to the cloud is a complex journey and there is opportunity for channel partners to step in with new product offerings - and it's important to understand the deep need that customers have for trusted advisors to help them with this transition.

The process can be overwhelming - particularly if customers don't have the skills



In 2022, IT teams will need to focus on network simplification, and channel partners can get a step ahead by offering a unified network operating system."



Sherifa Hady

Vice President Channel, Europe Middle East & Africa at Aruba HPE

to understand the benefits of the cloud or whether it's more cost-effective for them to deploy a hybrid cloud model.

To take full advantage of the increased interest in cloud, channel partners need to differentiate themselves – guiding customers through the process and helping them maximise the benefits of the cloud – perhaps via a support offering.

This means developing a comprehensive cloud-based strategy to ensure they have the best tools and management software available to support customers.

No.3 – Shift to flexible subscription models

The rapid uptake of cloud technologies has prompted a widespread re-think of IT consumption models and we have now moved from hardware-driven revenue to a software-first market – essentially an SaaS-based economy. In 2022, we can expect to see heightened demand for flexible subscription models.

Recent research from Aruba found that customers are becoming more open to exploring flexible models of

consumption. Only 8% of IT decision-makers said they would continue with solely Capex investments in light of the pandemic, compared to 55% who said they would look at SaaS models.

With many key services such as deployment and decommissioning included in subscription offerings, these models give IT staff more time to carry out the more complex, value-add business tasks. It's vital that channel partners broaden their own offerings to reflect this new demand. **cnne**



COLOSSALBIT

ON A DIFFERENT METaverse

CNME Editor Mark Forker managed to secure an exclusive interview with **Ciro Arianna**, CEO of ColossalBit, in a bid to explore what is the metaverse, what impact does he envisage his new restaurant 'MetaTerrace' will have on the Dubai entertainment ecosystem – and the growing popularity in NFTs.

25

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In other words, the metaverse is like being 'IN' the internet, not ON the internet like we are used to.”

We have heard a lot about the Metaverse

in recent months, primarily due to the decision by Mark Zuckerberg to rebrand Facebook as Meta. Can you outline to our readers what exactly the Metaverse is, and will it work?

Metaverse is simply the internet, but bigger. The internet facilitates the two-dimensional viewing of images, text, and videos. Whereas, in the metaverse, our experiences will be three-dimensional, multi-sensory, and more. In

other words, the metaverse is like being IN the internet, not ON the internet like we are used to. From restaurants — where we kicked off a metaverse transformation through 'MetaTerrace' — to real estate, to even weddings, we are witnessing the emergence of digital twins. The metaverse is so dynamic that it's hard to keep track of its expanding applications and the total addressable market.

Like you rightfully noted, after a giant in Facebook made a foray, metaverse has the undivided attention of who's who in the upper echelons of global tech, business, and



Ciro Arianna
CEO of ColossalBit

finance. The Bank of America, Morgan Stanley, and many more Wall Street bankers are subscribing to the possibilities of the metaverse, hoping to gain an early-mover advantage. That said, the adoption rate is higher among FMCG brands that often stay on top of trends. The likes of Nike and Adidas have made visible efforts to become “metaverse-ready”. Adidas, in fact, sold its NFT

range featuring G-Money, Bored Ape Yacht Club (BAYC) and Punks Comic (a Pixel Vault project) recently, raising more than \$23 million in a couple of hours. If anything, the metaverse is now the active economy, and it will remain so for the foreseeable future.

There has been much fanfare about Dubai’s first Metaverse restaurant MetaTerrace,

which has been launched by ColossalBit, again can you tell our readers more about this new futuristic restaurant, is there a demand for this type of ‘experience’ in our experience economy – and what are the technologies fueling the Metaverse?

Every technology — AR, VR, AI, blockchain, NFTs — that can amplify our experiences finds application

in the metaverse. So, it's the confluence of technologies for an experience greater than the sum of its parts.

ColossalBit specifically chose to set up MetaTerrace in the Central Park Towers, Dubai International Financial Centre (DIFC), hoping to closely cater to stakeholders in one of the UAE's leading economic free zones. MetaTerrace will appeal to night-life enthusiasts and thrill-seekers as much as it does the blockchain community. One can meet like-minded individuals and engage in NFT and crypto discussions virtually, by joining MetaTerrace through an app, and in person, by checking in at the establishment in DIFC. We are leveraging multiple technologies and working on creating this hybrid experience.

ColossalBit is not just making waves in the Metaverse, it has also made a series of NFT investments such as securing the pen used by the world's greatest footballer to sign for Napoli. Can you tell us more about the benefits of NFT, why are you an advocate for it – and what does the NFT collaboration with the Italian Wine Crypto Bank entail?

NFTs are digital assets that are tokenized on the blockchain, making them unique and non-interchangeable by design. NFTs accompany smart contracts and digital ledgers, which keep records of ownership, resale and provenance, attesting to the digital asset's authenticity and upholding transparency.



MetaTerrace will appeal to night-life enthusiasts and thrill-seekers as much as it does the blockchain community.”

All the pertinent information is built into the code, making NFTs more advantageous compared to conventional art and collectables.

For starters, NFTs are inclusive, available to all irrespective of financial capabilities. NFTs are not subject to regulations of centralized bodies, thus largely independent. And thanks to blockchain's intrinsic transparency, trust, and ease of access cut across geographical lines, NFTs are highly beneficial compared to their physical counterparts. From an artist/owner's standpoint, NFTs allow broader marketing, retention of intellectual property rights, and royalties whenever they are resold in secondary markets. Such multi-fold value encouraged us to raise awareness and blaze an NFT trail in Dubai, leading to our winning bid of USD 56,000 for the world's first Augmented Reality NFT Mural "Future NFT Dubai". The mural is now

live at DIFC. We also secured the infamous S.T. Dupont pen that football legend Diego Maradona used in 1984 when he signed for Italian side Napoli for USD 26,000.

In partnership with the Italian Wine Crypto Bank, we launched the world's first NFT-linked fine dining and art experience, on the occasion of the 12th Italian Cuisine and Wines World Summit. Named 'Ciao Bella', the unique NFT experience gave 30 diners a peek into the future of dining. The joint venture with the Italian Wine Crypto Bank was part of our efforts to bring industry stakeholders together for impactful synergies. We will continue to pursue excellence in the NFT and metaverse space, adding to Dubai's leadership in both.

Can you tell us more about your plans to scale in the Metaverse, and what other investments are you looking to make in the NFT space?

ColossalBit has been actively investing in NFTs and early-stage ventures. For example, we have invested in Kaloscope, which is poised to solve one of the main pain points in the NFT space: The inability to view, manage, and share your NFT experience with others. Kaloscope, with its app-based gamified experience and AR/VR/XR capabilities, is bringing a unique value proposition to the domain. Likewise, we are currently focused on a few other value-based NFT and metaverse ventures. **cnme**

SOLARWINDS

RAGE AGAINST THE MACHINE

CNME Editor Mark Forker spoke to **Sascha Giese**, Head Geek at SolarWinds, to find out why he believes the implementation of AI and Machine Learning can help companies manage their data and become more secure, despite the resistance from some quarters over the use and cost of the technology.



Sascha Giese
Head Geek at SolarWinds

Giese is a hugely respected figure within the IT community and SolarWinds is a global leader when it comes to equipping enterprises with the solutions and tools needed to effectively run their IT infrastructure and environments.

We know that over the last 18 months there has been seismic changes in the landscape of the IT domain, not only in the Middle East, but globally – as a direct consequence of the COVID-19 pandemic. However, as we have now become adjusted to the complexities of our current climate, the question now is what does the future look like over the next 12 months?

We know that data volumes have grown exponentially, and that trend is expected to grow exponentially over the next 3–5 years. However, with many businesses struggling to get a grip on managing their data volume, we asked Giese what he believed companies needed to do to become better at managing their data.

“There are many different strategies that companies can adopt to better manage their data volume, but essentially it all comes down to their budget. For many companies there is still a lot of uncertainty regarding the future due to the ongoing issues with the pandemic, and that has resulted in many budgets being reduced significantly. Some companies are attempting to be as cost neutral as possible and are embracing data-ops theories, which allows you to merge different teams working together to get a better handle on the massive amount of data being collected, and that makes it easier for a data consumer to engage with their tools and solutions, and that is typically cost neutral. The other way to manage your data could be through the implementation of AI and Machine Learning,” said Giese.

Whilst Giese is a strong advocate for the implementation of AI into the IT infrastructure and operations of businesses, he does concede

that the technology comes at a cost, however, he believes companies should adopt it to be able to meet the challenges they face in the digital economy.

“On a very basic level it is a calculation, but you need to determine how many people you need for a specific task and examine how much does that cost. For example, data analysts don’t come cheap and if you need between 30–50 of them every year, how much does that cost you as a business? On the other hand, you might have a machine learning or AI system that again doesn’t come cheap, but at some stage there is this break-even point, where the calculation goes into one direction and at that point it makes sense to start going down the route of AI implementation,” said Giese.

A report recently commissioned by Gartner indicated that more and more governments are spending on AI, but in Europe there remained a high-level of skepticism amongst the workforce in relation to the integration of AI into everyday operations. Giese believes the main difference between the attitudes between the two markets, is that the Middle East is more ‘open’.

“I think the Middle East is a little bit more open because the whole topic of IT is a lot younger compared to Europe. If you think about automation there was a huge amount of resistance towards that from network administrators because people thought it was going to

take their job, and there were trust issues as to what the script was doing because they hadn’t written it themselves. 5% of AI are self-written, and everything else is bought off the shelf, so you never know who created those things, so there is a huge trust issue. The famous saying is if I want to do something right then I am going to have to do it myself and I think this mindset applies to a lot of IT personnel when it comes to AI,” said Giese.

Security is a huge challenge in the IT ecosystem, and Giese made the argument for the introduction of AI in terms of enabling companies to be better protected from cyber threats.

“We know that large teams in a security operations center are tasked with the responsibility of managing huge swathes of data and they need to compare all this data to make sense of it, now we know that humans can do this, but they can not do it as quickly as a machine. A machine can understand thousands of different performance indicators and metrics in a much shorter time frame. Machine Learning essentially means that someone was teaching a machine something, so we basically tell a machine if this and this happens to do this, and that creates an if and then scenario. If something happens then a machine is much faster in terms of applying actions than you or me, or any security analyst. There are many, many use cases for AI but its implementation in your operations are key to bolster your security,” said Giese. **crime**



There are many different strategies that companies can adopt to better manage their data volume, but essentially it all comes down to their budget.”

SAFE SECURITY

SAFE HEALTHCARE

Saket Modi, Co-Founder and CEO at Safe Security, has penned an in-depth op-ed which examines why the healthcare sector has been the target of so many data breaches - and offers a remedy as to what the sector can do to fightback.

For more than the past decade, healthcare has been the biggest target of data breaches. The total average cost has increased to \$9.23 million in 2021 from \$7.13 million the previous year, demonstrating a 29.5% rise.

Cyberattacks in healthcare are unfortunately not limited to their financial, regulatory, and reputational impact since they have a direct consequence on lives.

An Alabama-based resident claimed negligent homicide for the death of her infant because the hospital's fetal monitors were inaccessible as a result of a ransomware attack, leaving its systems locked for eight days. For instance, if a hacker tampers with CT or MRI scans, it could also lead to incorrect

medical procedures/surgeries, incomplete diagnoses, and reduced emergency or urgent care.

In such a scenario, the healthcare sector needs to quickly improve its cyber risk management. This is possible only if they move away from the traditional reactive and point-in-time approach in cybersecurity to adopt a predictive and measurable method instead.

Adopting a proactive strategy includes knowing the organisation's breach-likelihood in real-time and its financial impact on the organisation.

The current state of cybersecurity in healthcare:

The NotPetya attack happened five years ago. Since then, has much changed in the healthcare sector?

The cost of ransomware alone has grown by 1094% since 2015. However, there are three key areas where this sector falls short:

1. Accidental and/or malicious insider threats: The HIMSS Cybersecurity survey

2020 states that 89% of initial compromise in hospitals is still through emails and more than half (57%) of the cyberattacks in healthcare begin via trusted insiders.

2. Third-party are unsecured often with unrestricted access:

Over 1600 insurers at an average share PHI with hospitals. Hospitals also deal with a large number of medical devices suppliers, vendors for equipment, medication, repairs, and more, each third party is likely to be an entry point.

3. Medical device security: There will be ~50 billion medical devices by 2028, with 15 - 20 IoMT in each hospital room, creating a vast digital attack surface. Interestingly, while one aspect is digitising faster than it can be secured, 83% of medical imaging devices are still legacy systems too old to receive software updates.

4. The lack of a designated security team: 87% of healthcare IT security leaders work without the right personnel, and three in four hospitals are operating without a designated security leader.

Can predictive analytics in cybersecurity help the healthcare sector?

Financial services organisations predict the likelihood of loans being repaid using the financial history of the applicant, their previous loans, salary/income, and credit score.

Similarly, OTT platforms use predictive analytics and algorithms to improve their suggestions. The medical fraternity too relies on prediction models to improve diagnostics, identify risk groups, and improve patient care. Why not use the same analytical approach to predict the possibility of a breach rather than detecting cyberattacks after they happen and reacting to them?



Cyberattacks in healthcare are unfortunately not limited to their financial, regulatory, and reputational impact since they have a direct consequence on lives."

Saket Modi
Co-Founder and CEO at Safe Security

The use of predictive technology and models such as the Bayesian Network to predict cyber breaches makes this possible.

Enterprise cyber risk is a product of the probability of a breach happening and its business consequence. This probability is termed the “breach-likelihood” of the organisation and can be calculated at the most granular level.

Starting from the breach-likelihood of each medical device in every room, department-wise employee threats, to vendors or suppliers of equipment and pharmaceuticals, Electronic Medical Records directory on the cloud and the security

posture of each cloud asset – the possibilities are endless. Each prediction makes the organisation that much more prepared to predict and therefore mitigate breaches.

Once an organisation knows what to expect, it can focus energies on fixing what really matters rather than carrying out ad-hoc activities which only add to a sense of security rather than real cybersecurity.

How does breach-likelihood help the healthcare sector?

Breach likelihood in the healthcare sector can be a gamechanger in giving the visibility that is missing today. Similar to doctors arriving at a diagnosis after carrying

out due diligence, sieving noise from actual symptoms, and aggregating all relevant information to a central database, cyber risk quantification can segregate information from noise.

As healthcare organisations ramp up cybersecurity infrastructure, they need to remember that all cybersecurity services, products and processes implemented in their cyber risk ecosystem need to communicate with each other.

In a scenario where tens of cybersecurity services and tools are performing well in silos, but together fail to generate a comprehensive and prioritised solution, breach-likelihood is can create one score to drive cybersecurity strategy. **cyme**

EXPO 2020

BRINGING EXPO TO THE WORLD

CNME Editor Mark Forker secured an exclusive interview with **Rehan Asad**, Chief Programme Officer at EXPO 2020, in a bid to explore and find out how they were able to deliver the world's greatest virtual event, which has thus far garnered participation from over 50 million people from 192 countries.

Rehad Asad has enjoyed a remarkable and distinguished career in the IT and telecommunications sector. In his previous roles he has worked for several large multinationals, which includes US telecoms behemoth AT&T, Siemens, and Nokia, and prior to becoming Chief Programme Officer at EXPO 2020, Asad was tasked with the responsibility of being a senior executive at the UN's World Food Programme.

Asad is an extremely humble individual, but one of his greatest professional accomplishments must be the prominent role he has played

in overseeing the execution of EXPO's Virtual Tour, which has dazzled millions from all over the world, and has lived up to its billing as the 'world's greatest show'.

Many tech commentators believed that the virtual offering at EXPO 2020 was developed amidst the global COVID-19 pandemic, but as Asad pointed out that couldn't be further from the truth, revealing that the vision of the Dubai leadership was always to deliver an incredible digital augmented experience.

"I think the perception from some quarters is that we ramped up the virtual aspect of EXPO

Rehan Asad,
Chief Programme Officer at EXPO 2020



إكسبو 2020 EXPO 2020

دبي، الإمارات العربية المتحدة

DUBAI, UNITED ARAB EMIRATES



2020 due to the pandemic, but the reality is that this journey began in 2012. In the original bidding document that was submitted by Dubai, there were 15 promises outlined in the application. One of the promises made to the world by His Highness Sheikh Mohammed bin Rashid Al Maktoum was that Dubai would not only host the world's best-ever physically EXPO, but it would also host the greatest ever digital augmented EXPO. He didn't use the word virtual, instead he said digital augmented EXPO, so the virtual component of EXPO 2020 was in the DNA of the planning all the way back in 2012, and that is where our journey commenced, which once again illustrates the incredible forward thinking and vision of our leaders," said Asad.

The global COVID-19 pandemic delayed the opening of EXPO 2020 by 12 months, and with many restrictions still in place in certain countries there were concerns over the viability for some to travel to the show, however, as Asad reiterated it was always a key objective that they were able to bring EXPO 2020 to people all over world.

"Her Excellency Reem Al Hashmi told us that are guiding principles needed to be a commitment to not only bringing the world to EXPO, but to also bring EXPO to the world, but the question was how do you do that? Accessibility was another fundamental pillar for us, and that informed our strategic planning and decision-making, as we really wanted to bring the world's greatest show to children all over the world. However, to do that, we needed



We just want everybody regardless of where they are based in the world to have the opportunity to explore EXPO."

to architect our experiences into three segments. The first component was 'explore' – the second element was 'entertainment' – and the final piece of this immersive experience jigsaw was AR/VR and gaming," said Asad.

Partnerships with technology giants like Google and Microsoft have helped solidify and enhance the experiences provided by EXPO 2020, which have been evidenced further by the number of downloads some of their applications have enjoyed globally.

"We have created a Minecraft version of what we have established physically at EXPO 2020, and we engaged in this partnership with Bulwark and Microsoft, and this has incredibly become the 2nd most downloaded game in the world. We have also launched an application called 'Dubai EXPO Explorer' which gives end-users a full 360 view of EXPO – and this project was conducted in partnership with Google. It truly is such a beautiful application, and I am so humbled and proud to be part of it," said Asad.

As aforementioned above, accessibility and bringing the world's greatest show to Africa, Latin America, Europe,



essentially anywhere in the world is what drives Asad and his dedicated team on a day-to-day basis.

"We just want everybody regardless of where they are based in the world to have the opportunity to explore EXPO. We want to provide access to all the entertainment we have on offer, and those that are interested in AR/VR and gaming can engage with the inter-site to enjoy the experience on the platform that they want. That is the fundamental architecture of our site, and ultimately, we are driven by our desire to deliver incredible experiences to everyone engaging with us," said Asad.

The Chief Programme Officer at EXPO 2020 explained in more detail about how they were able to leverage the power of



disruptive technologies to really put themselves in a position to reach that global audience.

“We knew that taking human behavior into our design was critical to the success of the project. We worked with Google to develop the 360 element on the explore segment of the project, but in relation to entertainment we used encoding, because we felt that if we wanted to have a global audience then we needed to take into consideration that broadband speeds, devices, and the resolution are not one size fits all, so we needed to really look at our network infrastructure,” said Asad.

We all know the incredible power of social media, however, many governments across the world believe that social media companies have too much

power, especially when it comes to determining the outcome of elections and have called for ‘Big Tech’ to be subject to more strict regulations in a bid to thwart its influence.

However, despite the many corrosive elements that certainly exist within social media, it’s hard to argue against its impact when promoting a campaign, or delivering a message, or in this case EXPO 2020.

Asad revealed that if they truly wanted to bring EXPO to the rest of the world then it was imperative that they got all the prominent social media platforms onboard with them.

“A critical part of our success has been our collaboration with our social media partners. We have worked extensively with them because whether

you like it or not, there are 7 billion people in the world, 3 billion of which are connected to the internet, with almost 2.8 billion people using social media platforms. We engaged with Twitter, Instagram, Facebook, Snapchat, TikTok, to ensure we delivered on our primary goal, which was to truly connect and engage with a global audience, and if you’re serious about doing that then you need to work with social media platforms to do that successfully,” said Asad.

What fuels the EXPO 2020 virtual tour is ‘experiences’ and Asad revealed that they are using data in real-time from the show to make these ‘experiences’ even better.

“Four days a week we host LIVE guided tours of EXPO, but we examined the data and discovered that over the weekend people were not really tuning in to the content in the evening time. However, it was clear that from Mon-Thurs people were engaging with the content between 7-9 every evening after finishing work. We want to offer quality content and a LIVE EXPO tour, so we started to look at what content was being engaged with the most, from what part of the world, and at what time. We then adapted our programming accordingly to meet the demand at that time, and that rather inevitably drives better experiences. Every decision we make at EXPO 2020 is driven by data and we make intelligent use of that to fuel better experiences for all who engage and participate with us, and that is our ultimate mission,” said Asad. **cnme**

CALLSIGN

REBUILDING DIGITAL TRUST

Saaed Ahmad, Managing Director, Middle East and North Africa at Callsign, is pleading with businesses to place a greater emphasis on rebuilding digital trust if they want to maintain long-term consumer connections in the new digital economy.

A digital revolution is currently underway, affecting nations, businesses, and individuals alike. Our virtual life is becoming more and more our 'real' life. Our digital interactions and transactions are increasingly at the heart of the new normal and this, in turn, is powering the new economy.

We've observed a tremendous increase in online interactions and transactions in recent months, and this trend is expected to continue. According to a McKinsey study, customers' intent to buy

online post-COVID-19 increased by 45 percent.

But, as businesses and customers migrate online, so did bad actors. Consumers and organisations alike are at risk from digital fraudsters that capitalise on online interactions. With online scams increasing exponentially, it's more important than ever for digital identification to change.

Our data demonstrates that consumer trust in our digital world has vanished and – rightly or wrongly brands – are being blamed. Businesses must re-build digital trust to

Saaed Ahmad

Managing Director, Middle East and North Africa at Callsign



prosper in the increasingly competitive digital market.

Understanding Digital Identity and Digital Trust

Digital trust is essential for building and maintaining robust and long-term consumer connections. Customers and businesses aren't sure who they are interacting with online, whether communication channels are secure and if the technology being used can be trusted to keep them safe. Without trust, economies won't work, commercial and governments services will no longer be trusted. When consumers have confidence, they spend money, participate in online services and interact online. If they know their identity is verified, authenticated and they can authorise transactions, it greatly enhances loyalty, and growth in online services.

Digital trust is therefore underpinned by digital identity, and identity must be at the heart of all digital transactions. However, digital identity as we currently know it is broken.

We can't always be sure that the person or brand we're communicating with online is who they say they are. In the physical world, we recognise people based on their features such as their face, voice, body language, and the way they walk. It's far more difficult to prove one's identity online, and it's much easier for fraudsters to claim to be someone they're not.

Digital identity is all the information relating to a consumer's identity that is left behind by their online

interactions. For example, when consumers log into a bank, they identify themselves with an email and password, the device they used, and the time and location.

Authentication mechanisms from the physical world were digitised rather than re-designed for the digital environment when we went online. For example, snapping a photo of your passport to confirm your identity. The problem is that digital processes are insecure, are often inefficient and don't necessarily preserve consumer's privacy. Passwords can be stolen, and users forget them.



Digital trust is essential for building and maintaining robust and long-term consumer connections.”

Fraud, bots, social engineering, and malware are symptoms of a more significant problem: digital identity is broken, and online verification of real users is now failing. This has exacerbated the problem, as we no longer have faith in technology and processes to provide a safe digital environment — digital trust is eroding.

According to our research, more than a third of customers – 48%, believe that identification is at the root of the fraud problem and that people should confirm their

identity when utilising services. These consumer concerns underscore the importance of businesses recognising the need to restore digital trust and fix digital identity.

Securing Digital Identities

The solution lies in re-thinking how we fight fraud and identify people online. Current methods address these issues by actively detecting fraud. The problem with this strategy is that a fraudster using stolen credentials seems to be a legitimate user accessing accounts or making transactions. Instead, fraud solutions seeking to identify only legitimate users prevent fraud automatically and positively.

Layering behavioural biometrics on threat detection, device, and location data is the most proven approach to do this. Users can be identified with 99.999 % accuracy using a simple phone swipe, typing pressure, mouse motions, or device orientations. Organisations eliminate one point of failure in the authentication process and achieve two-factor authentication with minimal friction.

Putting your clients' digital identities at the heart of your business is the digital equivalent of putting them first. It aids in the delivery of smooth online experiences, secure, privacy-preserving experiences, and achieving this right leads to increased consumer loyalty.

As more people go online, this will become increasingly vital. Organisations that succeed digitally will recognise identity is part of every online interaction. **crme**

KROHNE

TIME FOR ACTION

Frank Janssens, Vice President, KROHNE Middle East and Africa, has written an exclusive op-ed for January's edition of CNME, in which he takes a much closer look at what businesses can really do to reduce their carbon footprint and contribute to decarbonisation over the next 12 months, and beyond, and argues its times for business leaders to get serious about climate change.

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Amidst Abu Dhabi Sustainability Week, it seems an apt time to reflect a little on decarbonisation and the broader ESG dialogue.

The fourth quarter of 2021 has tried to refocus the world on its own health. We are fortunate here in the UAE to have taken a progressive leadership role in handling the pandemic to the point where we now operate in one of the most

normal environments I have experienced.

Whilst safety and medical care procedures, free vaccination, testing and digital data availability via next-level applications like Al Hosn remain at the forefront of our minds, the UAE is shoulder to shoulder with the best in the world.

Face to face conferences have been back for some time, video calls have become optional yet again and major events such as Expo2020 Dubai have been operating without fuss, showcasing to the world what normal looks like from here on in.

COP26, the UN climate change conference, was followed by ADIPEC the world's most influential meeting place for the oil and gas industry. With

decarbonisation and energy transition very much on the industry agenda, where can we make genuine changes for the immediate future without negatively impacting business?

This is the issue on every business leader's mind today. In fact, I wondered if it was possible to apply learnings from an inclusive workplace discussion and I had chance to catch at ADIPEC to improve the ESG arena. There are three key themes to consider:

Leadership behaviour

Do we as leaders genuinely care about sustainability? I am heavily invested in industrial processes and infrastructure which lend themselves very well to this kind of thinking.

On the other hand, I am also a father and have a deep responsibility to advocate for positive change for the next



Do we as leaders genuinely care about sustainability? I am heavily invested in industrial processes and infrastructure which lend themselves very well to this kind of thinking,”



Frank Janssens
Vice President, KROHNE Middle East and Africa

generations to come. Our company mottos are “measure the facts” and, in terms of sustainability, we play a role in helping our customers in precise measurement across their operations so they can optimise and make informed decisions around reducing, reusing and recycling resources.

Part of our engineering and process advisory role is in understanding issues and recommending efficient solutions, through which we continue to play a small but growing part in the incremental changes underway.

A company like KROHNE is upping its efforts to hold our supply chain as accountable as we are in responsible environmental, sustainable and governance-related choices. Our most recent Sustainability Report (<https://krohne.com/en/>

company/group/quality-health-and-safety-and-environment) points to our ongoing efforts in this area, as we are well aware of our role place in the sustainability chain to make a positive change.

Focus on the lived experience

By bringing to life the small, subtle changes around the office and our global operations we can make a difference. While we are fortunate to be regionally headquartered in a forward-looking society such as the UAE, we need to bring greener ways of working to life around the office too. Can we use less water and electricity in our everyday operations?

Local GCC companies such as DEWA, ADDC, SWCC, NEOM, are strong educators in this space and provide excellent case studies and proofpoints. It

is through alchemical public-private partnership that we can combine vision and investment with expertise in innovative measurement and process optimisations solutions.

The end results are greater than the sum of their parts, offering exponential positive outcomes that will likely achieve far more than was originally intended. The important thing is to bring the vision to life and showcase the benefits.

Be the most sustainable person you can be

Beyond workplace behaviours, this final thought can be applied across every part of our lives – do you make greener choices where you can? Most buildings and communities in the UAE offer some level of recycling facility but do we make full use of this?

Where we have buildings with huge windows and natural light streaming in, are we turning off our electric lights? What do we do with our plastic PET bottles? The choices are there to be made and they can be increasingly complicated.

The decision to purchase a fully electric car over a traditional combustion engine or hybrid vehicle opens a discussion around battery technology and product lifecycle overall, when perhaps not owning a vehicle at all is the “greener” option for your family and the topic rolls on.

As a final reflective takeaway I would ask: Does our behaviour and our consequent choices reflect this pearl of wisdom? **enme**

ENTRUST

A SOLUTION PROVIDER YOU CAN 'TRUST'

CNME Editor Mark Forker secured an exclusive interview with **Hamid Qureshi**, Regional Sales Director at Entrust, to find out more about the key challenges that are facing businesses attempting to deploy and successfully manage PKI in their operating models.

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You need to have the right skilled resources to do all the pre-work before you implement a PKI, which allows you to understand all the processes, deploy it and then manage it going forward."

The Entrust 2021 Global PKI and IoT Trends study found that IT professionals are continuing to see a lack of clear ownership and an absence of sufficient resources and skills as the top challenges in managing and deploy Public Key Infrastructure (PKI) within their IT environments.

To find out more, not only in relation to the importance of PKI, but also to hear what the remedy for businesses seeking to adopt and integrate PKI into their business is, we spoke to Hamid Qureshi, Regional Sales Director at Entrust.

Qureshi has enjoyed a distinguished career in the IT industry in the Middle East – and is well placed to highlight the importance of PKI.

In a compelling interview, he started off the interview by declaring that PKI was no longer a nice to have, stressing it was now a necessity in the ever evolving and complex digital economy. However, he did concede that a major problem was determining who has ownership.

"PKI is being adopted more, quite simply because it is a necessity. It's not necessarily the sexiest thing in the cybersecurity world, but it is critically important because it underpins so much of an organisation's security posture. However, I think the biggest challenge that organisations face is who owns this, as organisations are struggling to determine where exactly this ownership lies," said Qureshi.

Talent acquisition is a major issue in the IT ecosystem, not just in the Middle East, but globally.



Hamid Qureshi
Regional Sales Director at Entrust

The emergence of disruptive technologies has created new opportunities, but like all technology if it is not harnessed properly by skilled professionals then you will be unable to yield the benefits from it, and the same applies to PKI.

Qureshi cited the report conducted by Entrust which found that 84% of respondents did not have the resources or skills to execute their PKI objectives.

"In addition to the ownership question, the next challenge facing enterprises in relation to PKI is insufficient resources, and that became evident in the study that we had with 84% of

respondents highlighting the issues they have faced with inadequate resources. You need to have the right skilled resources to do all the pre-work before you implement a PKI, which allows you to understand all the processes, deploy it and then manage it going forward. It is also very closely linked to the next challenge we saw from our research which was based around insufficient skills around PKI," said Qureshi.

Businesses are acutely aware that PKI is a necessity, and rather inevitably they want to deploy it ASAP, but as Qureshi points out that rush to deploy does not lend itself towards a

successful project delivery.

"You're not going to do something unless you really need to do it, and we know that in the new digital economy enterprises are facing a whole series of challenges and they are going to decide what to prioritise now, and what do they need to implement later. What we are finding is organisations are discovering they need PKI and immediately seek to go and buy a PKI solution, but we think that's the wrong approach. What we say to companies who have reached out to us for a PKI solution is we're not going to try to sell you anything, instead we want to understand what they want to do, and establish if they have a strategy," said Qureshi.

According to Qureshi, strategy is the key component in ensuring that businesses deploy PKI in an effective and efficient manner.

"Strategy is fundamental because that strategy will allow you to identify where should that ownership lie, is there a natural home, is there an area that you can invest in terms of processes and people to help drive that strategy. All the technology is going to do is implement the strategy that you have, it's going to do what you tell it to do. The most important thing is to understand what you want the PKI to do, and what are you trying to protect? So, it is imperative for enterprises to understand the strategy first and how the deployment of the PKI fits into your overall business strategy," said Qureshi.

Patience is a virtue, and that is especially the case when dealing



with those under pressure to deploy a PKI solution. However, Qureshi stressed the need for a consultative approach when dealing with prospective customers.

“We do face resistance at times because the nature of the situation is a lot of companies are under severe pressure in relation to time constraints, but the real problem is if a vendor just sells them a product to make a quick buck then they are not really helping the client with their issue, and in many cases will have made their situation considerably worse, and ultimately you’re going to end up with a failed solution. No professional wants to be associated with a failed project, or no vendor like Entrust that prides itself on being a solutions provider wants to be involved with a failed project. It is much better to take a strong stand and take a consultative

approach to getting where your client needs to get to. We know you are under pressure, but it will be far more damaging to buy a solution that will not meet your needs in the long-run,” said Qureshi.

Over the last 18 months the IT ecosystem has witnessed some devastating cyberattacks, and the economic and brand consequences of those attacks have left permanent scars on those effected, and it only serves to reinforce the importance of having a resilient and strong security portfolio to protect your business.

One of the other key capabilities of PKI is its ability to enable security for critical digital initiatives such as cloud technology.

“What you have within an organisation is a series of communications between people and machines, but what you must be able to do is verify the

identity and the credentials of who you are interacting with to ensure that the reason they are interacting with you is legitimate and valid. Essentially, a PKI system gives you that framework and allows you to build an underlying foundation in a secure, expedient, and efficient manner, which also enables you to establish the veracity of who or what is interacting with who or what – and determine whether that is happening for the right reasons. We know that as we become more immersed in a digital world much of it is done without human interaction, and as businesses transition to the cloud you are interacting with businesses that you don’t have any control over, so you do need to be able to protect yourself and be able to revoke authorisation as required – and having a PKI solution enables you to be much, much more secure,” concluded Qureshi. **crme**

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LET'S GET
STARTED!



Patrick Smith
CTO, EMEA at Pure Storage



PURE STORAGE

MAKE OR BREAK

Patrick Smith, CTO, EMEA at Pure Storage, has given his tech predictions for 2022, a year in which he believes we will see an increase in tension between the realists and idealists within enterprises when it comes to the cloud – and **James Petter**, GM International at Pure Storage outlines the trends he feels will determine business success in 2022.

The past two years have been about survival and tentative exploration. The need to accommodate remote work drove regional businesses to the cloud in unheard-of volumes.

But the requirement for business continuity was soon followed by the evaluation of other technologies that would allow greater innovation both during the crisis and as/when it passes.

Now that regional enterprises realise that operations are still ongoing, we expect to see innovation resume with greater confidence than ever, and it is within the context of that tentative optimism that we make our 2022 predictions.



James Petter
GM International at Pure Storage

The internal politics of the dominant cloud

While cloud computing has proved itself an effective springboard for innovation, I believe a rift will emerge in organisations between realists and idealists.

Amid the regional economic recovery, the attraction of the cloud is clear — it is a great place to stage proofs of concept safely and cheaply and become an early adopter. But it is also a source of friction within organisations as the keen adopters and the cloud realists butt heads.

These tensions will increase throughout 2022 as the CIO and CEO rush to move everything to the cloud in an attempt not to be left behind. Those with a more balanced view on the

cloud will find themselves at odds with the ‘move everything to the cloud’ mentality of the CIO and CEO.

Cloud realists, who tend to be those lower down the food chain, risk being labelled non-believers and may be marginalised if they do not conform to the cloud enthusiasts’ way of thinking.



If you’re a CIO and you can’t answer the question: ‘When are we going to the cloud?’, the likelihood is that you’ll be fired,”

Kubernetes will live on, despite the rise of low-code and no-code

As “the driving force” behind the sweeping changes seen in the way organisations build and run applications, the popularity of Kubernetes and containers will continue to rise heading into 2022, despite the parallel uptick in popularity of low-code and no-code development.

Organisations expect the impossible from their data — they want faster insights on bigger datasets for a lower cost. The temptation is to think that no-code cloud based solutions can provide the answers, but this underestimates Kubernetes and container technology.

Supporting this, 2022 will be a time for growth in the number of start-ups in the K8s ecosystem, with emerging businesses offering particular focus on the areas of security and stack observability.

However, a major challenge for organisations that are keen to embrace Kubernetes will continue to be the prevailing skills gap across the region.

CIOs that fail to unite container and cloud strategies will find themselves on thin ice

If you’re a CIO and you can’t answer the question: ‘When are we going to the cloud?’, the likelihood is that you’ll be fired. The scale of adoption of cloud technology has been astronomical over the past few years but will increasingly focus on exploiting the benefits of adopting containers in 2022.

The widespread reallocation of IT budgets from the maintenance of systems — which is now largely

undertaken, at least in part, by cloud service providers — to the pursuit of innovation means regional CIOs must formulate roadmaps for how they can bring containers and the cloud together in 2022 to promote agility and scalability.

They need to remember that fast adoption isn't everything; the foundations need to be solid. Plans need to be forward-looking and build in flexibility because change in this space is guaranteed — be it cloud provider or K8s distribution or both. Modern applications run on modern data services where K8s is the foundation; enterprises want to win with data and the CIO holds the key to this victory."

Make or Break - Trends that will Determine Business Success in 2022

With uncertainty rife going into 2021 (and for most part of the year), flexibility and agility were organisational priorities. As such, adoption of hybrid work as the de-facto operating model and a significant pivot towards more as-a-service technology investments were two key trends we witnessed across the region.

Based on the learnings of the past year, here are a few trends that I believe will have a significant impact on businesses heading into 2022.

Failure to retain top talent will cripple businesses:

As the worst of the pandemic subsides, and life starts returning to normal, businesses may be faced with a new crisis: employee attrition. The

technology industry is not immune to the great resignation that hit the US this summer.

This is a global trend that may continue well into 2022 as employees voluntarily reassess their workplace options and change their priorities.

To set themselves apart and retain their employees, the industry may see businesses starting to shift travel and expenses (T&E) budgets towards higher salary levels as well as offering flexibility on benefits with an even greater lens on diversity and inclusion.

Currently, the high costs of recruitment and high salaries being thrown around are unsustainable — there needs to be a levelling out, and this will be a key focus for businesses in 2022.

Businesses will increasingly embrace a new 'invest to grow' mindset:

The pandemic has dramatically

changed how business leaders view IT spend. Over the last 18-24 months, businesses witnessed a power struggle between the CEO's growth perspective and the CFO's pullback perspective.

With businesses under huge duress, the CFO came to the fore and dominated. However, we're now at a tipping point with the power shift more finely balanced between the two — and the CEO winning back the conversation.

In 2022 we'll increasingly see businesses investing in new ways of delivering their products or services, while retaining the overall value of their brand. For example, there will be exponential growth in areas such as as-a-service (aaS), managed services, subscriptions and the cloud, as businesses look to partner with specialists for their 'IT plumbing' so all the focus and attention can go towards optimising the brand





and their products.

Businesses are shifting their psyche — increasingly wanting hosters and integrators to do everything for them instead of depending on a private cloud run by their own people.

This will keep the CFOs happy because they won't have the same cost implications as before and the CEOs happy as they're getting that growth trajectory that they're looking for.

Brands will increasingly cross the chasm between the old and new world, while trying to get their heads and procurement models around subscription models. By my reckoning, we might be 30% further forward in terms of pre-pandemic but there's still a lot more legacy thinking and technology to shift. It will happen though, as the stock market continues to hammer any businesses that still buy in a legacy way.



The myopic view of business success being based purely on measuring how much money comes in and goes out will become a thing of the past.”

CEOs must become more decisive and IT-literate than they've ever been:

As a result of the pandemic, CEOs will become more authoritative in their decision making. And this is true across all industries.

The risk of making a mistake right now is very damaging for any business, so they'll need a decisive leader in place to allow them to come out of this period stronger than ever.

To make these decisions effectively, it's critical for CEOs to have far more depth and breadth of understanding of their company, as well as the data they have and how they can manage it to the extent that data must be considered a balance sheet asset. This requires CEOs to be far more IT-literate than they have ever been.

As a result, we'll see them leaning on and working more closely with the CTO and Chief Data Officer (CDO) to fully grasp and understand the value of their technology and data.

This applies especially to areas such as containers and Kubernetes to ensure businesses can fully embrace automation, mobility, and agility, and be

dynamic in the way data moves throughout their business.

Businesses will face dire consequences if they don't comply with ESG regulations:

As a society, we all have a responsibility to do more to use less power and create less of a carbon footprint. This is not just a trend — the planet is dying because we're doing bad things to it.

The myopic view of business success being based purely on measuring how much money comes in and goes out will become a thing of the past. In 2022, companies must be valued by their commitment to ESG.

As such, we'll see governments putting restrictions or applying greater tax on companies that don't comply with certain ESG regulations. ESG will become a balance sheet item where companies must declare the amount of carbon they're producing and whether they're offsetting it sufficiently. Data will be key to this.

If companies want to be more efficient, they will need to mine their data to identify patterns and trends, which will inform them of where they're causing the most damage so they can get to work on fixing it.

The rapid changes society has undergone over the past 18 months, present an opportunity for forward-focused businesses. Companies that focus on their employees, make the right technology investments and prioritise ESG will stand to gain a decisive edge, not just in 2022, but for years to come. **cime**

Ed Tucker*Co-Founder of fast-payment startup Timbl***TIMBL**

TRUST THE SCIENCE

Ed Tucker, Co-Founder of fast-payment startup Timbl, has urged on the hospitality sector across the UAE to embrace and harness the capabilities presented by 'data science' in a bid to reimagine and transform their business model in the new and at times complex and fast-moving digital economy.

Tucker has penned an in-depth and forensic op-ed, which examines in detail the need for the F&B sector to implement data in their long-term strategy and vision for their business. Tucker believes it is no longer an option to consider investing in data science, bluntly put, if they fail to do so, then they won't survive in an increasingly competitive market driven by 'experiences'.

More than two years of the pandemic has acted as a lightning



rod for business. Smarter solutions to ride the waves of disruption are emerging everywhere. And the hospitality industry is not immune.

Lockdown measures hit restaurant and bar operators hard and in turn they have had to think on their feet to maintain a semblance of their pre-pandemic revenue streams. Bouncing back is critical to the sector and the UAE F&B scene is has been well prepared thanks to a consistent demand for a wide range of

quality leisure experiences and strong leadership around COVID policies.

The UAE is equally fortunate to have entrepreneurial innovators providing well timed solutions such as digital menus and order-at-table experiences. As a beacon of innovation, the UAE has embedded tenets that will encourage the use of technology and smarter thinking in the nation's long-term visions, such as "UAE Next 50". Transformation across all sectors is vital to these long-term visions and the creation of sustainable models for business and society.

However, many F&B operators



We live in a hyper-connected digital world and businesses have no choice but to innovate."

need to plan for life after COVID if they are to align with the nation's sustainable growth. Sure, there will be opportunities to shave some costs to protect or even improve the bottom line, but this won't help business growth. Their core foundation for success is to plan for sustainable growth. That can only be achieved by seeking market penetration through competitive advantage, product differentiation and targeted marketing. And the key to all this is data.

This comes as a wake-up call to F&B operators as they fall into that very small group of businesses who have managed to get by without knowing too much

about their customers. Now, operators are at a crossroad; whether to maintain and survive by cutting costs or to thrive by investing in data science.

We live in a hyper-connected digital world and businesses have no choice but to innovate. That means reimagining their businesses in order to prosper through long term sustainable growth. As far back as 2015, PA Consulting's advice was to "embed your organisation's data capability in the business operating model to become a successful data-driven company."

Everything can be supercharged through data science. For example, operator spending on marketing will evolve from "spray & pray" to a completely measured approach and getting the right message to the right customers on the right channel. Data means we can get our message timing right with tailored call-to-actions and tone of voice. A true one-to-one targeted marketing approach.

Here's the thing: the value of their data grows over time, creating a powerful source of management insight and competitive advantage. Imagine if F&B operators could delight customers with the awesomeness of a fast payments experience while capturing customers' identity.

Imagine if all customer and transaction data could be visualised in real time so that can be quickly understood and acted on.

Timbl has now provided hundreds of data points that allow our restaurant partners to gain a wide range of benefits –including personalised



customer experiences, enhanced business processes, maximising table occupancy and staff retention. Restaurants are now able to track everything from the methods in which their staff receive tips to what drink and meal combinations specific customers like to order. Personalised experiences – from payments to marketing communications – ensure customer retention and growth.

For those who haven't started, the journey to data rich operations can start now. The first step is clarity on the strategy. Are they looking to streamline operations and reduce operating costs or looking for a competitive

advantage and revenue growth? Data is crucial to defining and executing such strategies.

Secondly, operators need to align their strategy with their capability. Do the business leaders understand the power of data and who should have access to what data throughout the organisation? Are the leaders ultimately prepared to set goals based on the measurability that their unique data points will provide? Awareness is key and that applies to everyone in the organisation being data ready.

And lastly, F&B operators need to complete a gap analysis to assess their systems and infrastructure to fully understand

if they are ready for data rich resources. If they're not, then they need to define what they need in order to turn data into results.

Our experience tells us that operators are willing but often caught in a "you first" mode. The winners will be those who make data the beating heart of their operations quickly to build sustainable business models that line up with the vision of the UAE. This requires strategic partnerships with companies like Timbl who have data in their DNA. The opportunity for growth, personalisation and awesome experiences is immense. But the journey to data needs to start now. **enme**



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1

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authentication
and electronic
signature

2

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and protection against
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3

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