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computer news middle east

WHERE TECHNOLOGY MEANS BUSINESS

ISSUE 380 | MARCH 2024
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BLUEPRINTS FOR A SMARTER FUTURE

CNME spoke to the leadership team at Terminus International, who explained how the Chinese AIoT leader is on a mission to leverage their technologies to transform the world we live in.

LENOVO
CTO

HPE ARUBA NETWORKING
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The event attracted over 215,000 people, with organisers claiming it was the most attended technology event in the entire world."

TAKING A 'LEAP'

The sheer scale of the digital transformation underway across the KSA is quite staggering.

The KSA's Vision 2030 program serves as the key foundation in their ambitious economic reformation.

The world's leading technology companies have pledged their unwavering commitment to enable Saudi Arabia to achieve their overall goal, which is to make the country a hub for tourism, innovation, technological advancement, and entrepreneurship.

A snapshot of the endeavour being undertaken across the KSA was perfectly illustrated by the scale of LEAP.

The technology conference was held earlier this month from March 4-7th in Riyadh.

The event attracted over 215,000 people, with organisers claiming it was the most attended technology event in the entire world.

It has become the fastest growing conference in the fast-growing economy in the world.

CNME were present at LEAP, and whilst the event was undoubtedly a huge success, it would be remiss of me not to touch on the logistical issues experienced by all who attended the event over the four days.

Organisers have developed a world-class event, but more effort needs to be made in 2025, to avoid the lengthy delays getting in and out of the exhibition centre.

At LEAP, we spoke to a whole host of technology companies, but in this month's edition of March, we featured our interviews with Lenovo and HPE Aruba Networking.

Alain Carpentier and Sherifa Hady are the dynamic duo driving HPE Aruba Networking's growth across the KSA – and in a compelling interview they disclosed how they are leveraging their vast portfolio of products and solutions to meet the demands of their Saudi customers.

Some businesses have disclosed previously that they have found it difficult to manage the expectations of customers in Saudi, whilst also meeting their demands, but Hady praised the mindset of business leaders in Saudi Arabia.

Hady said, "I would like to have more customers that have the mindset of our KSA customers. Our Saudi customers get it, they are very intellectual, knowledgeable, and they want state-of-the-art, best-in-class technologies. Their desire to be the best in every single thing they do, and to be the best in the world is something that at HPE Aruba networking we both appreciate, and find inspiring."

You can find the full interview on pages 10-13.

Ashley Woodbridge is the CTO of the Infrastructure Solutions Group, META, at Lenovo, and in a fascinating exchange he highlighted how Lenovo are pursuing a hybrid approach when it comes to the way they deliver AI to their large base of customers across the META region.

CNME also spoke to his colleague Shashank Sharma, Executive Director and General Manager, META, Lenovo Intelligent Devices Group, who highlighted the importance of computing power to really yield the benefits of Generative AI.

You can catch those pair of interviews on pages 14-17.

On the front cover of March's edition of CNME was a blockbuster of an interview with Chinese AIoT leader Terminus Group.

Terminus Group created the concept of AIoT and have become the market incumbent in that space domestically.

They were also the AI partner of EXPO 2020, but they have now decided to expand their operations internationally, and have launched Terminus International, which will be headquartered in Dubai.

We spoke to Marcel Sebastian Ionescu, Vice President of Products and Commercialisation at Terminus International, Abdurrahman Najjar, Sales SVP – META region at Terminus International, and Dr. Ling Shao, Chief Scientist and President of Terminus International who have been tasked with driving the company's success across the META region.

They believe that the suite of solutions and products Terminus have can meet the emerging demands of the META marketplace, and are confident they can replicate the success they have enjoyed in China on a global scale.

In addition to this, CNME also spoke to Founder and CEO Victor AI, and Kangping Shi, CFO of Terminus Group, who articulated the company's journey, financial status, and vision for the future.

It's a brilliant story, and we have no doubt that we are going to hear more and more from Terminus International over the coming years as the adoption of AI continues to skyrocket.

You can check out the bumper front cover feature on pages 26-33.

We also have interviews with Bloomberg, GHC, Oman Housing Bank and Cisco, and all the coverage from our CIO Leadership Awards, which were held at the end of February.

Enjoy March's edition of CNME.

Mark Forker
Editor

The Unified IT Management Platform



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News

CNME rounds up the biggest regional and global developments in enterprise technology, which includes the news that VAST Data has partnered with NVIDIA on a new data platform architecture, Dataiku has launched a new Generative AI cost monitoring solution - and AVEVA has appointed Joanna Mainguy as their new Sustainability Accelerator Director.

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16 Ashley Woodbridge, CTO Infrastructure Solutions Group META, at Lenovo, has outlined how the company is going to focus on delivering a 'hybrid AI' experience for their customers.

20 Raid Mohamed Backer Al-Lawati, AGM - Head of IT & Digital at Oman Housing Bank, details the cloud transformation journey that the company undertook in partnership with Cloud4C.

35 Gary Kazantsev, Head of Quant Technology Strategy at Bloomberg LP, highlights how Generative AI is completely transforming the traditional financial landscape globally.

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CISCO

FOUNDER, CPI
 Dominic De Sousa
 (1959-2015)

Published by **CPI**

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Publication licensed by
 Dubai Production City, DCCA
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Tel: +971 4 5682993

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

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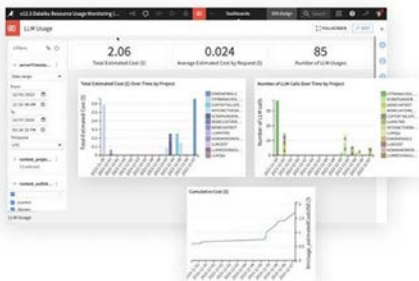
Dataiku launches Generative AI cost monitoring solution

In the rapidly advancing landscape of Generative AI, the rush to harness the power of large language models (LLMs) has led to a challenge for widespread enterprise adoption: the comprehensive understanding and management of associated costs, and Dataiku has responded to the challenge.

LLM Cost Guard enables effective tracing and monitoring of enterprise LLM usage to better anticipate and control Generative AI costs.

It provides visibility into costs attributed to specific applications, providers, and users for a fine-grained understanding of which LLM use cases are driving what costs. LLM Cost Guard is a feature within the Dataiku LLM Mesh, which provides a secure LLM gateway and allows customers to be agnostic when it comes to LLM providers, including integration of LLMs provided by OpenAI, Microsoft Azure, Amazon Web Services, Google Cloud Platform, Databricks, Anthropic, AI21 Labs, and Cohere.

"AI is a critical strategy for every enterprise's innovation and growth, yet we constantly hear business leaders' concerns not only about the potential costs of Generative AI projects but the inherent variability of that cost," said Florian Douetteau, co-founder and CEO, Dataiku. "With LLM Cost Guard, we're aiming to demystify these expenses."



Cisco bolsters investments in Saudi Arabia and supports digital transformation



At LEAP 2024, Cisco announced new strategic initiatives in Saudi Arabia, building on the company's long-standing presence in the Kingdom and reaffirming the commitment to its customers and partners.

Based on the Regional Headquarters license granted by the Ministry of Investment, Cisco unveiled the establishing of a new regional head office in Riyadh, and the launch of a new phase of its Country Digital Acceleration (CDA) Program.

Reem Asaad, Vice President for

Cisco Middle East, Türkiye, Africa, Romania, and the Commonwealth of Independent States (CIS), commented: "Cisco's ongoing investments in Saudi Arabia's growing digital economy contribute to the rapid integration of technology across all sectors to drive innovation, enhance efficiency, and foster economic growth. We're excited to continue our pivotal role in supporting the country's vision to accelerate a digital, sustainable, and inclusive future."

EVIQ and TAWAL forge alliance for Saudi Arabia's Electric Mobility

In a groundbreaking move to shape the future of electric mobility in the Kingdom, EVIQ, the pioneering electric vehicle infrastructure company, has inked a transformative partnership with TAWAL, the forefront integrated ICT infrastructure provider.

The announcement of this partnership took place at LEAP 2024, in the presence of Mohammad Bakr Gazzaz, CEO of EVIQ and Eng. Mohammed Alhakhani, CEO of TAWAL.

Upon signing the agreement, Eng. Mohammed Alhakhani, CEO of TAWAL, expressed his enthusiasm: "We are



(L-R) Mohammad Bakr Gazzaz, CEO of EVIQ and Eng. Mohammed Alhakhani, CEO of TAWAL.

thrilled to embark on this innovative journey with EVIQ, aligning our strengths to contribute to the evolution of electric mobility in Saudi Arabia. TAWAL's commitment to advanced ICT solutions finds a powerful synergy with EVIQ's vision, and together, we are set to redefine the landscape of sustainable transportation infrastructure in the Kingdom".

VAST Data, with NVIDIA, unveils new data platform architecture

VAST Data, the AI data platform

company, recently unveiled a new AI cloud architecture designed to deliver unprecedented levels of performance, quality of service, zero-trust security and space/cost/power efficiency for the AI factory.

Building on NVIDIA BlueField-3 data processing unit (DPU) technology, VAST Data's parallel system architecture makes it possible to disaggregate the entirety of VAST's operating system natively into AI computing machinery, transforming supercomputers into AI data engines.

"We're extremely proud to partner with NVIDIA to help industrialise AI computing", said Jeff Denworth, co-founder at VAST Data. "This new



Jeff Denworth, co-founder at VAST Data.

architecture is the perfect showcase to express the parallelism of the VAST Data Platform. With NVIDIA BlueField-3 DPUs, we can now realise the full potential of our vision for disaggregated data centres that we've been working toward since the company was founded".

AVEVA announces Joanna Mainguy as new sustainability accelerator director

AVEVA, a global leader in industrial

software, driving digital transformation and sustainability, recently announced the appointment of Joanna Mainguy as Sustainability Accelerator Director. Joanna's appointment testifies to AVEVA's dedication to strengthening the company's sustainability impact in line with advancing global climate commitments.

As Sustainability Accelerator Director, Joanna will focus exclusively on sustainability solutions and strategies to accelerate innovation that will help AVEVA's customers to achieve their net-zero targets. She will look at how AVEVA leverages current market and customer analysis to inform its in-house development team, advise on new



Joanna Mainguy, Sustainability Accelerator Director, AVEVA.

customer collaborations and on how AVEVA should grow its partnership network and M&A pipeline to reflect its sustainability priorities.

Commenting on her appointment, Joanna Mainguy, Sustainability Accelerator Director, AVEVA, said: "I am delighted to join AVEVA at such a pivotal time in its sustainability innovation and growth trajectory. I look forward to working with AVEVA teams and customers to continue to grow the sustainability benefits that can be achieved with AVEVA software. I am also keen to work closely with our partners to drive further positive change at scale, since we know addressing the climate crisis will continue to require expanded collaboration".

aiXplain expands its frontier into the Middle East, accelerating AI accessibility and innovation

aiXplain, the world leader in

empowering developers and business users with Artificial Intelligence (AI) technologies, recently announced its strategic entry into the Middle East during the Leap 2024 technology conference.

aiXplain's entry comes at a time where the Middle East has seen a rapid adoption of AI as both governments and businesses in the region recognize the global move towards AI and advanced technologies, understanding the need to either adapt or fall behind.

In line with its vision, aiXplain has appointed Husni Khuffash as Managing Director for the Middle East and North Africa (MENA) region.

Khuffash brings three decades of business development expertise with



Husni Khuffash, Managing Director MENA, aiXplain.

companies like Google, Microsoft, EY, and others, with a special focus on the MENA region's energy and government sectors. His educational background in law and an Executive MBA equips him with a unique blend of skills for driving growth, innovation, and client satisfaction.

Husni's role at aiXplain will leverage his vast experience to tailor AI solutions for the MENA market, fostering sustainable success and expanding aiXplain's footprint.

Juniper Networks Expands Partner Ecosystem Leveraging AI-Native Networking Solutions

Juniper Networks, a leader in AI-Native Networking, has announced the next evolution of its global Juniper Partner Advantage Program. The new elements will help partners leverage AI for IT Operations (AIOps) to offer managed networking services for increased reliability, agility and reach on the path toward unlocking new revenue opportunities and equip customers with solutions that enable a consistent experience-first approach across their networking infrastructure, a press release said.

As part of the JPA Program expansion, Juniper has introduced a new Partner Assured designation to provide partners who have rich Juniper practices with third-party validation from Information Security Systems International of their capabilities across the customer lifecycle. By equipping partners with market leading AIOps and verification of superior customer outcomes and lower operational costs, Juniper's Partner Assured designation helps to accelerate partner profitability.

"By offering world-class partner programs alongside a suite of innovative and secure AI-Native Networking solutions, Juniper sets the foundation for partners to unleash their value, speed and scale," said Gordon Mackintosh, Group Vice President, Juniper Partner Organization at Juniper Networks.

Through the Juniper Partner Advantage Program and its innovative AI-Native Networking Platform, Juniper is committed to helping partners maximize performance, productivity, and profitability. Coming off the heels of 233 percent growth in participants YoY, Juniper has expanded its existing Champions Program to bring more expertise to participating partners through a robust extended sales force delivering strong Juniper acumen to support their customers. Together with its partners, Juniper is delivering speed, scale and value to its customers, ultimately making every connection count.

Qualys receives Dubai Electronic Security Centre certification



Hadi Jaafarawi, Managing Director for the Middle East at Qualys.

Qualys, Inc., a pioneer and leading provider of disruptive cloud-based IT, security, and compliance solutions, recently announced it has received cloud service provider (CSP) certification from the Dubai Electronic Security Centre (DESC).

The certification confirms that Qualys' cloud services, within the certification scope, operate according to DESC's CSP Security Standard

requirements. This allows Qualys to extend its cloud-native services to a range of public-sector organisations in the Emirate of Dubai.

"Our DESC CSP certification underscores the robust cloud security and compliance features of the Qualys Enterprise TruRisk Platform. It enables Qualys to stand out in government sectors and various industries across the region, offering vital solutions for mitigating cybersecurity risks and safeguarding crucial data", stated Hadi Jaafarawi, managing director for the Middle East at Qualys. "We are proud to collaborate with Dubai's government entities as a trusted cloud security provider. We look forward to helping organisations across the region reduce their cyber risk".

Everdome advances Metaverse Connectivity: Unifying creator-led spaces with digital environments

The Dubai-based metaverse company

Everdome has unveiled a significant leap forward in the next evolution of the internet.

Their new development unites creator-led destinations, enabling seamless transition between different metaverse worlds built by Everdome and their community of digital pioneers.

Interoperability and travel across metaverse worlds are key elements to the successful evolution of the internet's next iteration. According to the World Economic Forum's governance track, interoperability in the metaverse can present enormous opportunities and value for frictionless experiences, development and economies.

Creator-led content is also a key element of successful metaverse mass adoption. Everdome's latest development



integrates Spaces with City HQ, granting public access to a multitude of locations and smooth travel between them within the digital world.

Everdome CEO Jeremy Lopez states, "Transition between metaverse worlds remains a key challenge for the metaverse environment as a whole - and our step to unite creator experiences with Everdome's core HQ building is a vital first move as we pioneer user experience of movement across a digital landscape."

F5 adds automated penetration testing to strengthen multicloud application security capabilities



Kara Sprague, EVP and Chief Product Officer at F5.

F5 announced it has added new automated reconnaissance and penetration testing capabilities into F5 Distributed Cloud Services.

These capabilities, enabled via the acquisition of Heyhack, make it easier

for customers to protect the exploding number of applications and APIs across today's multicloud environments.

With these new capabilities, F5 Distributed Cloud Services customers can easily scan for and discover vulnerabilities impacting their web applications. Based on the automated scan results, F5 Distributed Cloud Services will recommend web application firewall rules and other appropriate remediations. This technology further strengthens F5's multicloud application security portfolio, enabling customers to automate vulnerability discovery.

"Companies face significant challenges of complexity, cost, and risk in today's highly distributed,

multicloud environments. Heyhack complements F5's broad portfolio of application and API protection solutions with automated penetration testing that simplifies discovery of application vulnerabilities", said Kara Sprague, EVP and Chief Product Officer at F5. "This powerful solution is another example of how F5 is making it significantly easier for customers to secure any app, any API, anywhere".

F5 continues to introduce new automated capabilities into its Distributed Cloud Services. Previously, F5 announced the industry's most comprehensive and AI-ready API security solution with the addition of vulnerability detection and observability capabilities in application development processes.

Metra Group announces VAP for GCC countries with Secure AIOps company TechBridge

Metra Group, a leading provider of information technologies and solutions, has recently entered an Agreement of Value-Added Partnership with TechBridge Consultancy Services LLP – an Indian company pioneering in AI based Data Centre Operations & Cyber Security powered through advanced analytics and machine learnings/ artificial intelligence (AI) capabilities.

TechBridge provides open platform with native integrations, for heterogeneous infrastructures such as data centre projects in the state-of-the-art DC's, smart cities, safe cities, power sector, telecom, etc cutting across verticals. The global network monitoring market size was valued at \$3.04 billion in 2022 & is projected to grow from \$3.34 billion in 2023 to \$6.97 billion by 2030 and global network security market size was valued at \$21.43 billion in 2022 & is projected to grow from \$23.83 billion in 2023 to \$54.37 billion by 2030.



(L-R) Mr. Puneet Kaura VP Sales and Operations – Aquila Clouds, Mr Saurabh Agarwal – Founder and CEO of Tech-Bridge, Mr. Maan Al Saleh VP Sales and Business Development – Aquila Clouds & Mr. Adib Rajji, VP Vendor Strategy and Business Development of Metra Group.

Mr. Saurabh Agarwal – Founder and CEO of TechBridge, who was present at the occasion explained about how AI and Automation is helping the Data Centre operations to be achieving Zero Touch & Zero Trust goals, with the power of Gen-AI is helping the Digital Transformation and Security buttressed with confidence.

He also cautioned on the risk of data and information overload and further explained about how TechBridge platforms make sense of such large set of data and provide the pointed/condensed AI based decision support to deliver the comprehensive value with secured & confident environment.

HPE ARUBA NETWORKING

ON A MISSION OF SIMPLIFICATION

CNME Editor Mark Forker secured an exclusive joint-interview with **Alain Carpentier**, Senior Vice President of Worldwide Sales at HPE Aruba Networking, and **Sherifa Hady**, Vice President and General Manager, EMEA Sales at HPE Aruba Networking, at LEAP 2024 in Riyadh, to find out how HPE Aruba Networking is leveraging its technologies to help drive the digital transformation agenda of the KSA across industry verticals such as hospitality and healthcare.

LEAP 2024 was undoubtedly one of the biggest technology conferences in the world.

Over 200,000 people attended the 4-day ICT symposium in Riyadh.

HPE Aruba Networking have been investing heavily into the KSA over the last 5 years, and are now the market incumbent when it comes to the vertical of hospitality.

The broad portfolio of solutions and technologies they have to offer ensures they are going to be a key partner in helping the KSA achieve their digital transformation objectives.

CNME managed to speak to Alain Carpentier and Sherifa Hady, who together are driving Aruba's phenomenal growth not only in Saudi Arabia, but across the Middle East in general.

Hady kickstarted our conversation by highlighting that at LEAP, HPE Aruba Networking was demonstrating use-cases and tangible business outcomes, as opposed to just

showcasing products.

"At LEAP 2024, HPE Aruba Networking are showcasing our solutions in edge-to-cloud, data and AI. However, we don't want to just highlight our hardware, software and infrastructure technology, but more importantly what our business outcomes are, and how we are leveraging our technology to help our customers. At LEAP, from a HPE Aruba Networking perspective, we're helping large public venues deliver better experiences. We're demonstrating and replicating a stadium here at our stand at LEAP, which illustrates the experience a fan should encounter when visiting a major stadium that has HPE Aruba technologies powering it. Our objective is to showcase our solutions, but not from a product perspective, but instead

from a business outcomes perspective," said Hady.

As the Senior Vice President of Worldwide Sales, it's hardly surprising that Alain Carpentier spends a lot of time on the road.

However, as Carpentier pointed out due to the sheer scale of what is occurring in the KSA at the minute, he spends a lot of his time in the Kingdom.

"You can ask my wife, and she'll confirm that I spend a lot of time in Saudi Arabia, because to be quite frank the sheer scale of what is happening here is completely unique to the rest of the world. The scale, investments and vision is staggering. Saudi Arabia is currently trying to combine the digital world with the physical world and they are pursuing mega construction projects under the realm of building smarter



Our strategy has been based on the simplification of customer infrastructure with a single pane of glass across different projects."



cities. We're organised by verticals, and during LEAP I did a tour of the venue and every provider is attempting to showcase their use-cases by domain, but this is what we've been doing for the last 5 years. We are very present in verticals such as retail, hospitality, healthcare and large public venues to name a few. IoT is a big domain, and over the last few days we've had a number of conversations with customers and partners in terms of how we can help to develop IoT across the Kingdom," said Carpentier.

Carpentier added that they now have huge momentum in the region due to the sheer volume of investment they have made in the KSA.

"We had a big event in Barcelona called HPE Discover 2023 with Atmosphere, and we decided to bring three top customers, and one of them was from the Red Sea project in the KSA. They explained how HPE Aruba Networking technologies were helping them with this Giga project and their overall digitalisation efforts. We have invested heavily in the KSA, and really ramped up our investments

a number of years ago, and we're now really starting to see the outcomes of those investments," said Carpentier.

Hady highlighted their unwavering commitment to the KSA, by highlighting an announcement they made at LEAP 2023, in relation to their manufacturing processes.

"Last year at LEAP, we announced that we were going to start to produce some of our market-leading servers here in the KSA, and that only served to further illustrate our commitment to the region. This year at LEAP, we are showcasing the first 'Saudi made' servers and they are available to order now," said Hady.

The leadership of the KSA want to diversify their economy and make it a hub of innovation, technology and entrepreneurship, and they are in a rush to get there.

For some managing the expectations of some customers, whilst also meeting the demands can be somewhat challenging. However, according to Hady, she wished she had more customers with the mindset of those in the KSA.

"I would like to have more customers that have the mindset of our KSA customers. Our Saudi customers get it, they are very intellectual, knowledgeable, and they want state-of-the-art, best-in-class technologies. Their desire to be the best in every single thing they do, and to be the best in the world is something that at HPE Aruba networking we both appreciate, and find inspiring. They are in a rush,

and they are focused, but we love that, and undoubtedly I'd love to have more customers like I have in the KSA," said Hady.

Carpentier moved the dial of the conversation towards some of the sticking points that have the potential of slowing down transformation projects, pointing out issues around the global supply chain that are still prevalent.

"I think the stress point in the KSA is all about the scale and pace of the transformation. They are worried about the supply chain, and they want to be reassured that they will always be served, because as we know the industry has had challenges in relation to the global supply chain over the last few years. They are also mindful about the people they need to support their development, there is a lack of engineers and a skills shortage, but that's where we come in," said Carpentier.

Carpentier declared that the Aruba Central software and management platform they have built over the last few years was designed to simplify their lives.

"At the end of the day, the connectivity is the first milestone to do the rest, if you are not able to connect people, or connect IoT devices then nothing can happen, so what we are fixing with our customers today is to simplify this layer, which is essentially to have less people involved in the support and delivery process. Our strategy has been based on the simplification of their infrastructure with



a single pane of glass across different projects. Whereas our market rivals have different solutions depending on the size of each project, ours simplifies the process as ultimately our customers want to find the easiest way to go fast," said Carpentier.

Sherifa Hady has enjoyed an exceptional career in an industry where when she started out female representation in leadership roles was extremely low.

Progress has been made,

but there is still work to do, but when asked what her advice would be to aspiring young Saudi women looking to forge a career in IT, she said they had to perform and not be afraid to be vocal.

"I've been very fortunate to have great managers who have believed in me during my career, and it really is extremely important to have that support. My advice to women not just in the KSA, but everywhere is the fact that we need to be more

vocal about what we want, sometimes we shy away from it, and we wait for someone else to tell us what our next step is. I think we need to own our own careers, and we need to be vocal about what we want, and whilst we might not be able to get it tomorrow, we need to be focused on where the next step is. We have to perform, perform, and perform, that is key. We have no right to ask for anything extra unless we are performing. I'm very impressed at the progress that has been made in the KSA over the years, it really is very encouraging, another tangible example of the change happening here," said Hady.

Carpentier concluded a great conversation by reinforcing their standing in the hospitality sector in the KSA, and stated that he believes they can replicate the success they have enjoyed in the education space in North America in the KSA.

"Hospitality is obviously a big focus for Saudi Arabia because they are attempting to make this a hotspot for tourism, and you can see that through the sheer number of hotels under construction. We decided to put a bet on hospitality around 5 years ago, and we have a local team on the ground driving our vision. We're winning a lot of hotel contracts, and it's a bit confidential at the minute, but we are heavily involved in a large number of Giga projects based around hospitality all over

the country. Traditionally, another industry vertical we've been very successful in is around higher education in the United States, and there is no reason why we can't replicate that success here in the KSA. We're also working with high-tech companies, and we work with Saudi

Aramco, as they are trying to become more high-tech, and are looking to digitalise their operations, and we have a great relationship with them. Healthcare is another huge domain for us, and we see huge opportunities within that space here in the KSA," concluded Carpentier. enme



IoT is a big domain, and over the last few days we've had a number of conversations with customers and partners in terms of how we can help to develop IoT across the Kingdom."



LENOVO

TIME TO COMPUTE

Shashank Sharma, Executive Director & General Manager, META, Lenovo Intelligent Device Group spoke to Mark Forker, Editor at CNME, concerning their LEAP 2024 portfolio, new AI offerings, why Lenovo remains 100% channel focused in order to maintain the phenomenal momentum they are enjoying across the META region – and the importance of computing power to yield the benefits of Generative AI.

Could you give our readers an overview of Lenovo's PC business, in terms of your product portfolio and some of the solutions you are showcasing at LEAP?

Our PC business is, currently, about circa 55% of our overall business worldwide and it has allowed us to service many customers around the world.

We started in the Middle East and Africa in 2005, which was a bit later than other brands but as of 2023, we have become the number one PC brand in the MEA region.

This success has allowed us to focus our efforts through the channel on the consumer and commercial needs of our customers.

For us, LEAP is about giving the consumer the best solution to their computing requirements, which is an ever-changing factor.

We can think of no better



example that the recent surge of growth within the trend of Artificial Intelligence.

The AI evolution within the last 12-18 months has



The AI evolution within the last 12-18 months has meant that the customer's first priority, on both client and infrastructure sides, is to have computing capability to use either generative AI, or predictive AI."

meant that the customer's first priority, on both client and infrastructure sides, is to have computing capability to use either generative AI, or predictive AI.

Our job as a solution provider is to give them the correct solutions that match their computing environment, whilst remaining software agnostic due to our key partners in this space.

In terms of that AI offering, what is it about Lenovo that really differentiates you from your market rivals?

When you set out to make an AI-capable offering, you must first invest heavily in AI.

Over the next three years Lenovo is investing over \$1 billion in AI capabilities from Edge to the Cloud, it's all about getting these capabilities in the hands of our customers.

Secondly, AI capabilities will keep increasing over the coming years both on the front end, which is on the client PC side, and on the backend which is the server side.

Lenovo is committed to making sure our AI growth is in-line with the software requirements as they continue to change and evolve.



Could you give us an overview of the growth you've enjoyed within the last 12 months and how you plan to maintain that status as the number one PC provider across the region?

Our journey to becoming number one has been all about understanding the needs of our customers.

We also needed the right partnerships in the local markets across the Middle East and Africa.

If you get these two things right, it then becomes about remaining invested in the technology you are providing, this has yielded solid results for us in the past and we believe this will remain true for the upcoming quarters.

How important is the channel ecosystem to you and what do you look for when selecting a partner to help deliver on your vision?

Channel is everything to us when it comes to getting our products, services and general message to our partners, our business in the region is 100% channel focused.

We fundamentally see the channel as a partner instead of an extrinsic cost to the business.

What we look for in a channel partner is an equal in understanding and commitment towards our products and services.

We want to see partners that are as passionate about our customers' requirements as we are, once we have that the sky is the limit. **enme**

LENOVO

HYBRID AI

Ashley Woodbridge, CTO Infrastructure Solutions Group, META, at Lenovo, spoke to CNME Editor Mark Forker at LEAP 2024 in Riyadh, about the exciting developments within the fields of Artificial Intelligence, their plans to further support the technological evolution of the KSA – and why they are focused on delivering a ‘hybrid-AI’ experience to their customers.

AI is everywhere and at Lenovo you have a concept called AI for all. Could you talk to our readers about this concept and what you plan to exhibit from your current portfolio at LEAP 2024?

We want to get AI into the hands of everyone and see how they can utilise its benefits.

What we have observed is that the younger generations are producing the most interesting AI use-cases that can empower businesses.

On our LEAP 24 booth, we have several local start-ups that are doing amazing things to change the retail experience, optimise hotels of the future and local manufacturing companies that are building Lenovo technology locally within the KSA with a focus on regional requirements.

What is your perspective on Generative AI, the opportunities it presents and the challenges enterprises face with adopting it?

Twelve months ago, none of us knew what Generative



AI was and now we are seeing it deployed globally within production environments.

We need to think about the responsibility and sustainability of this technology in the long term.

Our approach is to focus on hybrid-AI, which we see as a union of personal, private, and public AI technologies.

This fusion will give you the comfort a personal twin that will run on your end-devices and secure your

most private information in collaboration with a trusted partner like Lenovo.

For enterprises, you can store all your intellectual property and sensitive data in a securely governed site that can be remotely controlled by an embedded device, we have termed this as a pocket-to-cloud AI solution.

With this approach we can meet many of our customers use-cases with suitability and responsibility in mind.

When you're developing products and AI solutions do you engage with your customers to see what they need, or do you consider yourself ahead of the curve with the foresight to see what is coming?

Lenovo is an innovative company, and we're very focused on being a true manufacturer with advanced capabilities.

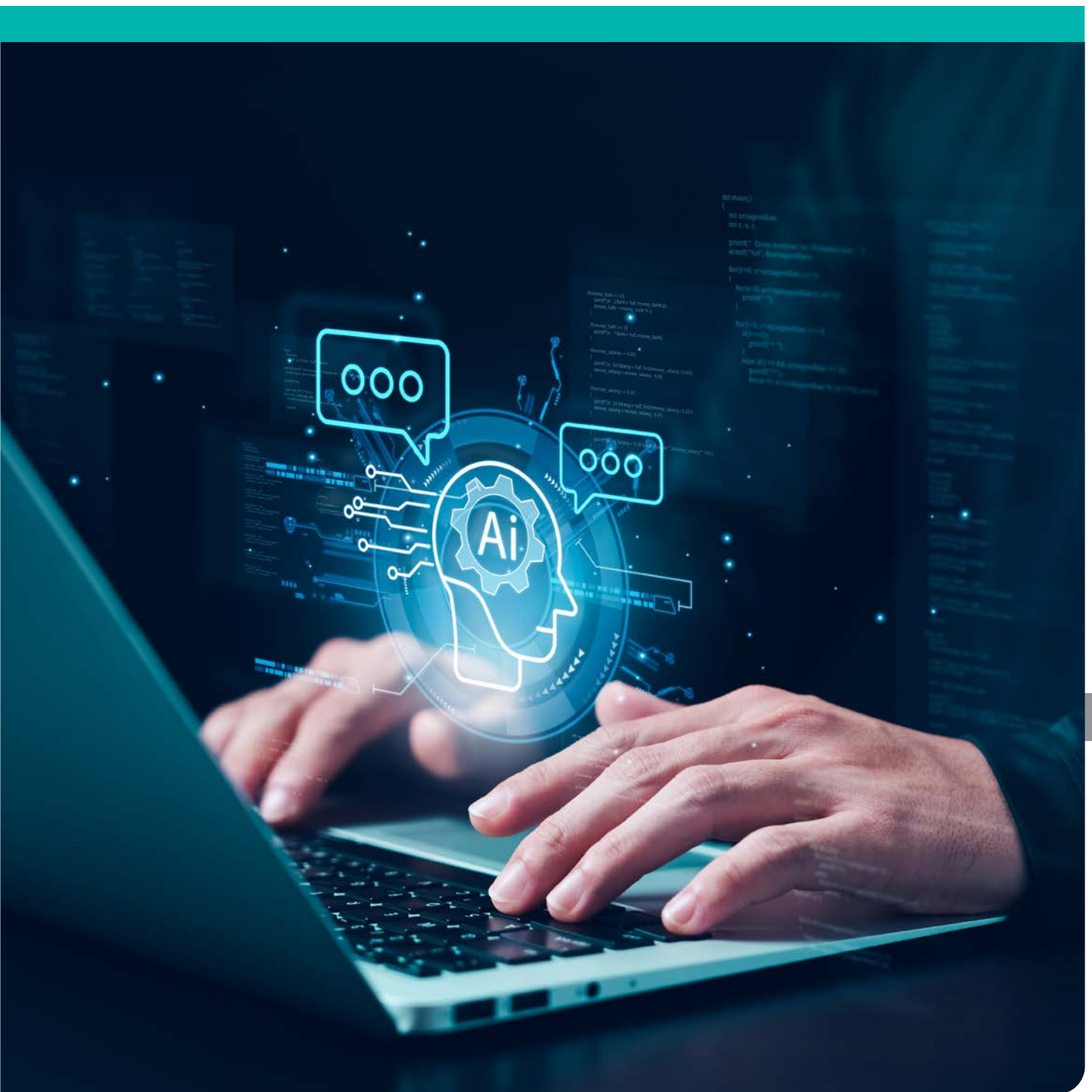
We do try to think ahead with sustainable technologies like warm water cooling, but the best feedback always comes from our customers.

For example, one of our close collaborators DreamWorks develops their movies on Lenovo infrastructure allowing us to work closely with them to meet their requirements and engineer solutions for specific use cases concerning digital assets.

Processes like these represent the best of both



Our approach is to focus on hybrid-AI, which we see as a union of personal, private, and public AI technologies.”



worlds, we present to our customer our vision and roadmap whilst they provide feedback and insight on our direction.

Lenovo is well positioned as a global leader, what is your perspective on the market in the region and the importance of an event like LEAP?

The event is amazing, and we're really excited about interacting with our customers to discuss challenges with them.

Topics range from how we can help them with climate change, better weather forecasting, the

impact of natural disasters and even aquaculture.

They're coming to us with the really hard questions which is exciting. When you have passionate customers at an event like this it becomes possible to have forward-thinking discussions about partnerships. **enme**

GHC

MISSION-CRITICAL TRANSFORMATION

In the latest in our Mission Critical Master Series, CNME Editor Mark Forker spoke to **Majed Shahin**, Chief Technology Officer at GHC, to learn more about their cloud transformation journey and how their partnership with Cloud4C is helping them achieve their digital transformation goals.

GHC was established in 2007 and as a Saudi multi-business holding company that directly operates through its subsidiaries in distribution, mainly in beauty, lifestyle, wellness, food and beverages.

Today, the GHC group is comprised of multi-businesses within retail and distribution that operates in over 200 branches and employs 2000+ people.

Their vision is to lead the industry of beauty, lifestyle and wellness as an added value retailer and distributor. Their mission is to constantly redefine the beauty and lifestyle shopping experience for every guest, through their passionate people and their personalised range of products and services.

Can you outline to our viewers the cloud transformation journey GHC undertook?

A transformation journey is unique for each organisation because it is intrinsically linked to their own objectives and goals.

We found proper planning and business alignment to be

important as we didn't want to disturb our day-to-day operations.

We began this journey back in 2018 when we faced a choice of keeping our workloads on-premises or seeking out a cloud-services provider to host our data.

After deciding on cloud-hosting, the journey began in earnest to find the right cloud provider to become our partner and fortunately we discovered Cloud4C, who already enjoyed a local

presence in the region.

During our journey we had to trial and test many different methods to ensure that whatever we chose was suitable for our business objectives and met our initial proof of concept.

What was mission-critical about your transformation, how did it impact your day-to-day operations and customer experience?

It was always mission-critical to ask ourselves the question,



what can the cloud provide for you?

Other key factor included reliability, scalability, cost-optimisation, and agility which were all at the forefront our minds at every step of this journey.

After selecting our partner, we had to make sure that we were fulfilling each of these factors, because they all impact our day-to-day operations. For example, with scalability we always aim to provide the optimum offering for our customers by utilizing the required resources for computing power or data storage.

In the case of reliability, building up our infrastructure and platform presence will aid our day-to-day operations in delivering uninterrupted service to our customers.

Can you tell our viewers what the biggest challenges were for you on this migration journey – and what have the key benefits been so far in terms of the day-to-day operations of the business?

Every organisation has a unique journey and I'm sure they all face specific challenges. As for us, we faced two major challenges as we embarked on our journey.

The first challenge was selecting the right service provider, as you must be prepared for a long-term collaboration and cannot easily switch out if you become unsatisfied with the process.

The second challenge was concerns about disrupting the day-to-day operations of



our business, as performing a cloud migration is a big disruption that could divert attention if not handled accordingly.

Cloud4C is widely regarded as the go-to cloud evolution specialist for mission-critical applications. Can you explain the role they played in helping GHC achieve your cloud transformation goals and objectives and what were the key factors to choose them as a partner?

There are, of course, some generic factors like scalability, reliability, and agility but there were also some more specific criteria that we at GHC were looking to achieve.

The global and local presence of the provider was a key factor for us as we didn't want a collaborator that

would be unable to operate at scale.

We also wanted a provider that could implement specific services, with special focus on our SAP ERP software implementation.

With Cloud4C we discovered that the vast number of professionals they employed were knowledgeable on ERP from SAP and aided us in the implementation phase and the hosting requirements that followed.

Have you been able to achieve the objectives you set out for yourself when embarking upon this transformation journey?

Usually with a transformation journey an organisation keeps track of certain objectives to help measure the success of the venture, this isn't something you check at the very end and should be a continuous process throughout.

There are many benefits to cloud transformation like, reliability, scalability, agility and we were able to achieve these elements due to them being inherent features of cloud transformation.

GHC's unique objectives were to gain a robust infrastructure, meet our customers' demands on time and deploy new technologies in a dynamic way. With the help of Cloud4C, we believe we have comfortably met all these goals. 



It was always mission-critical to ask ourselves the question, what can the cloud provide for you?"

OMAN HOUSING BANK

THE POWER OF CLOUD

As part of our Mission Critical Master Series, CNME Editor Mark Forker spoke with **Raid Mohamed Backer Al-Lawati**, AGM - Head of IT & Digital at Oman Housing Bank, about their cloud transformation journey and how adopting cloud technologies has helped them to evolve the services they provide to Omani citizens.

Can you outline to our readers the cloud transformation journey Oman Housing Bank undertook?

A cloud transformation journey is quite similar to any journey one might embark on, in that they take time. We took a significant amount of time selecting the cloud partner, the managed operations partner, and the contractor for the security operations centre. When we migrated to the cloud, we migrated as-is and we are in the journey of improving the infrastructure that is currently running on the cloud. This is achieved by segregating the apps from the database layer and increasing the number of elements that control the entire security infrastructure running on the cloud.

What was mission-critical about your transformation, how did it impact your day-today operations and customer experience?

When we committed to the concept of moving to the cloud most of our data centre servers were already obsolete and no longer supported. This naturally carried a lot of risks, and the core banking systems were significantly slower than normal due to the availability of processing power. As soon as we upgraded to the cloud, we noticed an immediate improvement in these core systems as the storage capacity of our systems increased and allowed our branches to service the customers quicker.





Can you tell our viewers what the biggest challenges were for you on this transformation journey – and what have the key benefits been so far in terms of the day-to-day operations of the business?

The biggest challenge during the migration was establishing the network topologies and connectivity, and with the help of our chosen partner we resolved this in a very timely manner. Another challenge we faced was that some of the systems such as the databases were outdated or obsolete making migrating them to a cloud quite challenging. Again, with the help of our internal team and our chosen partner we managed to resolve this issue quickly and efficiently.

In term of benefits from moving these business workloads to the cloud, it reduced the number of active systems we had running from a channel perspective.

Can you explain the role Cloud4C played in helping OHB achieve your cloud transformation goals?

Cloud4C played a significant role in this cloud transformation from many different angles. Infrastructure, databases, applications set-up, servers, and backup configurations were implemented with their expertise. With their professionalism we were able

to achieve migration within the expected time and feel a sense of validation in our choice of a partner that we can rely on for cloud future migrations.

Have you been able to achieve the results for the transformation journey?

A cloud transformation is a journey and cannot be broken down into a single milestone. As of today, we have moved our business workloads to the cloud and achieved our anticipated outputs. It's a long journey but our internal teams and ongoing partners will continue to play a role in helping us to achieve our desired business outcomes. CRMO



“A cloud transformation is a journey and cannot be broken down into a single milestone.”

OPSWAT

ZERO TRUST IS 'CRITICAL'

Prior to the CIO Leadership Awards 2024, CNME Editor Mark Forker moderated an exclusive roundtable discussion that was hosted by cybersecurity leaders **OPSWAT**, who stressed the need for businesses to adopt a Zero Trust approach to protecting their critical infrastructure.

Presented by Sertan Selcuk, VP METAP and CIS for OPSWAT, the discussion entitled *Zero-Trust Approach to Protecting Critical Environments*, delved deeply in an analysis of decades of company data and insights.

Also in attendance to provide their support were Rami Nehme, Regional Sales Director - South Gulf, Levant & Pakistan, OPSWAT and Saif AlRefai, Sales Engineering Team Lead - META, OPSWAT.

During the discussion each representative of OPSWAT spoke at length about a different facet of their business.

Sertan Selcuk, VP METAP and CIS for OPSWAT, initiated the roundtable discussion with a presentation entitled, *A Zero Trust approach to protecting critical environments*.

Within his speech he elaborated a little on how the key principles of Zero

Trust can be represented with the five pillars of the CISA Maturity Model.

"The five pillars consist of Identity, Devices, Networks, Applications/Workloads and Data. Identity represents continuous validation and risk analysis, Devices support a continuous physical and virtual asset presence, Networks are used to integrate the best practices for cryptographic agility, Applications/Workloads highlight how vital protections against sophisticated attacks in all workflows are, and Data can be strengthened to provide automated categorization and labelling enterprise-wide," said Selcuk.

Next to take centre stage was Saif AlRefai, Sales Engineering Team Lead - META, OPSWAT.

He helped outline the core elements of OPSWAT's advanced threat prevention platform - MetaDefender.

"MetaDefender is comprised of several vital features which make a critical component of threat prevention and zero-trust security. Firstly, it exhibits a Deep CDR used to disarm active embedded threats and reconstruct every file to prevent zero-day attacks and advanced evasive malware. With its advanced capabilities multi-scanning can be used to provide a simultaneous analysis with 30+ leading anti-malware engines to detect nearly 100% of known threats," said AlRefai.

He added that its proactive DLP can check for sensitive





and confidential file content to prevent data leakage and meet regulatory compliance.

“The inherent file-based vulnerability assessment constantly scans and analyses binaries and installers to detect vulnerabilities before exposure. Finally, it can supply volumes of threat intelligence data to provide enriched insights on threats on billions of hashes, IPs and domains,” said AlRefai.

Rami Nehme, Regional Sales Director- South Gulf, Levant & Pakistan, OPSWAT, then broke down the critical infrastructure challenges faced by C-Level executives in fortifying these vital sectors.

“By securing societies most critical infrastructure, OPSWAT provides protection for the services that we rely on to stay safe and healthy – and the modern conveniences we’ve come to rely on. Infrastructure protection networks are



complex, and the challenges most organisations face when attempting to implement them are the network complexity regulation issues, the technology gaps a company may possess

after relying on a single antivirus engine for so long and the training gaps caused by a lack of formal critical infrastructure protection certification and training,” said Nehme.

He concluded by declaring that OPSWAT’s suite of technologies can overcome any complexity.

“Each of these problems has a bespoke solution with OPSWAT’s unified platform, a comprehensive platform integrated by design can overcome complexity, purpose-built critical infrastructure covers any technology gaps and our OPSWAT Academy provides practical critical infrastructure protection training and certification in order to combat skill gaps,” said Nehme. **CIME**



MetaDefender is comprised of several vital features which make it a critical component of threat prevention and zero-trust security.”

TOP ATTACKS

Terry Young, Director of Service Provider Product Marketing at A10 Networks, explains how DNS Exploits continue to be a top attack vector in 2024, in an exclusive op-ed for March's edition of CNME.

The world of IT security has become more sophisticated and complex; as threats have grown exponentially, they have also become more blended, obscure, and harder to remediate.

Today, most organisations have experienced some kind of attack, with many experiencing multiple attacks, and it is no longer a matter of if, but when, an attack will take place.

The growth of cybercrime-as-a-service, especially DDoS-as-a-service, has enabled criminals to purchase or rent tools and services that enable them to carry out attacks without having to develop expertise themselves.

Combining such tools with attractive financial incentives and a wide collection of ready-made victims, it is easy to see why this is such a lucrative industry for criminals.

TOP ATTACK TECHNIQUES

The cost of a network, website or service being down or unavailable can be prohibitive. The average cost of downtime across all industries has historically been about \$5,600 per minute, but recent studies have shown this cost has grown to about \$9,000 per minute.

For higher risk industries such as finance, government,



healthcare, manufacturing, media, retail, and transportation their average cost of downtime tends to be over \$5 million per hour.

One of the most popular attack techniques involves the domain name system (DNS).

The DNS protocol is essential to every internet-based service and is used to translate alphabetic domain names into a set of numerical internet protocol addresses. DNS is one of the key protocols that makes the internet work.

WHY DNS IS A FAVOURITE ATTACK VECTOR

Today, many organisations provision their own DNS

infrastructure to ensure uninterrupted operations of their IT infrastructure and business applications.

For example, in many organisations, work computers default to using the organisation's own DNS servers. This helps internal users access internal websites while keeping such domain names confidential and secure.

However, DNS still remains one of the favourite attack vectors for cyber criminals for two main reasons:

- It is an inherently insecure protocol, and easier to target.
- DNS is fundamental to the operations of the internet and applications, and therefore bringing it down can have a much greater impact compared to simply targeting individual applications or services.

As more organisations rely on online applications, DNS exploits have become more common.

In a 2023 IDC study, 88% of organisations have experienced one or more DNS attacks on their network, with an average of seven per year and each successful attack costs the business, on average, \$942,000.



DELVING INTO DNS ATTACK TECHNIQUES

There are several different DNS-based attack techniques including: DNS tunneling, DNS phishing, DNS hijacking or credential attacks, DNS spoofing, and DNS malware. DNS attacks are also used as the basis for both DDoS and more advanced phishing attacks.

Many DDoS attacks rely on ways to abuse DNS protocols, including traffic amplification, subdomain attacks, DNS floods and DNS recursion attacks.

DNS hijacking, for example, allows attackers to re-route queries from an organisation's servers to destinations that they control, and it is often used to insert malware into endpoints.

With DNS spoofing, malware is injected into DNS caches, or directly via DNS tunneling, so hackers can redirect DNS query traffic.

DNS NXDomain flood attacks send spurious queries to nonexistent domain names with requests for invalid or non-existent records, tying up servers.

All of these types of attacks can have short- and long-term implications. In the immediate aftermath of an attack, an organisation may experience downtime or loss of productivity as a result of systems being taken offline.

This can lead to revenue loss, reputational damage, and regulatory fines. Long-term impacts include damage to brand reputation, loss of customers, and decreased market share.

88% of organisations have experienced one or more DNS attacks on their network, with an average of seven per year and each successful attack costs the business, on average, \$942,000."

THE CHALLENGE WITH MULTIPLE PRODUCTS TO PROTECT DNS

With the emergence of each new threat and the technology to counter it, organisations have traditionally responded by deploying a new security product to remediate the immediate threat at hand.

Over time, this has led to the deployment of numerous security devices in the network, resulting in the following challenges:

- **Increased complexity:** With many security devices in the network, the task of deploying, managing, and troubleshooting has become increasingly complex. Each device has its own separate management interface and configuration commands that require specialised knowledge to deploy and troubleshoot.
- **Increased cost:** Upgrading DNS infrastructure to meet growing traffic needs requires upgrading most, if not all devices. This results in the need to purchase multiple different products, resulting in high purchase and licensing costs.
- **Slow performance:** Some of the newer DNS technologies, such as DNS over HTTPS (DoH) and DNS over TLS (DoT) require TLS decryption/encryption processing, which is highly CPU-intensive. However, DNS servers were not originally designed for such processing,

therefore adding DoH/DoT can lead to a severe slowdown in overall performance.

- **Unsuitable for hybrid cloud:** All these problems are further compounded by the growing adoption of hybrid cloud. This is because many of the legacy security products that have been deployed in private data centres may either not be available or may not be optimally suited for such a deployment. This leads to adoption of cloud-specific offerings, adding to the complexity and cost of deployment.

SECURING AND SIMPLIFYING YOUR DNS INFRASTRUCTURE

DNS is a critical component of the internet infrastructure, and it is important that DNS is always up and running to ensure normal business operations.

However, DNS is also susceptible to a range of attacks and unfortunately no single security method can prevent all the different types of attacks.

Therefore, an all-encompassing approach is required, including DNS load-balancing, DNSSEC, DoH/DoT, and DNS caching to ensure DNS infrastructure is constantly available and performing optimally.

Only with a comprehensive set of DNS security solutions can organisations secure and simplify their DNS infrastructure without compromising on performance or the user experience. 

TERMINUS INTERNATIONAL AND TERMINUS GROUP

TIME TO GO 'INTERNATIONAL'

CNME Editor Mark Forker secured exclusive interviews with the executive leadership teams at **Terminus International** and **Terminus Group**, in an effort to find out more about the Chinese AIoT market leader, and how they plan to replicate the success they have enjoyed domestically on a global scale following the establishment of their international HQ (Terminus International) in UAE.

Dr. Ling Shao, Chief Scientist of Terminus Group and President of Terminus International, has been tasked with the responsibility of driving the international arm of Chinese AIoT leader Terminus Group across the Middle East region and globally. To achieve the international expansion goal, he has built a versatile and experienced team, including Marcel Sebastien Ionescu, Vice President of Products and Commercialisation at Terminus International, and Abdurrahman Najjar, Vice President of Sales at Terminus International.

Dr. Ling Shao is one of the world's leading scientists when it comes to AI.

In 2023, Dr. Shao received the UAE's highest scientific recognition (Mohammed bin Rashid Medal for Scientific Distinguishment) from the Vice President and Prime Minister of the UAE/the Ruler of Dubai - His Highness Sheikh Mohammed bin Rashid Al Maktoum.

He has also enjoyed an



Dr. Ling Shao

outstanding career, and his previous roles have seen him work as the Executive Vice-President and Provost of Mohamed bin Zayed University of Artificial Intelligence, the CTO and Chief Scientist at Saudi Data and AI Authority (SDAIA) and the founding CEO and Chief Scientist of the Inception Institute of Artificial Intelligence (IIAI), which is now part of Core42.

Ionescu is one of the most respected technologists across

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The Terminus International team is dedicated to promoting the widespread adoption of AIoT technologies in the Middle East and globally, accelerating the development of products featuring large multimodal models and generative AI.”

the Middle East region, and has enjoyed a decorated career to date, one which has seen him work with notable entities like G42, QSi Middle East, and ATS Group.

Najjar VP of Sales for Terminus International who has vast experience in several

earlier sales capacities across the Middle East.

He has worked with ICT behemoths such as Etisalat (e&), Huawei, HPE, Cisco and GBM, and is one of the most revered sales leaders in the region.

As the head of Terminus International, Dr. Ling Shao has earned respect for his accomplishments in both the academic and commercial sectors of artificial intelligence. He believes that the innovations brought about by Generative AI will significantly impact people's lives in the future. As a global leader in platform-oriented urban AIoT services, Terminus offers digital solutions worldwide for diverse customer needs across five core scenarios: buildings, communities, parks, cities, and achieving "dual carbon" goals. These efforts are powered by the synergy of artificial intelligence and the Internet of Things (AIoT). Empowered by Generative AI, Terminus will continue to drive upgrades in city management, promote the prosperity of industrial ecosystems, and facilitate the implementation of green-energy and low-carbon practices.

“Generative AI has seen explosive growth in the past 1.5 years, led by breakthroughs such as



Marcel Sebastian Ionescu

ChatGPT and Sora. This direction has ignited a worldwide surge in research and development, attracting major tech companies to the field. It is being vigorously applied across various domains, from text to images, music to videos, and from gaming to education, fostering an environment where innovation flourishes in abundance. Despite some controversy over AI-generated content on social media, this has only fueled further investment. Meanwhile, advancements in large language and multimodal models continue, as researchers tackle challenges related to hallucination, bias, and real-time performance. Within this vibrant landscape, China has risen as a leading force in the creation of foundation models, excelling both in volume and performance, swiftly narrowing the technological gap with OpenAI. Terminus remains agile and innovative in this competitive landscape. Our AI Lab, which is also under the Terminus International umbrella, attracts leading industry talents and leverages our AIoT data capabilities to develop Generative AI products tailored to the unique smart city markets of China and the Middle East. Our goal is to enrich our solutions for increasingly complex interaction scenarios and novel applications in smart homes, cities, energy, and autonomous driving.” said Dr. Shao.

Dubai being our

international headquarters, Terminus International has established a strong presence in the Middle East, showcasing a professional and global stance. Looking ahead, Dr. Shao emphasizes Terminus International's commitment to leveraging its extensive international market resources to compete on the global digital economy stage, aiming to establish a Chinese model of technological diplomacy.

“At this critical juncture of digital economic transformation in China and the Middle East, Terminus's experience in smart city planning and execution will inspire further innovation and technology upgrades in local enterprises. The Terminus International team is dedicated to promoting the widespread adoption of AIoT technologies in the Middle East and globally, accelerating the development of products featuring large multimodal models and generative AI. This initiative is part of a strategic global layout, aimed at bringing digital innovation and vitality to our partners and building a sustainable, intelligent, and open ecosystem together.” said Dr. Shao.

He then moved the dial of conversation to what the long-term ambitions are for Terminus Group in the META region.

Dr. Shao stressed that smart buildings and smart energy are

the two key industry verticals that they will focus on.

“Terminus Group will continue to focus on the Chinese market, whereas Terminus International will focus on all markets outside of China. We have selected Dubai as our HQ for our MENA operations, as it's the embodiment of technology and innovation. In terms of this region, our two main focuses in terms of industry verticals are smart buildings and smart energy. We will in time broaden our operations and increase our focus in smart mobility and smart city applications. We have existing products and solutions in China, that can be easily transferred into the international market,” said Dr. Shao.

Ionescu kickstarted the conversation by highlighting how their vision is to build a fully-fledged smart city.

“Terminus International has been designed and built to address the overall market in terms of pushing the technologies that have been developed by Terminus Group. Terminus Group is the brainchild of developing AI for smart cities, and our vision is to build a true end-to-end AI CITY. Now based on that vision we are developing all our products and solutions as part of our efforts to work towards that goal. Take for example, smart home automation and building



Terminus Group is the brainchild of developing AI for smart cities, and our vision is to build a true end-to-end AI CITY.”

management systems, which are designed and built for serving and digitizing the urban spaces. In relation to the community space, we have smart access control, and smart energy solutions that cater to our add-on platform that enables the digitalisation of everyday life to help the citizens that live in those communities deal with mundane tasks like visitor management and parking,” said Ionescu.

Terminus has a broad portfolio of products and solutions when it comes to smart cities, but Ionescu claimed that its ‘crown jewel’ was its offering in relation to carbon management.

“Smart Cities can take advantage of smart energy solutions and smart traffic optimisation, and any utility infrastructure network can be developed and optimised. As we are an AI-first company we look to draw efficiencies from the data that we collect straight off the bat. Our crown jewel is based on net neutrality and carbon management, and this is something that we take to heart, but not necessarily from the new carbon management solutions we have, but also from an energy management optimisation standpoint. In order to achieve net zero then you have to optimise and minimise the consumption that you have in every city, so our overall operating systems and platform work together in tandem to take advantage of all the products and solutions that we have underneath to

work towards achieving that goal,” said Ionescu.

Ionescu highlighted how when Terminus Group was working towards their vision of an AI CITY, they quickly discovered that the most important asset in a city is the building.

“The living spaces, the offices, and retail outlets all rely on a shell and core that has to be addressed in terms of optimising the environment. Now, we realise that the digitalisation of these spaces has been categorised in the ‘nice to have’ box, but we are looking to commoditise this, and bring it to a democratised and popularised level. As I’ve already stated as we are an AI-first company, we have already injected this ethos into all the physical products we have developed for the smart buildings sector. The building management system has been a traditional product that has been around for the last 10-15 years, but we thought about introducing some innovative twists to this solution, whilst at the same time staying compatible with the standards that have been established over this period of time,” said Ionescu.

Terminus have recently launched a new energy product line, and according to Ionescu, the new energy product line was designed to capitalise on the under-utilised redistribution of energy in the advent of deploying mixed energy in the home.

“The home becomes an energy producer and a self-optimiser, so this is

why we have developed an AI-orientated energy optimisation for specific spaces. We have also established a battery storage capability that allows green energy to be stored at the place of production rather than sending it back to the grid, and storing it in large capacity and then bringing it back. There is multiple deployment scenarios, but we feel that the end consumers can really benefit from these new solutions. In addition to this, one other capability that we injected into this product line is the ability to define microgrids and virtual grids, meaning that an association of homeowners can pull these resources together and become an independent cross-optimiser. One other use case that we visualised is the fact that we can enhance the capacity of existing deployments without having an impact on the grid, case in the point being the deployment of EV chargers, which is another product that we have at Terminus,” said Ionescu.

AIoT is a concept that was created by Terminus Group, and Ionescu explained how they use AI to optimise operations across multiple industry verticals.

“AIoT is a term that we coined many years ago when we started our technology journey. It came naturally to us, because AI has been a central focus in everything that we developed in terms of IoT. What we do with AI is to look at opportunities where we can really optimise operations. AI is used in

everyday life, and it's not something that we develop for mundane tasks, but we develop it for very specific tasks. Our International President is also our Chief Scientist for AI at Terminus Group, and our AI lab is part of the international group for a very specific purpose, and that is we are looking to bring customised solutions to the people that we engage with. We are looking to train AI to optimise the use of chillers for water in communities across the UAE, and the rest of the Middle East, because it is a very expensive resource, not only from an energy consumption perspective, but also from water wastage. We want to use AI to make the lives of citizens better, and ultimately make cities smarter and greener," said Ionescu.

Abdurrahman Najjar, as aforementioned above is the Sales VP – META region, at Terminus International, and he began his conversation with me by disclosing what the key priorities were for Terminus International across the region he will serve.

"The initial focus for us is to execute on the local GTM strategy and to build our channel market, in parallel of our direct sales reach to strategic customers, and eventually elevate and heighten awareness of the Terminus AI based technologies across the Middle East region. The best way to do this is through enabling our channel ecosystem to really grow and drive our presence and building references across

the GCC and the entire META region. We're also aligned with a number of major partners and distributors in the region in an effort to utilise their profound country knowledge and expertise to really propel our expansion and to execute on the business deliverables. We take great confidence from the success Terminus Group has had in China, and we firmly believe we can replicate that success across the META region," said Najjar.

Najjar believes that their ability to deliver AI-based technologies is what ultimately differentiates them from market rivals.

"Terminus developed

incredible innovation in the Chinese market, with their concepts and technologies on smart cities, AIoT, digital twins, sustainability, and autonomous mobility to name just a few. It is clear to see that governments all across this region are pursuing aspirational and ambitious transformation programs that are underpinned by disruptive technologies such as AI. We have AI-based scenarios on our platform that really differentiates us from our market rivals, and having the uniqueness that we do really gives us an edge over our competition," said Najjar.

Najjar highlighted the



Abdurrahman Najjar

important role the channel ecosystem will play in terms of really driving an efficient market coverage and business success of Terminus International across the META region.

“Our plan is to work with the leading systems integrators and distributors that are long established across the Middle East marketplace. We will primarily work with them on the enablement in terms of the technical and sales orientation they are going to need in order to effectively help drive the growth of Terminus International. As I said we’re going to be working

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We take great confidence from the success Terminus Group has had in China, and we firmly believe we can replicate that success across the META region.”

with system integrators and distributors that are pioneers in this space, and we can leverage their expertise and knowledge to really help us get to where we need to be,” said Najjar.

Najjar is a distinguished sales leader with decades of experience, and he stressed that understanding the regulatory and cultural intricacies that exist in the Middle East is a critical factor in the success of an

organisation entering the market here.

“I think a good starting point is to localise the presence of Terminus International in the market. Each country across the GCC has nuances and differences, so it’s critical that you understand some of the complexities that exist when it comes to the culture and the regulatory frameworks that are in place. We are very experienced as a local team to address each country for tailored AI Solutions, and we understand the governance that is in operation in each country, and we know what we need to do to get the results that we want,” said Najjar.

Kangping Shi, also known as Kevin, is the CFO of Terminus Group, and he provided a greater insight into financial performance of Terminus Group domestically.

“Terminus Group has a very unique advantage over our market peers in the AIoT industry in the fact that we are an ‘AI-First’ company. Just like companies that were born in the cloud, we were born in AI. We have an extremely strong R&D team, but one of the truly unique advantages we have stems from the fact that we have strong support by the national authorities.” said Shi.

Kevin reinforced the importance of investing in R&D, but said that unlike



Kangping Shi

some of their rivals they strike the right balance in terms of how much they invest.

“We are very focused on our products, and we invest a lot in R&D, but our purpose is not R&D, our purpose is to solve the problems that our customers are facing. We invest in R&D based on the conversations that we have with our customers in order to help them overcome their problems. However, we feel that other companies fail to find the right balance when it comes to R&D,” said Kevin.

Kevin also believes a key market advantage they have over competitors is the fact that they can provide a boutique hands-on service to customers, unlike larger players who have multiple business lines.

“We’re not a technology behemoth, we’re a start-up, so that means we’re extremely focused on our AIoT business. The very large players have so many business lines to concentrate on, and AIoT is only one of those verticals, so that gives us an advantage as we can provide a boutique hands-on customer experience. We believe AIoT is the future, and we are going to continue to invest all our resources into that space to solidify our position as a market leader,” said Kevin.

We’ve invested a lot of money into our marketing operations and R&D. As our revenue has grown over the last number of years, as a result our losses have declined. One of the factors behind our success has been the economy of scale, as our

revenue becomes bigger a lot of our costs are fixed, so we can enjoy some benefits from the economy of scale as a result,” concluded Kevin.

Last, but by no means least, I was afforded the opportunity to speak to the mastermind behind Terminus Group, which of course is Victor AI, the CEO and Founder of Terminus Group.

He began our discussion by explaining how Terminus Group has become an industry leader in the AI marketplace in China, reinforced by the fact the company has over 1,000 patents in AI and IoT.

“In China, Terminus Group is regarded as one of the largest AIoT players in the market. We’ve been ranked by many independent analysts as one of the top AI companies in China. Every year, Stanford University ranks the top 2% of scientists in the world, and three of our chief scientists have been included in that ranking for four consecutive years. We have participated in a lot of national AI projects, and our AI lab has been recognised nationally as a key standard bearer for AI development and innovation. We have a number of patents in AI and IoT in China, and that is amongst the largest numbers of patents in the AI space across the nation, and really illustrates our standing as an AI leader,” said AI.

The Terminus Group CEO stated that international demand for cutting-edge AIoT technologies is the primary factor behind their decision to expand their operations globally.

“Basically, if you look at what is going on in the world right now, there is a lot of demand internationally, so we felt it was time to further develop and expand our business globally. They need our AI technology to make the world a better place and enhance humanity. We decided to set up our international HQ in Dubai, to specifically meet those customised demands in the UAE, and across the Middle East region, and all our international customers. We will have our independent R&D centre here, and we will also have our products here and we will use Dubai as a launchpad to expand to other parts of the world to provide a totally different set of AI technologies to our international customers.” said AI.

He concluded our conversation by stating that he believed AI was now a common ‘universal language’ and that the company is fully focused on being a global leader in AIoT.

“We felt that last year was the time to really accelerate our expansion plans. In the last 12 months, everyone is




Terminus Group wants to be the global leader of AIoT, and that is our ambition, and that’s now why we decided to invest our resources to grow our operations internationally.”



Victor AI

talking about ChatGPT and OpenAI, and the interest in AI in the mainstream has exploded. I think the general consensus amongst everyone now is AI represents the future and is here to

stay. The AI language is universal, and it has become an international common language. Terminus Group wants to be the global leader of AIoT and that is our ambition, and that's now

why we decided to invest our resources to grow our operations internationally, and we believe we can further promote the success we have had in China, across the world," concluded AI. 



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FINANCIAL REVOLUTION

CNME Editor Mark Forker spoke to **Gary Kazantsev**, Head of Quant Technology Strategy at Bloomberg LP, in an effort to find out how Generative AI is transforming the traditional financial landscape, the impact of its BloombergGPT solution - and some of the challenges that exist when it comes to the adoption of Generative AI into existing processes and workflows.

Can you provide our readers with a broader overview on what your role entails as the Head of Quant Technology Strategy at Bloomberg?

In my role, I sit within our Office of the CTO and set the technology strategy for Bloomberg's quantitative product portfolio. This means I am responsible for a combination of product development, research, and education.

A large part of that strategy concerns our quantitative research platform - BQuant. I think a lot about what machine learning infrastructure, data, and computational frameworks are needed for the cloud-based analytics we specifically designed for quantitative analysts and data scientists in the financial markets.

To do this, I spend a lot of time talking to our customers and prospects around the globe about their needs. We discuss, for example, how their approaches to investing are becoming more and more



data-driven and increasingly make use of statistical and machine learning methods to analyze investment opportunities across a range of asset classes.

Prior to this, I created and led the company's Machine Learning Engineering group. Starting in 2008, we built the company's first set of AI projects, the majority of which sit at the intersection of computational linguistics,

machine learning, and finance.

These included things like sentiment analysis of financial news, market impact indicators, statistical text classification, social media analytics, question answering, and predictive modeling of financial markets.

The introduction of ChatGPT has really transformed the IT and technology landscape over the last 12 months, but can you tell us more about BloombergGPT - and how its introduction will really impact the financial sector?

As I noted above, Bloomberg has actually been building and using AI in our products for the last 15 years. We use this technology to enable our customers to derive valuable intelligence and actionable insights from our high-quality financial information, not to mention deal with the information overload resulting from continually increasing volumes of financial news and data.

Ultimately, the goal of Bloomberg's AI solutions is to enable financial professionals to find what they're looking for fast in order to make more informed business and investment decisions.

Over the years, we've assembled deep experience in the field of AI. Today, Bloomberg employs more than 300 AI researchers and engineers from around the globe, and they are constantly exploring state-of-the-art AI tools and technologies and considering their applications in the financial domain.

But, our AI efforts aren't only focused on building products. Our AI team also does cutting-edge research, and our researchers have published more than 100 peer-reviewed papers in the last three years.

We also provide funding for research and fellowships, collaborate with academic partners, participate in conferences and program committees, host and mentor interns, and peer-review scientific articles in the fields of natural language processing, information retrieval, and machine learning for major conferences.

Thus, generative AI was not new to us when ChatGPT was introduced – we started investing in the research of generative AI very early on, starting more than three years ago, after the original papers on the GPT architecture were published.

BloombergGPT was the culmination of our initial research efforts in this area. It was the first large language

model (LLM) built from scratch that was specifically tailored for the financial domain.

Training this internal, not-for-commercial use model from the ground up – not just fine-tuning another model – showcases our prowess in AI, as well as our commitment to not only using but also creating breakthroughs in this field. We published a very popular research paper about BloombergGPT last March, and it's been called one of "Ten Noteworthy AI Research Papers of 2023" by some in the AI field.

So the key thing to understand is that our BloombergGPT research taught us a lot about the capabilities – and limitations – of large language models.

It is informing how we think about applying generative AI to applications in finance – for example, how to enable customers to ask complex questions in natural language and receive insights extracted and developed from potentially millions of structured and unstructured information sources.

Generative AI is a broad field of artificial intelligence that really has the capabilities to change the way businesses operate. However, there are valid concerns over data privacy and security when it comes to Generative AI. What is your view on some of the challenges with Generative AI?

Our research with projects such as BloombergGPT has enabled us to understand both the power and

limitations of generative AI, so we can build and employ guardrails when we use this technology in our products.

We are particularly mindful of the limitations of current generative AI technologies and are applying the lessons learned while developing AI systems over the last 15 years to build safeguards that foster accuracy in our AI-enhanced products.

For example, when we summarize a document using generative AI, we link back to the source content to provide full attribution and transparency, so the user can verify the accuracy of the summary.

In addition to the more commonly talked about limitations like hallucinations, or confabulations, generative LLMs are trained on static datasets, and thus cannot access up-to-date information on recent events without access to external knowledge bases or APIs.

They are not capable of reasoning – in particular, reasoning over temporal relations – and lack the capability to perform precise mathematical calculations. They are also very expensive to retrain. As you can imagine, some of these issues are particularly impactful with regards to finance, where it is important to understand the financial performance of a company over time and how that might differ from a previous quarter or year.

Our AI researchers have spent a lot of time learning how to mitigate these



constraints using retrieval augmented generation (RAG) and “Toolformer” paradigms to call existing tools — Bloomberg’s APIs, databases, and the Bloomberg Knowledge Graph — in generating responses to user queries.

In fact, we have been using methods like retrieval augmented generation for quite some time. The question answering system we built to enable Bloomberg Terminal users to interact with Bloomberg systems utilizing natural language makes use of this exact paradigm.

A statistical model is used to convert natural language input into a structured logical representation, which is then converted into API calls, search engine and database queries to perform the retrieval step in a fully deterministic, attributable, and transparent manner.

This system was built before transformers, and the statistical model used is not a generative AI model. We did not know this methodology was called “Retrieval Augmented Generation” when we started building it a decade ago, but the approach is very familiar to us.

Can you provide us with more insights into the evolving role of Machine Learning in finance - and what new trends you expect to see emerge across the financial ecosystem in the next 12 months?

Machine learning is already used across the investment process for a variety of tasks — from security screening and selection to factor construction from unstructured and structured data, as well as from alpha generation to execution.

It helps organizations digest larger and larger datasets. For Bloomberg, this makes it possible

The goal of Bloomberg’s AI solutions is to enable financial professionals to find what they’re looking for fast in order to make more informed business and investment decisions.”

to deliver new kinds of products and analytics to our clients. A good example of this is sentiment analysis of news stories and social media, which was the first AI-enhanced product Bloomberg deployed to clients back in 2009.

One consequence of improvements in machine learning techniques and increasing adoption of these methods is the ability for our clients to rapidly digest new sources of information — such as from large datasets like GPS coordinates, social media or pharmaceutical data — and extract signals and value that otherwise would be very difficult, or even impossible, to capture.

Since the introduction of ChatGPT, our clients — indeed the whole world — have acquired more appreciation for what the state of the art in AI and machine learning is, and what we are capable of.

This has served to accelerate the adoption of these technologies, especially as the barriers to entry to use these models have virtually disappeared due to the ease of use of a natural language interface.

Over the next 12 months, I think we can easily anticipate the industry rapidly exploring the capabilities and limitations of this technology and focusing on key use cases to improve efficiency of various automatable or augmentable workflows.

Some examples to look for include reading and summarizing complex documents, improved

search and analytics, code generation, and more.

What were some of the major takeaways that jumped out at you during the World Governments Summit in Dubai?

AI was front and center at the World Governments Summit, with sessions and discussions about AI in every forum — covering topics from digital government to innovation, education, ethics, etc. It is clearly an issue which is top of mind for a lot of people, both within the financial sector and outside it.

Many of the conversations concerned limitations of the technology, governance, safety, and responsible AI development.

Another thing that struck me was the overall spirit of optimism about the future. It was very refreshing and inspiring to see people from around the world — both young and old — envisioning a brighter future and working towards it.

The consensus at the Summit pointed to an increased need for collaboration between industry, government, and academia — something we at Bloomberg are fully in agreement with and have been working on for years — to facilitate engagements between various stakeholders across the spectrum. [enme](#)

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Riasat Ali, RAK Ports



Isha Aljasmī, Ministry of Energy & Infrastructure (MOEI) UAE



Nithin Geo Thomas, Amity Education



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CISCO MIDDLE EAST AND AFRICA

IDENTITY INTELLIGENCE

CNME Editor Mark Forker spoke to **Garsen Naidu**, Director, Architecture specialists at Cisco Middle East and Africa, to learn more about their partnership with NVIDIA, how they are leveraging their expertise and knowledge to help enterprises overcome obstacles associated with Gen AI – and what their cybersecurity concept of 'Identity Intelligence' actually entails.

Can you outline to our readers both the significance of Cisco's partnership with global AI leaders NVIDIA and what that collaboration entails?

At Cisco Live in Amsterdam, Cisco and NVIDIA has announced joining forces to help enterprises quickly and easily deploy and manage secure AI infrastructure.

The power of this partnership of the two tech titans of GPUs and Ethernet networking is designed to offer enterprises simplified cloud-based and on-prem AI solutions, including infrastructure management, secure AI infrastructure, and observable end-to-end AI solutions.

AI is fundamentally changing how we work and live. It is transformative technology that will require enterprises to rethink and re-architect their infrastructures.

This partnership will arm enterprises with the technology and the expertise

they need to build, deploy, manage, and secure AI solutions at scale.

Cisco and NVIDIA purpose-built Ethernet networking-based solutions will be sold through Cisco's vast global channel, offering professional services and support through key partners

who are committed to helping businesses deploy their GPU clusters via Ethernet infrastructure.

We know that we are currently in the midst of a Generative AI revolution, however, it's fair to say that despite the seismic



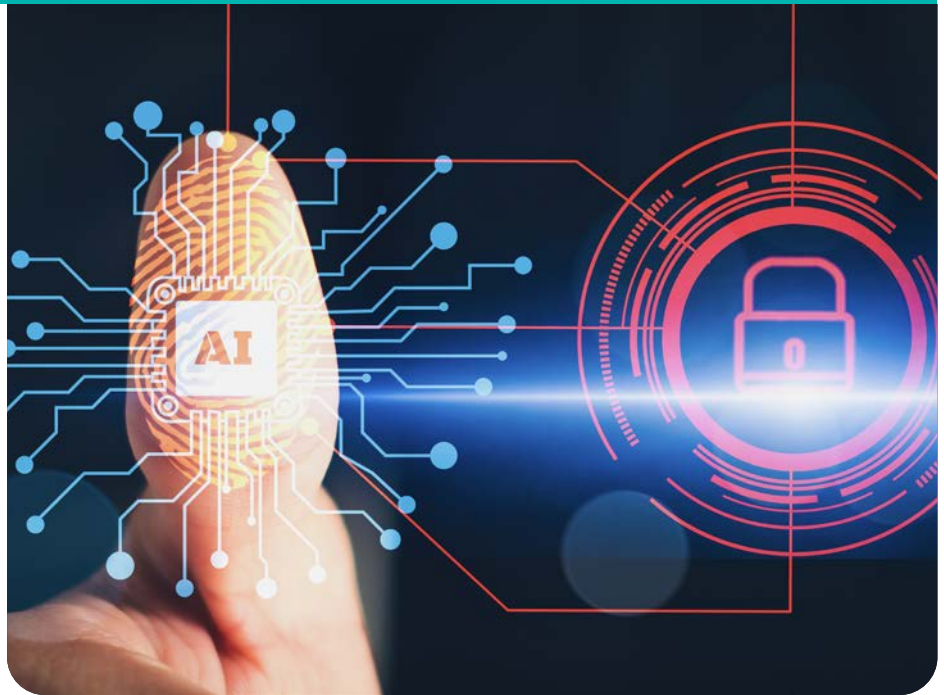
opportunities presented by Gen AI, there remains concerns when it comes to compliance. Cisco have launched Motific in an effort to help enterprises navigate the obstacles they will inevitably face with adoption, but can you tell our readers more about Motific and how it works?

At Cisco, we appreciate that Artificial Intelligence (AI) can be leveraged to power an inclusive future for all. We also recognize that by applying this technology, we have a responsibility to mitigate potential harm.

That is why we have developed a Responsible AI Framework based on six principles of Transparency, Fairness, Accountability, Privacy, Security and Reliability; and we are continually working to translate these guiding principles into controls that can be implemented on things like model creation and selection of data through different techniques.

For example, current and clean data are critical to operating effectively and can be achieved via techniques such as Retrieval Augmented Generation (RAG)

Since the expansion and breadth of access to GenAI, 97% of companies have reported that the urgency to deploy AI-powered technology has increased. However, many organizations face challenges in ensuring the AI being utilized includes trustworthy, use-case specific data that complies with organizational policies.



One of the biggest hurdles facing organizations is the ability to tailor GenAI applications and solutions on knowledge bases and data sources that are custom to their specific use cases.

For that, we have recently announced the launch of Motific to enable organizations to navigate the complex world of GenAI deployment.

Motific, is Cisco's first SaaS product that allows for trustworthy generative AI (GenAI) deployments in organizations. Born from Outshift, Cisco's incubation business, Motific provides a central view across the entire GenAI journey, empowering central IT and security teams to rapidly deliver trustworthy GenAI capabilities across their organizations with control over sensitive data, security, responsible AI, and cost.

It is time-consuming for companies to provision and manage GenAI assistants and APIs, integrate models across providers, and hire the talent to manage the process; Motific is a model and vendor agnostic solution that will help customers accelerate their AI deployments across the entire GenAI journey from assessment, through experimentation, to production.

The cybersecurity landscape is a constantly evolving minefield, and the repercussions of a cyber-attack are devastating. Cisco has pioneered 'Identity Intelligence' as part of their effort to fightback against the world's most persistent threats. Again, can you tell us more about Cisco's Identity Intelligence concept?



AI is fundamentally changing how we work and live. It is transformative technology that will require enterprises to rethink and re-architect their infrastructures."



We have recently unveiled new innovations within the Cisco Security Cloud as part of our mission to simplify security.

First-of-its kind Cisco Identity Intelligence and continued innovation in artificial intelligence (AI) capabilities are the latest milestones towards our vision of a unified, AI-driven, cross-domain security platform.

Today there is blind trust between authentication and access solutions, and threat actors have successfully compromised some of the largest organizations in the world in 2023 by targeting these weaknesses.

In fact, more than 26% of all Cisco Talos Incident Response engagements in 2023 involved adversaries using compromised credentials on valid accounts.

A user is often mapped

to many digital identities and accounts – drastically increasing entry points for attackers and the possibility of lateral movement "across" identities.

Too often legacy permissions have not been removed, and security teams are missing crucial context about historical identity behavior, actions across systems and current risk levels that are needed to make trusted access decisions.

Cisco Identity Intelligence runs on top of customers' existing identity stores and provides unified visibility, as

well as AI-driven analytics. Customers can discover their whole identity population, clean up vulnerable accounts, eliminate unused and risky privileges, detect behavior anomalies and block high-risk access attempts – without ripping and replacing their current solutions.

Can you provide our readers with more information in relation to the new security and AI capabilities that have been added by Cisco as part of their efforts to embolden and drive the company's networking cloud vision?

Cisco Networking Cloud is our



First-of-its kind Cisco Identity Intelligence and continued innovation in artificial intelligence (AI) capabilities are the latest milestones towards our vision of a unified, AI-driven, cross-domain security platform."



vision—our commitment—to simplify IT, everywhere, at every scale. Until now, there has never been a consistent way to automate operations, analyze and diagnose issues, or assure the user experience across networking domains. Cisco Networking Cloud will change that.

Assuring the user experience across increasingly complex and ever evolving technology landscape is complex, AI based solutions can help simplify the complexity and deliver end to end security across multiple domains with things like event correlation, anomaly detections and root cause analysis.

As a market leader in both networking and security, and with visibility into over 1 billion endpoints, Cisco is in a unique position to build the industry's premier AI-driven,

secure and simple networking management platform, Cisco Networking Cloud.

Whether it's autonomous operations or simply delivering a trouble-free experience to an end user, endpoint and network data is key to AI-driven intelligence. The best data produces the best result, and Cisco has the best data.

To deliver an exceptional experience organisations now require a secure networking solution that delivers a shared view across their entire network, and a scalable way to enforce security policies everywhere, without compromising their always-on, optimized user experience; and bringing networking and security teams closer together is critical help achieve this.

The recently announced Cisco Networking Cloud and security integrations innovations will offer our customer new capabilities to achieve this.

The new capabilities address customers' need to simplify their operations, assure digital experience, bring security and networking teams closer together, and accelerate their AI adoption with scalable infrastructure.

With Cisco Secure Access we introduced deeper integrations between Cisco Networking and Security Cloud platforms.

These innovations with Cisco Secure Access, Cisco's Secure Services Edge (SSE) solution, deliver a unified approach to networking and

security management, and automated monitoring of the digital experience, providing insights from network, device and application performance metrics. These integrations are available today with Catalyst SD-WAN and ThousandEyes.

Few transformational technologies have generated the kind of interest as AI and, most recently, Generative AI (GenAI). Organizations around the world are finding exciting new ways to collaborate, manage applications, enhance their digital security and reimagine customer experiences.

Cisco is committed to ongoing AI innovation to help organisations achieve their business outcomes and we will continue to deliver AI-fueled solutions across networking, security, collaboration, and observability.

We have the infrastructure solutions to power AI, the software portfolio to optimize and secure it, the visibility and tools to ensure the best user experience and the expertise to help our customers get the outcomes they need.

In your opinion, what is it that ultimately differentiates Cisco from its market rivals?

The IT landscape has drastically changed as organizations around the world have digitized their businesses, and it will continue to evolve at an even more rapid pace with the acceleration and adoption of AI.

While these new technologies create vast opportunities, they also add even greater complexity — unlike anything we’ve ever seen.

Today, IT leaders face the challenge of managing a growing set of often disparate technologies and successfully delivering them to a wide audience of end users who demand simple experiences.

As our customers add billions of new connections to their enterprises, and as more applications move to a multi-cloud environment, the network becomes even more critical.

To address these challenges, we’re focusing on creating a simpler, sustainable, and more inclusive technology. We do this through our ability, rare among technology providers, to deliver comprehensive solutions for virtually every IT and business objective, from networking to security, collaboration, monitoring, application development and more.

We want our customers to take full advantage of technology to deliver on their business outcomes and our focus is to help our customers deliver a unified user and customer experience by extracting the most across multiple technology domains in a simple and secure way.

Beyond Cisco’s deep portfolio is our strategy to deliver it all as platforms that can usually be consumed as a service in the cloud or on-premises.



What were the key takeaways and learnings of Cisco LIVE in Amsterdam?

Cisco Live 2024 in Amsterdam was a pivotal event, highlighting the future of technology. It presented a forward-looking vision of technology’s role in addressing contemporary challenges.

For C-suite leaders, it underscored the importance of AI, network simplification, and security in driving digital transformation.

The insights and innovations revealed at this

year’s event are instrumental in shaping strategies for a more connected, secure, and sustainable future.

It was mainly defined by the integration of our several product lines, bringing AI everywhere and enabling a more unified approach to IT security.

We are in a mission to unify products across Cisco’s networking, security, cloud computing, and collaboration segments, illustrating our vision for a future; where seamless integration reigns supreme. **cisco**



Cisco and NVIDIA purpose-built Ethernet networking-based solutions will be sold through Cisco’s vast global channel.”



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