

TELETIMES MEDIA LLC

INTERNATIONAL teletimes

Issue 231
AUGUST
2024

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Vol: 19 Issue: 08 August 2024 ABC Certified

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Marketing Coordinator - Imran Rasheed

Printer: Khurshid Printers (Pvt) Ltd.

19th YEAR OF PUBLICATION

Recipient of

"MEA Business Award 2021 for Best Telecom Publication"

"Best IT & Telecoms News Outlet Award 2020"

"International Arch of Europe Award for Quality"

"Teradata ICT Excellence Award for Media"



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TELETIMES MEDIA LLC.
P.O. Box 239031,
Dubai - UAE
+971 50 1305097

Media Partner to:



	US\$	AED	SAR	PKR	€	GBP
Price per copy	8	25	25	500	7	5
One year	80	250	250	5000	70	50

A Teletimes Media Publication, Dubai

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Editor's Note



Dear Readers,

As we step into another exciting month in the world of technology and telecommunications, I am thrilled to present to you the latest edition of Teletimes. The convergence of innovation and collaboration has never been more critical than it is today, and this issue brings to the forefront the extraordinary strides being made across the globe.

In this edition, we delve into the transformative power of artificial intelligence (AI) and its role in predictive maintenance within the telecommunications industry. The complexity of telecom networks demands ever-evolving solutions, and AI is proving to be a game-changer. On pages 12 and 13, our feature article highlights how AI-driven predictive maintenance is reducing network downtime, improving service quality, and optimizing operations across major telecom networks. Through real-world examples from leading telecom operators such as AT&T, Vodafone, and Huawei, we explore the tangible benefits of AI in revolutionizing network reliability.

We also take a closer look at the upcoming GITEX Global 2024, which promises to be the world's largest tech and start-up event, taking place this October at the Dubai World Trade Centre. The event will bring together thousands of exhibitors and visionary speakers who will showcase the latest advancements in AI, biotech, quantum deep tech, and cybersecurity. With exciting new industry programs and high-profile keynote speakers, GITEX 2024 is set to lead the way in fostering global innovation and collaboration.

Once again, Teletimes is a media partner to GITEX and will be exhibiting at the event. Please reach out directly to me on khalidathar@teletimesinternational.com to arrange meetings and interviews or to learn how we can help you promote your presence at GITEX.

As always, we continue to spotlight cutting-edge developments across the telecom and IT sectors. In addition to AI and predictive maintenance, this issue covers significant advancements in network infrastructure, including AI-powered 5G maintenance, satellite communication innovations, and sustainability initiatives within the industry.

Thank you for your continued readership and support.

Sincerely,

Khalid Athar
Chief Editor



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GITEX Global 2024: world's largest tech event announces GITEX Editions and all-new show highlights

Powerful sponsors, cybersecurity conference, and international keynote speakers; a glimpse of what's in store at this 44th edition

With only two months remaining until GITEX Global 2024, the world's largest tech and start-up event, organizers have revealed a host of new industry programs, cybersecurity experts, as well keynote speakers from world-leading brands confirmed for this year's edition, running from 14-18 October at Dubai World Trade Centre.

Here's the lowdown on what's new so far in 2024:

GITEX Editions 2024

Aligned with Dubai's ambition to be the home of 30 start-up unicorns by 2030,

GITEX Global 2024 is launching GITEX Editions, the region's most impactful gathering for fostering strategy, created to accelerate scale and global governance for high-growth companies. The early confirmed speaker line-up includes 8 fast-growing start-ups from 8 countries, 3 backed by the European Innovation Council (EIC).

AI: Fabrizio del Maffeo, Co-Founder, CEO & Board Member, Axelera AI (Netherlands)

An expert in developing Gen AI infrastructure and edge computing.

Growing with a purpose of becoming the 'European NVIDIA', Axelera AI are backed by Samsung and the EIC. Valued at \$500M, GITEX Global will mark its first ever Middle East presence.

Synthetic Biotech: Dr. Alexander Zhavoronkov, Founder and CEO, InSilico Medicine (Hong Kong)

Leading the biotech company with the world's fastest-ever IPO and currently valued at \$1.5B, he will discuss groundbreaking advancements in AI-driven drug discovery, synthetic biology, and ageing.

Sustainability Biotech: Dr. Mazen Rizk, Founder and CEO, Infinite Roots (Germany)

EU's largest mycelium-biotech investment, building next-generation sustainable alternative proteins. A Series B funded company backed by the EIC.

Quantum Deeptech: Dr. Joseph Fitzsimons, Founder and CEO, Horizon Quantum Computing (Singapore)

Singapore's biggest Quantum startup, backed by SG Innovate, Sequoia and Tencent.

Semiconductor Deeptech: Dr. Sunghyun Park, Founder and CEO, Rebellions (South Korea)

Set to become Korea's first AI Semiconductor Chip Unicorn with a \$1.5B value, acquired Sapeon AI.

Auto tech: Svilen Rangelov, Co-Founder and CEO, Dronamics (UK)

World's first cargo drone airline on a mission to change e-commerce worldwide, part of the EIC scaling club.

Emilio Scervo, Chief Technology Officer and Board Member, Buggati - Rimac (Croatia)

World's fastest hypercars. Valued at \$5 billion, they are the first and fastest-growing Croatian Unicorn.

Semiconductor Supercomputing: Philippe Notton, Founder and CEO, SiPearl (France)

High performance semiconductor manufacturer for AI interfaces and supercomputing aiming for the technological sovereignty of Europe.

Cybersecurity Conference Program

GITEX Global 2024 will see Cybersecurity taking centre stage with true stories





magazine, Wang will join global VCs and investment partners on stage to address the driving forces behind the rising global interest of businesses to increasingly invest in advanced security solutions and the surge in M&A activity within the cybersecurity sector. On another must-see panel discussion, Serban will take part on the conversation with CISOs and CIOs around corporate board engagement strategies for cybersecurity adoption.

New Industry Experts on Stage in 2024

For the very first time, Michael Spranger, the president of Sony AI Inc. will be addressing delegates from 180 countries at GITEK Global 2024, revealing the latest projects underway at Sony's strategic research and development organization.

Also debuting will be Chris Duffey, Futurist & Head of GenStudio, Adobe, USA who co-authored the world's first book on AI, with AI. Adobe has been highly instrumental in driving Gen AI to help creators.

Isabell Gradert, VP Central Research & Technology for Airbus in Germany, will also be making her first regional appearance at the world's largest tech and start-up event.

Sponsor Announced: Tech Destination Pakistan

Following its presence in the Pakistan Pavilion in previous GITEK Global editions, Tech Destination Pakistan, represented by Pakistan Software Export Board, has this year been declared the 2024 event's 'Tech Destination of the Year'. Shaza Fatima Khawaja, Minister of State for IT & Telecommunication, said of the announcement:

"This partnership highlights our commitment to innovation, technology and global collaboration. We look forward to showcasing Pakistan's brilliant tech talent and tremendous potential in this prestigious platform." 🇵🇰

from the trenches, AI-driven live hacks and fierce CISO debates. Making their debut at the world's largest tech event is Chenxi Wang, Managing General Partner of Fortune 500 fund Rain Capital (US), and Ekaterina Serban, Vice President

of Privacy and Information Security at Bosch (Germany), the world's largest automotive and services supplier.

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Organizers



stc Group paves the way for sustainable transformation

stc Group has launched its fifth annual sustainability report, continuing its commitment to driving forward sustainable transformation through environmental, social, and governance (ESG) excellence.

The initiatives outlined in stc Group's 2023 Sustainability Report contribute to sustainable transformation and a future where businesses are the catalysts for protecting people and the planet. As part of the updated sustainability framework, the Group identified three core pillars in 2023:

Environmental Performance & Climate

stc Group aspires to be a global leader in environmental stewardship and has made significant progress toward its commitment to achieving net zero by 2050. This commitment has been validated and approved by the Science Based Targets Initiative (SBTi) and is supported by several environmental performance programs. Key initiatives and programs include the installation of seven operational solar powered sites at headquarters, as well as the incorporation of energy efficiency and sustainability measures for data centers and towers. Additionally, a solar pilot project launched for 18 sites across the Kingdom. The Group has also implemented advanced power-saving technologies using artificial intelligence (AI), resulting in a 13% reduction in energy consumption across stc's 4G and 5G networks.

Human Capital Development Through Technological Innovation

Fundamental to stc Group's sustainability practices are initiatives that advance human capital by creating opportunities for growth that bridge societal divides through technological innovation. These social investment initiatives enrich the lives of customers, empower stc Group employees,



and contribute to community development in impactful ways.

- **Enriching the Lives of Customers:** Through its trade-in program, stc Group ensures customers are offered affordable and sustainable devices.

- **Empowering stc Group Employees:**

o In 2023, women comprised 64% of the Group's Talent Incubation Program hires and held 18% of our Board seats, contributing to a 31.6% overall hiring rate for women.

o The Group also increased the number of employees with disabilities by 36.8% from 2022. As an equal opportunity employer, stc provides an inclusive work environment that attracts, develops, and retains the best and most talented individuals from all backgrounds.

- **Contributing to Community Development:** Investment and development in communities at stc Group is paramount, and in 2023 focused across six key areas: Education, Environment, Sports & Health, Entrepreneurship, Community

Development, and Youth Empowerment. One key program in 2023 supported 446 non-profits through a Technical Enablement Program (TEP), supporting operational efficiency and reduced technical operational costs across 50 cities, saving these non-profits more than SAR 56 million.

Strong Governance & Ethical Excellence

stc Group is dedicated to embodying a standard ethical governance that upholds the utmost levels of integrity, transparency, and accountability. In 2023, stc Group transitioned its compliance function from legal affairs to an independent division reporting to the Chief Regulatory and Compliance Officer, ensuring programs across subsidiaries rigorously adhere to performance standards, thorough impact assessments, and responsible business practices. This included the expansion of the rawafed program, which boosts the local economy and promotes sustainable business. Through rawafed, stc partnered with 134 local SME suppliers and increased the number of local content certificates from 75 in 2022 to 582 in 2023, a 676% growth that is reflected across the local economy. 

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Gulraiz Khalid



In today's rapidly evolving telecommunications industry, the ability to ensure the optimal performance of networks is a critical factor for success. With millions of users relying on telecom services for everything from internet access to mobile connectivity, maintaining network reliability is essential. Predictive maintenance, enabled by artificial intelligence (AI), is emerging as a powerful solution to reduce downtime, improve service quality, and streamline operations in telecom networks. This article delves into how AI is revolutionizing predictive maintenance, highlighting real-world examples, recent developments, and the future of this technology.

The Need for Predictive Maintenance in Telecom Networks

Telecom networks are complex infrastructures composed of hardware, software, and various communication protocols. With the increasing demand for data, coupled with the expansion of 5G networks, the complexity of managing these networks is growing exponentially. Downtime caused by equipment failures can result in significant financial losses,

damage to reputation, and customer churn. Traditionally, telecom companies relied on reactive maintenance—fixing problems only after they occurred—or scheduled preventive maintenance. These methods, however, are often inefficient and fail to fully mitigate risks. This is where AI-driven predictive maintenance is making a game-changing impact.

Predictive maintenance leverages AI algorithms and machine learning models to analyze vast amounts of data from telecom networks. By identifying patterns, trends, and potential failures before they happen, operators can proactively address

issues and prevent service disruptions. This approach reduces unplanned downtime, optimizes maintenance schedules, and lowers overall operational costs.

Real-World Applications of AI in Predictive Maintenance

Several telecom companies have already adopted AI-based predictive maintenance systems to enhance network performance. One notable example is AT&T, which has been using AI and machine learning to predict when and where network failures might occur. By analyzing data from cell towers, fiber optic cables, and other

By identifying patterns, trends, and potential failures before they happen, operators can proactively address issues and prevent service disruptions

network components, AT&T's system identifies early warning signs of equipment failure, such as signal degradation, excessive heat, or abnormal usage patterns. This enables the company to address issues before they escalate, thereby improving service reliability and customer satisfaction.

Another example is Vodafone, which has implemented AI-driven predictive maintenance to monitor its vast network of base stations and antennas across Europe. Vodafone's system uses machine learning to predict failures by analyzing environmental factors like weather conditions and real-time operational data. The company has reported significant improvements in network availability and reduced maintenance costs, thanks to this AI-driven approach.

Telecom companies are also using AI to predict and prevent power outages. For instance, Telefonica, a major player in Spain's telecom market, has developed AI models that monitor power usage across its network infrastructure. These models help predict potential power failures, allowing the company to take preventive actions such as rerouting power or replacing faulty equipment before outages occur. The result is improved network uptime and reduced customer impact.

Another leading company adopting AI-driven predictive maintenance is Huawei, a global leader in telecommunications equipment and services. Huawei's AI-powered predictive maintenance platform leverages machine learning algorithms and big data analytics to continuously monitor the health of network infrastructure, including base stations, antennas, and data centers. One of the company's key initiatives has been using AI to optimize the performance of 5G networks, which are particularly prone to increased wear and tear due to the higher bandwidth and speed demands. Huawei's AI system monitors network conditions and predicts failures in real time, providing operators with actionable insights to prevent downtime. For example, its AI algorithms have been used to detect anomalies in base station power consumption, which has allowed telecom

Huawei's AI-powered predictive maintenance platform leverages machine learning algorithms and big data analytics to continuously monitor the health of network infrastructure, including base stations, antennas, and data centers

operators to replace faulty components before they lead to service interruptions.

e& (formerly Etisalat), one of the largest telecom operators in the Middle East, has also made significant strides in leveraging AI for predictive maintenance. e& has partnered with leading technology companies to deploy AI-powered solutions across its network. The operator uses AI to analyze data from network components, such as switches, routers, and power systems, to predict when failures are likely to occur. By doing so, e& is able to prioritize maintenance activities, allocate resources more efficiently, and ensure higher service availability. The company's AI-driven predictive maintenance efforts have contributed to reducing customer complaints related to network downtime, improving overall customer satisfaction. In a recent initiative, e& integrated AI to manage its network's power consumption efficiently, which has allowed the company to optimize energy usage and lower operational costs while maintaining high standards of service delivery.

stc, the leading telecommunications provider in Saudi Arabia, has also implemented AI-based predictive maintenance to enhance the reliability and performance of its expansive network. As the company continues to expand its 5G network across the region, stc has turned to AI to monitor and predict potential failures in its network infrastructure. The

company's AI models analyze historical and real-time data from network components, such as towers, servers, and fiber optic cables, to identify potential failure points before they occur. stc's AI platform has been instrumental in optimizing the company's maintenance schedules, allowing them to reduce both costs and service interruptions. Furthermore, the company is leveraging AI to improve its sustainability efforts by monitoring and managing power consumption across its network infrastructure, ensuring that energy usage is optimized for both operational efficiency and environmental impact.

Recent News and Advancements

In recent years, AI-based predictive maintenance has seen rapid advancements. The rollout of 5G networks has further intensified the need for effective maintenance solutions due to the increased density of cell towers and the introduction of edge computing. AI's ability to process and analyze massive amounts of data in real-time is proving crucial to managing these complex infrastructures.

In 2023, Nokia launched a cutting-edge AI-powered predictive maintenance solution tailored for 5G networks. The system, branded as "PredictX," utilizes AI and machine learning to detect and predict failures in 5G base stations and core network components. Nokia's solution integrates with existing network



Machine learning models are now capable of processing data from multiple sources, including sensors, logs, and external factors like weather and traffic patterns



management systems and offers real-time insights into potential equipment malfunctions, enabling operators to make informed decisions about when and where maintenance should occur. The system has already shown promising results, reducing operational costs and improving service availability in pilot deployments.

Ericsson, another major telecom infrastructure provider, has also invested heavily in AI for predictive maintenance. In collaboration with Google Cloud, Ericsson has developed AI models that analyze historical and real-time data from network components, including antennas, routers, and switches. These models identify potential faults before they happen and recommend the optimal time for repairs or replacements, ensuring that service interruptions are minimized. This partnership underscores the growing importance of AI in the telecom industry, especially as networks become more complex with the deployment of 5G.

Huawei is also driving AI-based predictive maintenance forward with its proprietary iMaster MAE solution, which focuses on network automation and predictive maintenance. This solution utilizes AI to identify potential anomalies in network equipment and addresses them before service degradation occurs. By integrating this into 5G networks, Huawei is paving the way for more efficient maintenance practices in large-scale deployments of next-generation telecom infrastructure.

How the Technology is Evolving

The evolution of AI in predictive maintenance can be attributed to the development of more advanced machine learning algorithms, improvements in data collection and processing, and the integration of edge computing. Initially, AI systems in telecom networks were primarily used for reactive maintenance—analyzing failures after they had occurred. However, as AI technology matured, telecom companies began to use machine learning to proactively identify patterns in network behavior that might indicate future issues.

Machine learning models are now capable of processing data from multiple sources, including sensors, logs, and external factors like weather and traffic patterns. For example, AI systems can analyze historical maintenance records to predict the lifespan of specific components, identify which parts are more prone to failure, and optimize maintenance schedules based on predicted wear and tear.

Edge computing is also playing a significant role in the evolution of AI for predictive maintenance. By processing data closer to the source—at the network edge—telecom companies can reduce latency and make faster, more accurate predictions. This is particularly important for 5G networks, which require low-latency, high-reliability maintenance solutions to support mission-critical applications like autonomous vehicles, smart cities, and IoT devices.

The Future of Predictive Maintenance in Telecom Networks

Looking ahead, AI-driven predictive maintenance will likely become a standard feature in telecom networks. As the industry moves towards fully autonomous networks, AI will play a central role in managing and maintaining these infrastructures with minimal human intervention. Self-healing networks, where AI systems automatically detect, diagnose, and fix issues without the need for human oversight, are becoming a tangible reality.

Moreover, the integration of AI with other emerging technologies like blockchain and IoT will further enhance predictive maintenance capabilities. Blockchain can provide secure and transparent maintenance records, while IoT devices can continuously monitor the health of network components, feeding data into AI models for real-time analysis.

The future of AI in predictive maintenance will also be driven by advancements in quantum computing, which promises to accelerate the processing speed of AI models. With quantum computing, AI systems could process vast amounts of data in seconds, making even more accurate predictions and enabling telecom companies to manage their networks with unprecedented efficiency.

Conclusion

AI is transforming predictive maintenance in telecom networks, offering a powerful solution to the growing complexity of these infrastructures. Real-world examples from companies like AT&T, Vodafone, Huawei, e&, stc, and Telefonica highlight the tangible benefits of AI-driven maintenance systems, including reduced downtime, lower operational costs, and improved service reliability. As AI technology continues to evolve, driven by advancements in machine learning, edge computing, and quantum computing, the future of predictive maintenance in telecom networks looks promising. The telecom industry is on the brink of a new era, where AI will play a pivotal role in ensuring network reliability, driving operational efficiency, and enhancing customer experiences. ■

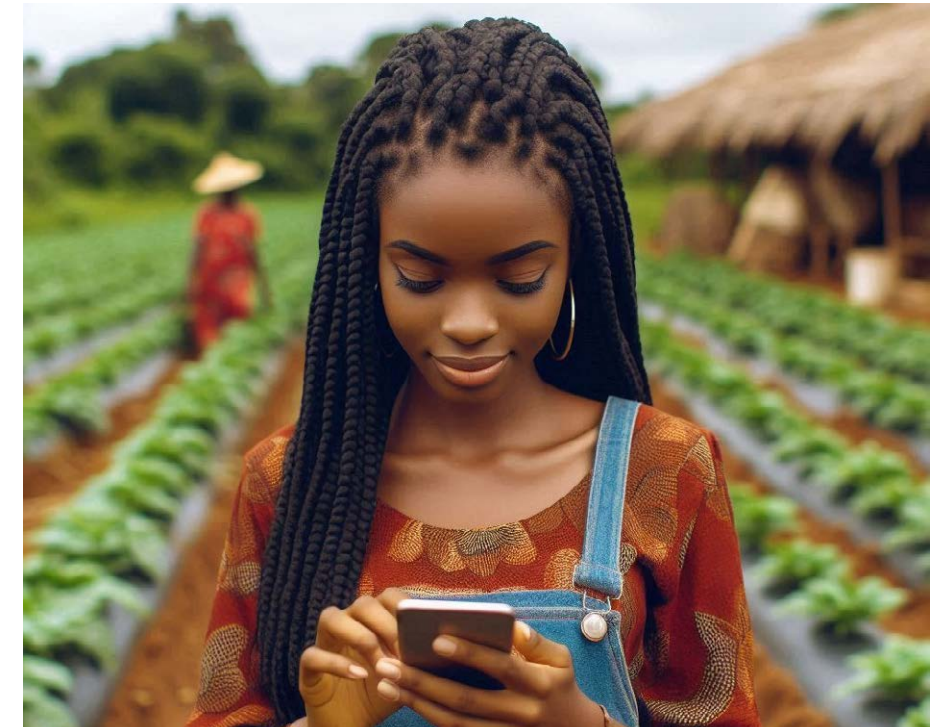
GSMA highlights Nigeria’s AI-driven path to economic growth and climate impact

Agriculture and energy are among key sectors of AI opportunity in Nigeria as the African continent looks to untap almost \$3 trillion of potential value by harnessing the new technology effectively

The GSMA has identified Nigeria as a pivotal player in the advancement of artificial intelligence (AI) for driving socio-economic progress and climate impact in its new report, “AI for Africa: Use Cases Delivering Impact – Nigeria Deep Dive”.

It follows the continent-wide report, funded by the UK Foreign, Commonwealth and Development Office (FCDO), which highlighted that while Africa currently accounts for only 2.5% of the global AI market, emerging AI applications hold the potential to boost African economic growth by an astonishing \$2.9 trillion by 2030.

The newly-released analysis on Nigeria, also funded by the FCDO, highlights AI’s transformative capacity in the country in key sectors such as agriculture, energy and climate action, and underscores Nigeria’s potential to lead in AI-driven development across the continent.



Agriculture: enhancing productivity and food security

Agriculture remains a significant sector in Nigeria, employing nearly 40% of the population and contributing a quarter of the GDP. The report identifies substantial opportunities for AI and digital technologies to enhance resource efficiency, increase productivity, improve market access, and reduce post-harvest losses. AI-powered solutions like Crop2Cash’s FarmAdvice and ThriveAgric’s Agricultural Operating System are already making strides by providing tailored advice and financial services to farmers.

However, challenges such as limited data availability, high costs, and a significant digital skills gap among smallholder farmers

hinder the widespread adoption of AI.

Energy: optimizing access and efficiency

Nigeria’s energy sector faces challenges including an ageing infrastructure and a reliance on fossil fuels. The deployment of AI technologies in the field remains nascent in Nigeria but has significant potential to improve energy distribution and reliability. Innovations like Beacon Power Services’ AI-enabled grid management platform and Husk Power Systems’ AI-driven mini-grids can optimize energy usage and extend access to rural areas.

These solutions are critical in addressing the energy sector’s needs, providing both on-grid and off-grid systems with the tools to enhance efficiency and sustainability.

Where access is lacking, AI could also play a role by helping inform energy planning and supporting the financing of solar appliances to reduce energy poverty.

Climate action: building resilience

Despite low greenhouse gas emissions, Nigeria is highly vulnerable to climate change. Existing AI-driven solutions include Google’s flood forecasting tool and Chemotronix, a carbon credit platform enabled by AI.

While climate-related AI applications are currently limited in Nigeria, there is potential to further leverage AI capabilities for climate action, especially around natural resource management. Satellite imagery could help biodiversity mapping

and monitoring, while climate modelling could help understand the future impact of climate change in highly polluted areas, helping Nigeria mitigate and adapt to environmental challenges.

Addressing key challenges

To fully leverage AI's potential, the report identifies several critical areas of focus:

1. Data availability and accessibility:

Investing in localized, domain-specific data collection and ensuring safe data handling practices are essential. Increasing access to high-quality data will help customize AI solutions to local needs.

2. AI infrastructure and computing:

Expanding infrastructure, enhancing access to high-performance computing, and prioritizing edge computing capabilities are necessary steps. Investments in these areas will support AI scalability and effectiveness.

3. Skills development: Enhancing AI and data science education, accelerating

digital literacy, and building capacity for AI users and builders are vital. Developing a skilled workforce will drive innovation and adoption of AI technologies.

4. Policy and ecosystem support:

Establishing clear policy roadmaps, encouraging cross-sector collaboration, and promoting local investment are key to fostering a robust AI ecosystem. Strengthening these areas will create an enabling environment for AI growth.

Strategic recommendations

The report provides targeted recommendations to support AI deployment in Nigeria:

1. Invest in localized data collection:

Support the financing of hardware and devices, including drones, IoT sensors, and smartphones to accelerate data collection across sectors, and support initiatives building local language datasets.

2. Enhance infrastructure and compute capabilities: Invest in data centres, promote

clean energy sources, and develop edge computing solutions for low-resource environments.

3. Foster AI skills and education: Capitalize on Nigeria's young population by enhancing AI and data science curricula, providing scholarships, and supporting capacity-building initiatives.

4. Strengthen AI ecosystem: Encourage public-private partnerships, mitigate investment risks, and boost funding for R&D to promote innovation and sustainable development.

Max Cuvellier Giacomelli, Head of Mobile for Development at the GSMA, said: "Nigeria's potential to harness Artificial Intelligence for transformative change is immense. The innovative applications we are already seeing in agriculture, energy, and climate action are just the beginning. With further progress around data availability, connectivity, or skills development, the country can truly enable AI to drive significant socio-economic progress." ■

IHS Towers and MTN Group to deliver mobile connectivity & drive digital inclusion

IHS Towers and MTN Group have renewed and extended communications infrastructure deals in Nigeria, as well as completing the renewal of all contracts across IHS Towers-MTN markets.

On 7 August 2024, the companies announced the agreement to renew and extend all Nigerian tower Master Lease Agreements until December 2032. The contracts include new financial terms that provide what the parties believe to be a more sustainable split between local and foreign currency. With this, IHS Towers and MTN Group have now completed the renewal of approximately 26,000 MTN tenancies on IHS Towers infrastructure across six African markets – Nigeria, Rwanda, Côte d'Ivoire, Cameroon, Zambia and South Africa.

MTN Group owns approximately 26% in IHS Towers, a stake which pre-dates the tower company's listing on the New York Stock

Exchange in 2021.

MTN Group President and CEO Ralph Mupita said: "The renewal of the various contracts across our markets into the next decade put MTN operations in the respective markets onto a more sustainable footing. We remain focused on ensuring our networks are well invested, have high availability and have the headroom to meet the growing and structural demand for data going into the future. These renewals are key to those priorities. We look forward to working constructively with IHS on the outstanding governance issues now that commercial arrangements have been concluded."

Sam Darwish, Chairman & CEO, IHS Towers, said, "As our largest customer and longest serving partner, we are proud to have completed the renewal of all tenancies with MTN Group in our African markets. Today,

we reinforce our strategic relationship and commit to increased operational stability, by securing our revenue streams into the next decade, and leveraging our shared innovation to deliver critical connectivity and support digital inclusion across the African continent. We are excited by the next phase of our commercial partnership and welcome the opportunity to work constructively for the benefit of the end user."

Building on their 20+ year relationship as commercial partners, both companies will leverage their shared operational excellence and engineering expertise to meet the end users' increasingly sophisticated data demands. Together, IHS Towers and MTN Group have a track record of navigating complex operating environments and challenging macroeconomic conditions to deliver connectivity crucial to economic growth and digital inclusion. ■

Saudi Arabia's sustained economic growth and digital transformation drive cybersecurity sector

The unemployment rate for Saudis dropped to 7.7% in the last quarter of 2023, nearing the objective of 7% as set for Vision 2030 and the nation is set to grow by 4.4% in 2024, fueled by substantial investments in non-oil sectors and the ambitious Vision 2030 initiative aimed at economic diversification. As Saudi Arabia's economy continues to flourish, this economic upturn is further supported by robust consumer spending, stabilized oil prices, easing inflation and a highly digitalized public and private sector.

As a digitally advanced nation, the Kingdom's residents have technology integrated into everyday life, from government services on platforms like Absher to various mobile applications for healthcare, finance, insurance and other services and Saudi Arabia is recognized globally for its digital advancements, ranking 3rd in the World Bank's GovTech Maturity Index for digital government transformation and 1st in the Arab world for digital competitiveness. This widespread digital integration necessitates the need for a resilient cybersecurity infrastructure to ensure the secure functioning of digital services.

The rapid expansion is also driven by the implementation of advanced technologies such as AI (Artificial Intelligence), IoT (Internet of Things), IIoT (Industrial Internet of Things) and hybrid cloud, in both public and private sectors. Reflecting this trend, the cybersecurity market in Saudi Arabia is witnessing unprecedented growth, with a compound annual growth rate (CAGR) of 13.78% and a market size of SAR 21bn at the end of 2023.

The Kingdom's rapid digital transformation and economic diversification under Vision 2030, increase the vulnerability of its digital infrastructure and high-value



targets make it a prime target, with the average cost of a cyberattack in Saudi Arabia being significantly higher than the global average, highlighting the critical need for cybersecurity measures such as the government's significant investments in developing cyber-secure infrastructure and the establishment of the National Cybersecurity Authority (NCA).

Four new Special Economic Zones (SEZs) in Saudi Arabia were also launched at the end of 2023, including the Cloud SEZ, which aims to attract leading global cloud computing companies to start their commercial operations with the capability to build and operate data centers throughout the Kingdom. This was followed by major global companies like Oracle announcing a SAR 6bn investment towards developing local cloud computing centers, AWS announcing a SAR 20bn investment towards building data centers and a significant cloud presence, and Google launching a new cloud region in Dammam that is estimated to add SAR 409bn to the country's GDP between 2024 and 2030.

To achieve hyper-resilience against cyber threats, strong collaboration between

government entities, private enterprises and international partners is essential. This approach leverages the strengths and resources of all stakeholders to create a comprehensive cybersecurity framework for the nation.

Gathering thought leaders, visionaries, market innovators and experts to play a pivotal role in this collaborative effort, MENA ISC 2024, one of the oldest and most trusted events among CISOs (Chief Information Security Officers) and cybersecurity professionals in the whole region, will once again bring together top industry leaders and decision-makers, for its 12th edition, on a platform to discuss the latest cybersecurity challenges and share ground-breaking solutions.

With the theme, "Hyper-Resilient Cyber: Navigating the Evolving Threat Landscape of the Interconnected World of IT, OT (Operational Technology), IoT, IIoT, & Hybrid Cloud," MENA ISC 2024 aims to address the rapidly changing cybersecurity landscape and its implications for the Kingdom's thriving businesses and critical infrastructure, and continue to be a beacon of knowledge sharing and collaboration in a sector that is constantly innovating. ■

e& delivers strong H1 2024 performance, consolidated revenue up 6% to AED 28.3 billion

e& has announced its consolidated financial results for the first half of 2024, reporting consolidated revenues of AED 28.3 billion, a year-over-year (YoY) growth of 6 percent, demonstrating strong performance across all business verticals.

Reflecting the effectiveness of its strategic focus on growth in local and international markets, the group's consolidated net profit grew by 17 percent to AED 5.5 billion. Furthermore, consolidated EBITDA reached AED 12.9 billion, resulting in a healthy EBITDA margin of 46 percent.

e&'s robust financial results are driven by its relentless focus on maintaining its growth momentum with a strong commitment to drive innovation while enabling a digital future for customers across its markets. This is further evidenced by the group's growing subscriber base, with total subscribers reaching 175 million, a significant YoY increase of 6 percent, while the total number of e& UAE subscribers reached 15 million, representing a YoY growth of 5 percent.

Delivering on its promises of maximizing value to its shareholders, e&'s Board of Directors approved an interim dividend of 4.15 fils per share for the first half (January to June) of 2024, in accordance with the new dividend policy that was greenlit by the shareholders at the Annual General Meeting (AGM) earlier this year.

The newly approved dividends policy stipulates an incremental increase of AED 0.03 per share every year for the fiscal years 2024, 2025, and 2026.

H.E. Jassem Mohamed Bu Ataba Alzaabi, Chairman, e&, said: "e& showcased remarkable resilience and sustained its upward trajectory in the first half of 2024, achieving consolidated net profits of AED 5.5 billion, representing a year-over-

Financial Highlights for H1 2024

	H1 2024	H1 2023	Percent change
Revenue	AED 28.3 billion	AED 26.6 billion	6% (*)
Net Profit	AED 5.5 billion	AED 4.7 billion	17%
EBITDA	AED 12.9 billion	AED 12.8 billion	2% (*)
Earnings per Share	AED 0.63	AED 0.54	17%
Consolidated Group Subscribers	175 million	165 million	6%

(*) At constant exchange rates, revenue increased by 8 per cent and EBITDA increased by 3 per cent year-over-year.

year growth of 17 percent. This robust performance was driven by our unwavering commitment to excellence and innovation."

"We are proud of the progress made in the first half of 2024, which was bolstered by our recent acquisitions, partnerships, and strategic expansion of our digital services portfolio. These efforts significantly strengthen e&'s position as a leader in digital transformation, providing state-of-the-art solutions to our diverse customer base."

Reflecting on e&'s growth trajectory and future prospects despite challenges in some of its markets, H.E. Alzaabi commented, "e& remains committed in delivering top-tier services and advanced technologies with a focus on purpose and value. Our ongoing investments in digital infrastructure and emerging technologies position us as a driving force for innovation and growth, making us the preferred partner in advancing the digital economy. With the support and vision of the UAE leadership, we will continue to play a crucial role in shaping the digital landscape and driving socio-economic progress, thereby reinforcing the UAE's status as a global innovation hub."

Hatem Dowidar, Group Chief Executive Officer, e&, said: "e&'s performance in the first half of 2024 highlights our dedication

and efforts to foster growth and efficiency while demonstrating resilience and adaptability to the various challenges in some of our markets."

"e& achieved impressive results with consolidated revenue increasing by 6 percent to AED 28.3 billion, and consolidated EBITDA rising by 2 percent year-over-year to AED 12.9 billion. Our success is driven by our relentless pursuit of technological innovation, delivering tangible value to our customers and shareholders. We have embraced advanced and emerging technologies, launching numerous AI-driven initiatives and platforms, underscoring our leadership in digital transformation. Strategic partnerships have enhanced our service portfolio, while we continue to expand our global presence through successful acquisitions."

"Looking ahead, I am confident that our dedication to empowering individuals, businesses, and communities through technology will pave the way for growth and create a meaningful impact in people's lives. Despite the challenges in some markets, we will focus on seizing the opportunities ahead. With the unwavering efforts of our teams, we can accelerate our progress, take bold actions to enhance our value proposition, and expand access to connectivity. We are deeply grateful to our customers and shareholders for their

continued support and trust as we explore new avenues and achieve new milestones," added Dowidar.

Key Operational Highlights

e&

e& was crowned the Fastest Growing Tech Brand and the Most Valuable Brand Portfolio in the Middle East and Africa (MEA), according to the 2024 Brand Finance Global 500 Report in recognition of the group's exceptional performance in increasing the value of its brand portfolio to US \$17 billion in 2024, reflecting the confidence of investors and partners in e&, which has also been named the world's Strongest Telecom Brand in the World for 2024 with a score of 89.4 out of 100 on the BSI Index with a leadership rating of AAA. e& was also named a Great Place to Work® by the Great Place to Work Institute in recognition of the company's efforts to foster a positive, supportive, and engaging work environment for its employees.

e& and Abu Dhabi National Oil Company (ADNOC) joined forces to build the world's largest private 5G network for the energy sector. This groundbreaking initiative will revolutionize the industry by enabling blazing-fast data transfer and connectivity across ADNOC's 11,000-square-kilometre operation. This powerful network will empower ADNOC's AI solutions to access remote onshore and offshore sites, driving significant technical advancements and innovation.

e& and Vodafone joined forces to empower other regional and international operators to adapt to the evolving voice landscape with cross-border managed voice solutions. The group also signed an agreement with Dell Technologies to drive 5G innovation through Dell's Open Telecom Ecosystem Lab (OTEL) and another with Huawei to build green and energy-efficient networks.

In a major move for the telecom industry, e& and its partners in the Global Telco AI Alliance formed a joint venture in H1 2024. This venture aims to develop cutting-edge

H1 Financial Results 2024

- Consolidated Revenue:** AED 28.3 Billion (6% YoY growth)
- Consolidated Net Profit:** AED 5.5 Billion (17% YoY growth)
- Consolidated EBITDA:** AED 12.9 Billion (2% YoY growth)
- Global Subscribers:** 175 Million (6% YoY growth)
- UAE Subscribers:** 15 Million (5% YoY growth)

The Fastest Growing Tech Brand in MEA

- Most Valuable Brand Portfolio** in MEA
- The Strongest Telecom Brand** in the World for 2024 with a BSI score of **89.4/100**, resulting in **AAA**
- Plays an integral part in **UAE's global leadership** in Fibre to the Home (FTTH) penetration since 2016 with a penetration rate of **99.3%**
- The Top Telecoms Employer Brand** in **Employer Brand Index 2024**
- e& enterprise acquired **GlassHouse**, a leading Turkish Managed Cloud provider
- e& enterprise announced the launch of a **Contact and Customer Experience Centre** in **Riyadh**
- e& has been named a **Great Place to Work®** in recognition of the company's efforts to foster a positive, supportive, and engaging work environment for its employees.

* Including (STARZPLAY, Careem Everything App)

Large Language Models (LLMs) specifically designed to revolutionize customer service through advanced AI solutions.

e& Carrier & Wholesale (C&W) has made advancements in accelerating the growth of connectivity with milestone agreements in the subsea cable space with 2Africa subsea cable, the most extensive subsea cable system landing in the UAE to date, making a huge leap forward in positioning the UAE as a global hub for digital connectivity and

providing advanced digital infrastructure that supports economic development and innovation.

A collaboration with Ooredoo will introduce the Gulf Gateway Cable (GGC-1), connecting data centres in Abu Dhabi and Doha while facilitating seamless communication and data exchange. In addition, C&W launched the region's first Smart Connect (Bandwidth on Demand) service, allowing operators to scale their connectivity requirements on the

go with unmatched flexibility and control over bandwidth provisioning.

e& joined forces with Telecom Egypt, Indonesia's Telin, and a major unnamed Indian telecom company to develop the ICE IV subsea cable project. This ambitious project aims to connect Southeast Asia and India seamlessly to the Middle East. Additionally, e& has expanded its state-of-the-art Tier III SmartHub network to Abu Dhabi. This expansion strengthens the region's entire digital ecosystem by providing advanced infrastructure.

e& Carrier & Wholesale continued its ascendancy, winning the 'Edge Innovation of the Year' Award at the 2024 Data Centre Solutions (DCS) Awards, followed by 'Middle East Regional Operator of the Year' and 'Best Regional Data Center Operator' at the Carrier Community Global Awards (CCGA). In addition, e& group won top positions in the MMA MENA Smarties Awards for its innovative solutions in customer and user experience and design.

e& UAE

e& cemented its leading position in telecommunications and technology, shattering speed records by achieving the world's fastest data transfer rate of 30.5 Gbps on its live 5G network in the UAE. This breakthrough strengthened the country's reputation as a global hub for digital innovation and reinforced e&'s leadership in 5G technology.

Setting an industry benchmark in the Middle East, e& UAE announced a network upgrade capability that will deliver speeds of up to 50 Gbps. Powered by the successful completion of the Middle East's first symmetric 50-Gigabit-capable Passive Optical Networks (50G-PON) broadband service, e& UAE is set to accelerate the digital experience for households and businesses.

Further demonstrating its commitment to advancing 5G technology, e& UAE released a comprehensive whitepaper highlighting the transformative potential of 5G networks in driving progress across various sectors

and providing the advanced infrastructure needed for the UAE's prosperous digital future.

e& continued to play an integral strategic part in the UAE's global leadership in Fibre-to-the-Home (FTTH) penetration, cementing the country's top position with a penetration rate of 99.3 percent. e& UAE remains squarely focused on realizing the nation's connectivity ambitions, enabling homes and businesses to benefit from the latest high-speed internet services, enhancing productivity, and enriching the customer experience.

Championing innovation, e& UAE partnered with Corning Incorporated to bring cutting-edge Fibre-to-the-Yacht (FTTY) services to the water's edge at Yas Marina in Abu Dhabi. This collaboration utilizes Corning's advanced fibre optic cables to deliver high-speed internet connectivity to all yachts docked there.

e& UAE also collaborated with Nokia to bring Multi-Access Edge Slicing, a first for its network, and also broadened its partnership with Oracle to fuel AI advancements, deploying NVIDIA H100 GPU clusters within e& UAE's Oracle Cloud Infrastructure (OCI) Dedicated Region, located at its data centres.

e& UAE set a new benchmark as the first company outside North America to deploy Microsoft's Azure Operator Nexus and Azure Operator 5G Core solutions. Continuing its efforts to elevate customer experiences using custom Generative AI (GenAI), e& UAE partnered with Amazon Web Services (AWS).

In a strategic move to enhance global connectivity, e& UAE became the first operator to join Yahsat's Direct-to-Device (D2D) ecosystem, which brings satellite coverage to standard smartphones.

Spearheading advancements in aerial mobility and autonomous systems across the country, e& UAE announced a partnership with Multi Level Group (MLG) to drive innovation in electric vertical

take-off and landing (eVTOL) aircraft and drone development, as well as integrated solutions utilizing its leading 5G network and digital expertise. The partnership was revealed in live demonstrations of eVTOL aircraft and drones powered by e& UAE's 5G network.

Demonstrating its commitment to delivering outstanding customer service, e& UAE continued to drive innovation, expanding its market reach and opening the second AI-powered autonomous telecom store, 'EASE,' in Dubai Mall. The self-service telecom store is designed with cutting-edge technology to help customers seamlessly purchase products and services.

e& UAE has successfully implemented AI-driven solutions to enhance customer experience, resulting in over 30 percent fewer technical calls and a 40 percent reduction in technician visits.

In a strategic collaboration to foster economic growth, the company partnered with the Abu Dhabi Chamber of Commerce and Industry to empower small and medium enterprises (SMEs), leveraging its expertise in digital technologies to facilitate digital transformation processes for SMEs in Abu Dhabi.

e& UAE brought Copilot for Microsoft M365, the transformative AI tool, to small and medium-sized businesses (SMBs) and enterprises. Copilot is an AI-powered assistant that integrates with various Microsoft 365 applications, seamlessly boosting productivity, creativity, and overall workflow efficiency while extending the data privacy and security of the Microsoft cloud.

Supporting small and medium businesses, e& UAE celebrated business excellence by launching the third edition of its SMB Awards 2024, a benchmark for recognizing and celebrating the outstanding achievements of SMBs in the UAE.

Demonstrating its commitment to social responsibility and digital inclusion, e& launched an AI-powered browser extension



H.E. Jassem Mohamed Bu Ataba Alzaabi
Chairman, e&

called "Wider Web" to support an autism-friendly browsing experience. The free-to-use browser extension empowers autistic users and caters for their needs by offering a customizable, sensory-friendly web-browsing experience.

Marking an important step towards digitized education in the country, e& UAE launched its groundbreaking AI-powered platform, GoLearning. The e-learning platform redefines the learning experience, offering a vast library of over 10,000 accredited courses, including a generous selection of more than 4,000 free courses focused on professional and personal development. GoLearning empowers everyone to pursue endless learning opportunities and skill development, focusing on maintaining the highest quality content.

In its continuous effort to support young Emirati talents and empower them with opportunities in the private sector, e& held the 2024 edition of its virtual coding camp to enable students and teachers with the essential technical skills to navigate and succeed in today's dynamic digital world. It also announced the opening of applications for the sixth cohort of its AI Graduate Program, which is set to commence in September 2024.

In recognition of its efforts to provide a supportive work environment for employees, e& UAE attained the highest position in Brand Finance's inaugural



Hatem Dowidar
Group Chief Executive Officer, e&

Employer Brand Report 2024 ranking as the Top Global Telecom Employer, marking yet another important milestone in its track record.

e& life

e& life, the business pillar of e& that enriches people's digital lives, continued to embrace its vision of simplifying its services, releasing the updated version of the e& money app, which became the UAE's number one fintech app in terms of monthly active users. e& money 2.0 now boasts full Arabic language support, making it accessible to a wider audience.

evision, the media and entertainment streaming arm of e& life, continued to enhance and develop its content library to meet the diverse requirements of MENA audiences. In the first half of 2024, evision recorded significant growth, surpassing 5.5 million subscribers. STARZ ON, its ad-supported streaming platform in the Middle East and North Africa, has been a key driver of growth.

The STARZ ON free experience was enhanced with a diverse range of content, including sports, Arabic and Turkish programming with Noor Play, and Mandarin and Korean programming with IQIYI. The strategic partnership with Noor Play also extends to cover a diverse range of premium content across Starzplay, eLife, SwitchTV and other e& platforms

To cater to the sub-continent audience, evision secured exclusive rights to the ICC Cricket World Cup and acquired exclusive rights to exciting Hotstar (Disney Star), Zee, and Viacom 18 content.

evision further solidified its entertainment offerings by signing multi-year deals with major studios including Sony Pictures Television and Amazon MGM. These deals bring the latest blockbusters, renowned classics, and family favorites from both cinema and television to Starzplay, eLife and Switch TV.

In addition, evision strengthened its sports portfolio by acquiring exclusive rights to UFC for the MENA region.

e& enterprise

e& enterprise remains a powerhouse for digital transformation in the private and public sectors. Its innovative tech solutions and enhanced digital services continue to empower businesses across industries to achieve their goals and accelerate growth.

e& enterprise marked a significant step towards regional digital transformation leadership. It expanded its global footprint by acquiring GlassHouse, a leading Turkish provider of managed cloud, business continuity, and SAP infrastructure services. This strategic move grants e& enterprise entry into the pivotal Turkish market, positioning it for significant growth and expansion.

In the first half of 2024, e& enterprise signed two landmark collaboration agreements with Burjeel Holdings, including the launch of a pioneering telemedicine services project and an MoU to transform delivery models and redefine healthcare in the UAE and beyond. This strategic collaboration represents a transformative approach to healthcare that prioritizes accessibility, efficiency, and sustainability across the region.

Pioneering a new approach to digital payments, e& enterprise forged a strategic partnership with Fils. This partnership

establishes a sustainable digital payments model, empowering companies to provide customers with greater transparency. Companies can now share the carbon footprint associated with each transaction, along with the option to offset emissions through reliable methods.

With Abu Dhabi Social Support Authority (ADSSA), e& enterprise developed the "House Visits and Interviews Management System." marking a significant milestone in ADSSA's digital transformation journey. The system streamlines social workers' field visits, ultimately enhancing the efficiency and impact of social support services for low-income families in Abu Dhabi.

e& enterprise continues to champion digital innovation in the region. Through a strategic partnership with SAS, it brings cutting-edge AI solutions and advanced data analytics to businesses in the UAE and Saudi Arabia. This partnership empowers companies across various sectors to leverage the power of AI and data for operational improvements and informed decision-making. e& enterprise also signed an agreement with Dubai Public Prosecution (DPP) to develop the world's first central digital system for remote investigation and litigation, streamlining the justice system and enhancing its efficiency and speed.

Reaffirming its commitment to accelerating Saudi Arabia's digital transformation, e& enterprise entered a strategic partnership with the King Abdullah Financial District (KAFD) and the International Data Corporation (IDC). This project focused on analyzing the Kingdom's current digital landscape, e& enterprise's investments in the region, and its alignment with the goals of Saudi Vision 2030. Creating jobs and boosting customer experience, e& enterprise opened a new state-of-the-art Contact and Customer Experience Centre in Riyadh equipped with the latest technologies to deliver exceptional customer service. The new facility is designed to support Saudisation and is expected to create over 1,500 new local job opportunities across administrative, technical, and specialist roles.

e& enterprise partnered with NICE to bring cutting-edge customer service solutions and the Contact Centre as a Service (CCaaS) platform to businesses in the UAE.

e& enterprise has joined forces with Payit, the leading e-wallet from First Abu Dhabi Bank, to streamline digital payment processes for businesses across the UAE. This strategic partnership leverages e& enterprise's Payment as a Service (PaaS) platform to increase customer satisfaction and boost digital payment adoption rates.

Demonstrating its commitment to innovation, e& enterprise unveiled haifin, the new brand identity for its leading blockchain-based trade finance platform. Previously known as UAE Trade Connect, haifin simplifies and facilitates trade across the MENA region.

haifin welcomed three new members to its consortium which included two banks and one fintech, including Sharjah Islamic Bank which became the 14th bank to join the platform. Haifin is now ISO/IEC 27001:2022 certified and has 18 members including commercial banks, Islamic banks and fintechs.

e& enterprise, in collaboration with the National Health Insurance Company (Daman), has launched a global first – Hayakom, a revolutionary digital service chain for the health insurance sector. This innovative platform aims to significantly enhance customer service experiences within the UAE's health insurance landscape.

e& international

e& international marked a significant step forward in its global expansion during the first half of 2024.

Uzbekistan's Perfectum joined e& international's Partner Market Program in a strategic move designed to accelerate digital transformation within the country's telecommunications sector. The program offers Perfectum access to e& international's extensive expertise and cutting-edge

solutions. By leveraging this partnership, Perfectum can fuel business growth, drive innovation across industries, and play a key role in Uzbekistan's digital future.

PTCL launched a new combined UPTCL app that covers PTCL, Ufone, and Flash Fibre in one app. The app is the first platform of its kind in Pakistan that serves as a single digital channel for wireless and fixed line customers to manage their connections, profiles, payments, and more.

e& Egypt launched e& Neo, in conjunction with Mashreq Bank, the first digital banking services in Egypt.

e& Egypt received the "Business Excellence Award – Egypt 2024", earning special recognition for outstanding Culture and People Practices.

Onic, e&'s digital brand in Pakistan, secured a double victory at the Pakistan Digital Awards, clinching Best Mobile App and Digital Ambassador of the Year.

Etisalat Afghanistan acquired 15 MHz of spectrum in the 1800 and 2600 bands, holding the largest spectrum in the market.

e& capital

e& capital, the investment arm of e&, has become a major player in the Middle Eastern venture capital (VC) ecosystem. It has invested nearly US \$150 million in startups that are shaping the future of technology in the MENA region and the world.

e& capital's investments cut across various exciting technology-led industries, including AI, SaaS, edtech, healthtech, telecommunications, and entertainment, strategically complementing the group's wide range of services. Key investments include Ikigai, an AI platform developed from MIT research that delivers highly accurate forecasts and time series predictions; Airalo, the global leader in travel eSIMs; and Traydstream, a platform digitizing and automating the trade finance industry globally. ■

Intelsat eyes strategic growth in the MENA region

A vibrant Middle East market provides great opportunity for Intelsat One Flex and a future Software Defined Network

Rhys Morgan, VP - General Manager, EMEA Media and Network Sales talks to Teletimes International in an exclusive interview

Interview: Gulraiz Khalid

Gulraiz: What's your take on the CABSAT event and how are you making use of this gathering as an opportunity?

Rhys: CABSAT is always a tremendously important show. The MENA region has been a strategically important area for us since the founding of Intelsat. In recent years, with all the developments in the UAE, Saudi Arabia, and multiple other countries, it has been a real growth area for us. We have an office in Dubai, which has expanded over the last three to four years, doubling in size. This growth reflects the amount of business we are doing in the region. So, it's a very important region for us, and by definition, CABSAT is a crucial show for us. We want to be here to see our customers and talk to new prospects. In the Middle East, customers prefer to do business with people they know and like to see the company visible and present in the region. That makes CABSAT even more important for us in terms of having a team here. We have quite a few people here, as we always do, with a packed agenda of meetings across the three days, dinners in the evening, breakfasts, etc. Many people fly in to visit the show, and we take advantage of that to see a lot of people across the event. For us, the big focus this year is on the three key verticals we operate most broadly in this region.

On the network side, we are talking to major telcos and their partners about cellular backhaul services and how we can integrate satellite more deeply into their networks. We have a suite of managed services, including Intelsat One Flex, a global product we are discussing with people in the region, whether it's extending their networks or providing connectivity for their customers in other regions. There's a lot of interest there.



We are also talking to many people around media, such as taking content from the Middle East and exporting it to Sub-Saharan Africa, North America, and other regions. We have a significant international media business where we take a lot of TV channels from here to the wider world.

Finally, we have many discussions around mobility, whether it's land mobility, small form factor terminals, maritime, or aviation. We have a broad variety of discussions across these areas, and if you walk around and see the content, you'll see that we reflect that. We are focusing very much on the local markets in the MENA region, tailoring our offerings to their specific demands.

Gulraiz: Did you personally see anything at CABSAT that excites you? What did you like most about the event?

Rhys: There are a lot of new antennas appearing. Walking around the hall, I see many flat panel antennas and smaller flat panel antennas. We are convinced that antenna technology needs to catch up with all the innovation going on in space. We are always driving for smaller, flat antennas that do not need complex installation and are priced right. I see more and more innovation across the hall and the industry. More software is entering the networks, and software-defined networking is where we all need to get to. We are investing around \$2 billion in a new software-defined network, and it's good to see the rest of the industry reflecting that. We need to become

more interoperable with our telco partners, so we are building a 5G compliant, 5G standards-based network that will interoperate with our telco partners. It's good to see our vendors and partners also moving towards software-defined networks, moving away from traditional hardware-based systems. That's very positive.

Overall, my general comment would be the vibrancy of the market. There's a massive amount of infrastructure investment and innovation going on. Large telcos in the region are constantly trying to expand their offerings, revitalize them, and provide new services to their customers. We work closely with them, and the closer we get in terms of network technology, the more we can do for them.

Gulraiz: *Can you tell us a little bit about your work on the software-defined network (SDN)?*

Rhys: We are currently working very hard to develop a software-defined network both on the ground and in space. We have four software-defined satellites with manufacturers at the moment. These satellites will bring a tremendous amount of capacity and flexibility, allowing us to move capacity almost anywhere around the footprint very dynamically. This means we have far less wasted capacity in low-demand areas, and we can follow high-value customers, like a plane, with a satellite beam. If a high-value customer on a plane wants a gig of capacity, we could provision that and have the capacity follow the plane on its journey. This provides a significant step change in functionality and capacity on the satellite.

The network needs to cope with that, so we are building a 5G standards-based network globally, running many virtual services rather than hardware-based ones. The goal is to build everything onto consumer-grade computer technology, allowing for continuous upgrades and flexibility through software rather than hardware. This approach makes satellite communications more accessible and enables us to move capacity around almost automatically. Our customers' networks will react to that with built-in triggers and management tools as part of this software-defined network. It will bring a lot of orchestration and network intelligence, opening the addressable market by moving away from specialized satellite hardware to a more mass-market electronics approach.

Gulraiz: *In terms of your cooperation with telcos, will this be a global rollout, or do you have specific partners you are more interested in partnering with?*

Rhys: Some organizations are more interested than others, but our rollout will be global. Our network will be fully upgraded, and it ultimately depends on how close we get with our partners and customers. We are interconnected and deeply embedded in certain mobile network operator networks, while in others, we may be more at arm's length. This often depends on their operational philosophy and how much infrastructure they want to own. Many mobile network operators come to us with requests to outsource

“ There's a massive amount of infrastructure investment and innovation going on. Large telcos in the region are constantly trying to expand their offerings, revitalize them, and provide new services to their customers ”

almost all of their satellite infrastructure, and we often take that on and manage it for them. We are satellite experts, and in some partner organizations, satellite expertise may not be present, or they may not want the OPEX burden or CAPEX reinvestment into satellite infrastructure. We take away that burden and allow them to outsource to us. This is common in countries where they operate, such as in West Africa, where we actively manage networks for large mobile network operators. Others prefer to manage their own networks end-to-end, so they may not exploit parts of the terrestrial network to the fullest capacity due to their architectural philosophies or financial dynamics. It will vary widely, just as it does today.

Gulraiz: *How do you see the future of Intelsat and the satellite industry, especially in the Middle East? Do you see any major trends that will shape the industry?*

Rhys: There will be continued growth in this region. Looking at some of the major countries and their ICT upgrade programs, there will be ongoing growth as people improve connectivity, coverage depth, and connected devices. We see this across the region, with demand for in-country services increasing. We are currently scoping out where to build a large gateway for the software-defined network. We want a physical infrastructure and service delivery presence in the region, which would be a significant investment. We are talking to various partners about this. There's also more demand to take services out of the region to other areas. Telcos and media companies want to service their customers who may have branch offices or facilities elsewhere or want to watch their content outside the region. There's an outward-looking mindset, with regional development and expansion of footprints. Telcos want to improve services across all their operations, media companies want to enter North America, and maritime and aero companies are expanding globally and need global partners. This trend is speeding up, and we are seeing more of it. ■

Navigating IT Outsourcing: Key Models and Best Practices

Eng. Nidal Bitar, CEO - ICT Association of Jordan

Information Technology Outsourcing (ITO) is an effective strategy for companies operating in various sectors such as financial, health, communications, industrial, and other sectors in order to enhance their capabilities and reduce operating costs, and most importantly to have them focus on their core business and operations.

ITO involves hiring specialized third-party companies to handle various IT functions, including software development, infrastructure management, and IT support. This outsourcing can be done locally, offshore, or via cloud services, offering flexibility and cost benefits depending on the adopted model.

ITO Outsourcing models typically fall into three main types, the first of which is the "Dedicated Team Model", where service providers allocate a dedicated team of professionals to work exclusively on the client's project. This model is suitable for long-term projects and provides high transparency and deep understanding of the project. However, it may not be sustainable for short-term projects and requires a steady flow of tasks to keep the team engaged.

The second model is the "Project-Based Model," where the client hands over the entire project to the outsourcing company, which manages everything from planning to launch. This model is ideal for well-defined projects with clear requirements, as it ensures minimal time commitment from the client.

The third model is the "Staff Augmentation Model," where the IT outsourcing company provides additional professionals to strengthen the client's internal team. This model offers flexibility and scalability but requires the client to manage the



T&M is especially beneficial for projects with uncertain outcomes, such as research and development initiatives. It allows clients to pay only for the actual work performed, reducing financial risks.

For ITO companies, building strong communication channels and cultural understanding with clients is essential. Investing in employee skill development and staying updated on the latest technological trends are also crucial for delivering innovative and high-quality solutions.



outsourced professionals directly.

A key concept in ITO is Time & Materials (T&M), where the client pays based on the actual time and resources consumed during the project. Costs are calculated by tracking the hours worked and the materials used, such as software and hardware. This model allows for flexibility in modifying project scope and requirements, making it ideal for projects with evolving needs or those involving high levels of innovation and experimentation.

Finally, selecting the appropriate outsourcing model depends on several factors, including the project scope, duration, management methodology, and technical requirements. Clients should carefully evaluate these aspects to choose the model that best fits their needs and budget. By understanding the strengths and weaknesses of each model, companies can make informed decisions to improve operations, enhance capabilities, and achieve strategic goals. ■



ICT leaders discuss future of tech talent and digital transformation in ME&CA

During the Huawei Seeds for the Future 2024 Regional Final, ICT leaders from government, private sector, and media representatives came together for an insightful panel discussion on the future of ICT talent and the pivotal role it will play in shaping the future digital economies.

This pivotal event, held at the IT Park in the building of the Ministry of Digital Technologies of the Republic of Uzbekistan, brought together high-ranking officials from the Ministry of Digital Technologies of the Republic of

Uzbekistan, UNDP, University of Dubai, Research Institute of Environment and Nature Conservation Technologies, and Huawei. Under the theme of "ICT Talent & Youth Power Driving Digital Innovation & Shaping the Sustainable Future of the ME&CA Region: Public-Private Partnership & Open Collaboration for Shared Success," the panel set the stage for an engaging dialogue on the future of education and digital transformation. The discussion centered on the vital role of open collaboration in nurturing local ICT talent, driving technological innovation, and building sustainable, knowledge-

based digital economies in the region.

The panel featured prominent figures from various sectors, including Karimjonov Rustam, Deputy Minister of Digital Technologies of the Republic of Uzbekistan; Professor Wathiq Mansoor, Dean of the University of Dubai; Nuriddin Samatov, Research Assistant at the Research Institute of Environment and Nature Conservation Technologies; Bunyod Avliyokulov, Program Analyst on Effective Governance, UNDP Uzbekistan; and Duke Zhang, Vice President of Public Affairs, Huawei Middle East & Central

Asia. stated: "We are committed to integrating advanced technology into our educational frameworks through strong public-private partnerships. By nurturing local ICT talent, we are not only preparing our youth for future challenges but also fostering an environment of innovation and growth in the digital economy."

Professor Wathiq Mansoor, Dean of the University of Dubai, commented: "Public-private partnerships are essential in bridging the gap between academia and industry. Initiatives like Huawei's SFTF and the implementation of smart education solutions play a crucial role in equipping our students with the skills needed to thrive in a rapidly evolving digital landscape."

Nuriddin Samatov, ICT Specialist at the Research Institute of Environment and Nature Conservation Technologies, Uzbekistan, remarked: "As a former SFTF participant, I have witnessed firsthand the impact of such programs in shaping the future of ICT professionals. Continuing to support these initiatives ensures we maintain a steady pipeline of skilled talent capable of driving digital transformation."

Bunyod Avliyokulov, Program Analyst on Effective Governance, UNDP Uzbekistan, expressed: "As we continue to push forward with digital transformation, it is imperative that we ensure no one is left behind. Remote education offers a powerful tool to bridge the digital divide, particularly in rural areas where access to quality education is limited. Collaborative efforts, like those we discussed during the panel, are crucial in ensuring that all students, regardless of their location, have the opportunity to learn and thrive in a connected world."

The panelists also highlighted how intelligent and digital transformation begins with education, a process where Huawei plays a pivotal role. The conversation underscored Huawei's belief that smart education can build a robust ecosystem, cultivating innovation-

oriented talents for an intelligent future.

Through the implementation of smart campuses, smart classrooms, and advanced technologies like IoT, big data, AI, and cloud computing, Huawei is enabling education systems worldwide to evolve. The "Five Ones" smart education solution, comprising one screen, one network, one platform, one cloud, and one app, was showcased as a transformative approach to improving the quality and efficiency of teaching, research, and management. Additionally, the introduction of Wi-Fi 7 at the University of Dubai was highlighted as a significant step in enhancing network speed and quality on campus. The importance of remote education in bridging the digital divide, particularly in rural areas, was also emphasized, with Huawei's solutions offering a pathway to inclusive and accessible learning.

Duke Zhang, Vice President of Public Affairs, Huawei Middle East & Central Asia, mentioned: "At Huawei, we believe that education is the cornerstone of future innovation. By integrating cutting-edge technologies into educational systems, we are not only enhancing the learning experience but also preparing the next generation of leaders and innovators. Our commitment to smart education and digital inclusion is reflected in the transformative solutions we bring to institutions across the ME&CA region, ensuring that all students have the tools they need to succeed."

The panel discussion facilitated engagement between media representatives and students from the ME&CA region, who convened in Tashkent for a series of activities and training workshops as part of the 2024 edition of Huawei's global initiative, Seeds for the Future. This initiative, which Huawei launched in 2008, has positively impacted over 18,000 students from 141 countries, is endorsed by more than 360 senior officials and heads of state, and has facilitated collaboration with over 500 universities and colleges. ■



Huawei Seeds for the Future 2024 Middle East & Central Asia finals successfully conclude in Uzbekistan

Huawei, in collaboration with the Ministry of Digital Technologies of the Republic of Uzbekistan, celebrated the culmination of the regional finals of the Seeds for the Future 2024 program with a grand awards ceremony in Tashkent. Team Future Gadget Lab from Kuwait and Team Beyond Limits from the United Arab Emirates (UAE) won first and second place, respectively, in the regional semifinal of the fourth annual Tech4Good competition that was held concurrently with the program. The teams were recognized by judges for their innovative use of technology to assist stroke patients with limited hand mobility. They will go on to compete in the finals in China alongside qualifying teams from around the world and explore ICT's huge potential to drive sustainable development.

Similarly, Team Nabeeh from Saudi

Arabia, Team Sufun from Oman, and Team AquaLucens from Bahrain were recognized for their outstanding projects. Amanzhan Sabyrgali, representing Kazakhstan, and Zainab Al Zaimoor, part of the Bahrani contingent, were chosen as the Mentors' Favorites in recognition of their skills, team spirit, and positive influence on their teams during the competition.

The closing ceremony was also attended by Rustam Karimjonov, Deputy Minister of Digital Technologies of the Republic of Uzbekistan, and Nausheen Adnan, Member of the Parliament of the Islamic Republic of Pakistan and Advisor to the Chief Minister on Educational Reforms.

Shunli Wang, Vice President of Huawei Middle East and Central Asia, said, "The 2024 edition of the Huawei Seeds for the Future program is particularly significant

as it marks both the 10th anniversary of the program in Uzbekistan and the 25th anniversary of Huawei's operations in this nation. We are grateful to our sponsor, the Ministry of Digital Technologies of the Republic of Uzbekistan, for their fervent support and for enabling us to celebrate this momentous occasion in Uzbekistan. We are confident this gathering was instrumental in nurturing the region's burgeoning ICT talent and empowering the youth to lead digital innovation and shape the region's sustainable future."

Rustam Karimjonov, Deputy Minister of Digital Technologies of the Republic of Uzbekistan, stated, "Huawei is significantly contributing to Uzbekistan's digital transformation story. We are delighted to host the Seeds for the Future 2024 program, as we strongly believe skill-based development and industry exposure are essential for students to



drive innovation in the digital economy. We are grateful to Huawei for organizing such competitions and allowing students in our region to challenge themselves and learn from industry leaders. Initiatives like Seeds for the Future are pivotal in equipping our youth with industry knowledge and strengthening the ICT talent ecosystem in our region."

Nausheen Adnan, Member of the Parliament of the Islamic Republic of Pakistan and Advisor to the Chief Minister on Educational Reforms, said, "It is truly inspiring to witness the talent and enthusiasm of these young minds representing their countries at the closing ceremony of the Seeds for the Future program. I would like to express my appreciation to Huawei for providing a platform for our students to develop their ICT skills at a global stage. Programs like these are crucial to equip students, develop the region's talent, and mark a giant leap towards the digital era."

This year's edition of the Seeds for the Future program brought together 150

university students from 14 countries across the Middle East and Central Asia, representing leading universities from countries including Azerbaijan, Bahrain, Iraq, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Oman, Pakistan, Qatar, Saudi Arabia, UAE, and Uzbekistan. The week-long event saw participants develop their Information and Communication Technologies (ICT) skills and work towards global digital inclusion while enhancing their cultural understanding through a series of sessions, classes, competitions, and cultural programs.

The Tech4Good competition aims to empower and engage the youth in driving positive change within their communities. This unique platform encourages young minds to address pressing social issues by harnessing the immense potential of the latest ICT technologies.

As part of the program, the students participated in five days of intensive training sessions and workshops in

Tashkent, covering cutting-edge ICT technologies, scientific and technological leadership, discussions on global topics, Tech4Good group projects, etc. Through learning and mutual exchange, participants gained a better understanding of 5G, AI, and cloud technologies, built more strengths for future growth, and improved their competitiveness in the job market. Students were also provided the opportunity to visit and connect with professionals at Huawei and Artel, Central Asia's leading electronics manufacturer and one of Uzbekistan's largest companies.

Huawei's Seeds for the Future program is the company's flagship CSR initiative that aims to develop ICT talents globally. Since its launch in 2008, more than 18,000 students from 141 countries have participated. With endorsements from more than 360 senior officials and heads of state, the program has collaborated with over 500 universities and colleges to cultivate a new generation of ICT leaders and innovators. ■

Could your business expand into telecommunications?

eSIM could be the key to diversifying your services

There are almost two million applications available on Apple's App Store, offering a convenient avenue to better serve customers, deliver a personalized experience and enable a real-time company-consumer connection. But what if your app could offer another service, one that goes beyond your bread-and-butter offering and generates an additional revenue stream? Here, Hamish White, CEO of embedded connectivity provider Mobilise, explains how any business could diversify and offer telecommunications services.



Hamish White

In the bustling app marketplace, whether it's Apple's App Store or Google Play, standing out requires more than just delivering core functionalities. Apps need to evolve, not only to meet user demands but also to explore new ways of distinguishing themselves from the competition. With the advent of eSIM technology, businesses have a unique chance to access the telecommunications space, transforming their app into a service hub.

Diversifying with eSIM

Imagine your app, already beloved by customers for its core services, now offering seamless global connectivity. Whether it's a banking app providing secure, always-on connections for travelling customers or a travel app ensuring users stay connected abroad without exorbitant roaming charges.

eSIM, or embedded SIM, can make that possible. Unlike traditional SIM cards, eSIMs are reprogrammable and embedded directly into devices. Rather than a user needing to physically insert a SIM card into their device to access mobile services, they can download and activate an eSIM directly from their device via an internet connection.

Some eSIMs require a QR code in order to activate them, while others can be installed directly through the app that provides them.

Many consumers are already familiar with the technology due to its increasing adoption across mobile networks and the growing availability of eSIM-enabled mobile devices.

Branching out with telecommunications

Let's imagine what this could look like. If you've flown on a budget airline before, you'll have likely purchased additional services such as seat allocation, in-flight meals, travel insurance, or car rental. With the addition of eSIM, another supplementary service can be added to the airline's service offer.

Customers could purchase a data bundle via the airline's app to use while travelling, in the same way they might add travel insurance when booking a flight. A similar methodology could be applied elsewhere to hotels or apps for booking accommodation.

Here, guests could purchase a cost-effective, eSIM-enabled data package to use on the trip, no longer relying on unreliable Wi-Fi, risking the shock of a high roaming bill or worst of all, turning their data connection off altogether.

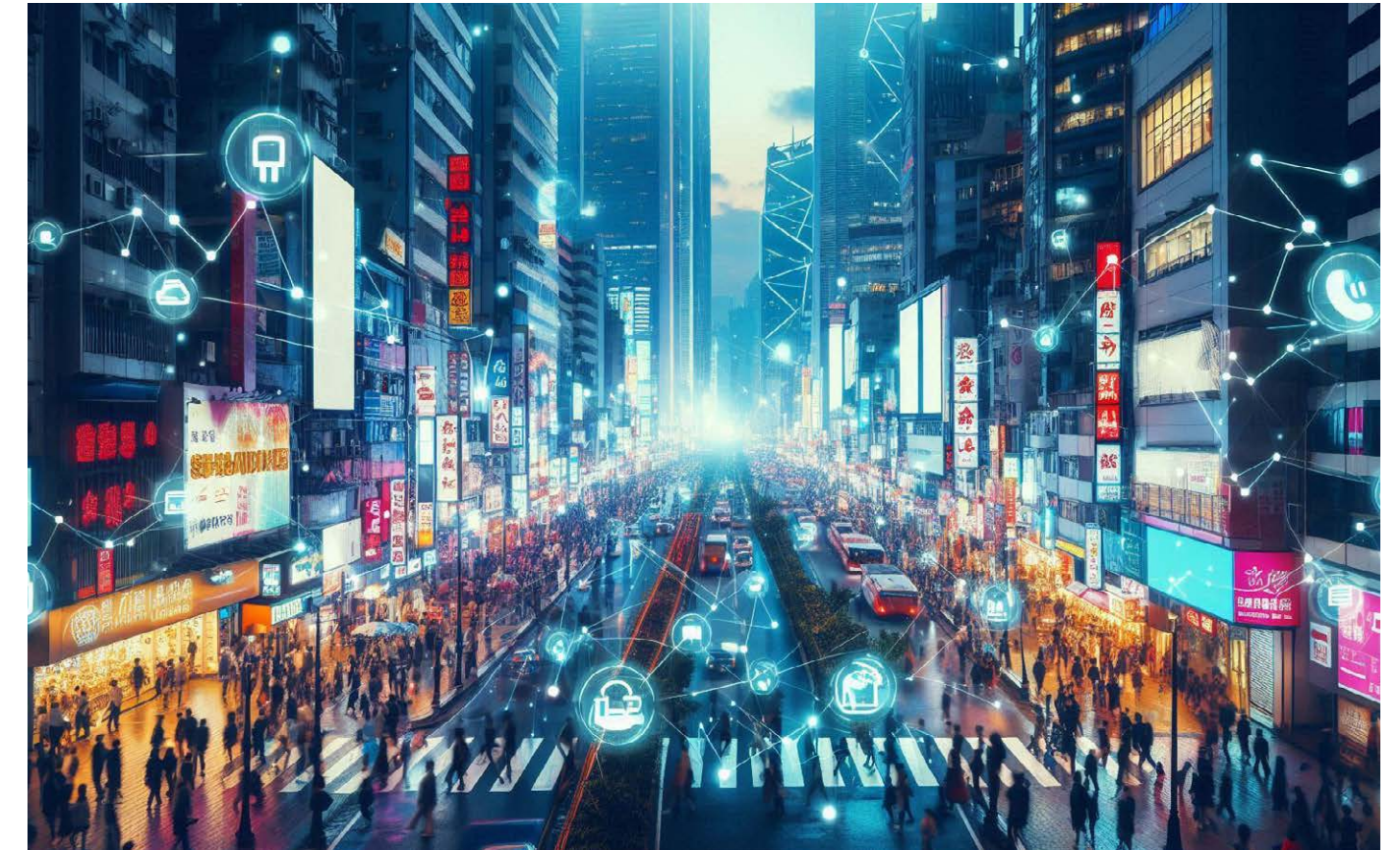
Making it happen

So, how can businesses make the leap into telecommunications? The answer is an embedded connectivity software development kit (SDK). A plug-and-play solution designed to be flexible and easy to integrate, providing all a business needs to pursue a connectivity offering via eSIM, Mobilise's own eSIM SDK service takes away the heavy lifting.

Able to sit seamlessly on top of an existing app, the SDK enables in-app eSIM activation — with no QR code or physical SIM required — alongside reliable 4G and 5G global coverage and automatic APN settings to help your business become a telco, even without any prior telecommunications experience.

At Mobilise, we believe eSIM SDK will be the key to helping businesses diversify their offers and, as a result, accelerate their customer experience delivery. In a matter of weeks, a business that was once far removed from the telecoms sector has access to a \$275 billion industry, can enhance their service quality and, crucially, keep their customers on their app for longer. Launching a complimentary telecommunications service may not have been a key business agenda item, but the ease of working with eSIM changes the game for any brand. And in a crowded marketplace, offering a full-circle digital connectivity experience could be the key to standing out. ■

Asia Pacific's mobile economy forecast to grow to \$1 trillion by 2030, as 5G technologies accelerate region's digital transformation



GSMA APAC Fintech Forum also launches at Digital Nations Summit Singapore to help Southeast East Asian mobile economy innovate and secure online trust

The mobile industry's contribution to Asia Pacific's economy will grow beyond \$1 trillion by 2030, with faster adoption of 5G technologies in the region meaning it will exceed average global growth rates, according to the GSMA's Mobile Economy Asia Pacific 2024.

Unveiled at the GSMA's Digital Nation Summit Singapore, the report shows that mobile technologies and services generated 5.3% of GDP (Gross Domestic Product) across Asia Pacific in 2023, a contribution that amounted to \$880bn of economic value in 2023. The greatest benefits come from the productivity effects of mobile services and digital

transformation on industries such as manufacturing and fintech. Mobile's contribution to the APAC economy over the period of 2023-2030 will outpace the global average, growing by 15% in the region, compared to the global average growth of 12% over the same period.

Commercial 5G standalone (SA) networks, now present in seven APAC countries (Australia, India, Japan, the Philippines, Singapore, South Korea, and Thailand), will help fuel this growth, alongside 5G Advanced, RedCap and AI, creating opportunities to launch new 5G applications and kick start a fresh round in 5G investments for enterprises and

consumers.

The authors of the report, GSMA Intelligence, expect 5G to add almost \$130 billion to the Asia Pacific economy in 2030, with the manufacturing industry forecast to benefit the most, driven by new 5G-enabled applications including smart factories, smart-grids, and IoT-enabled products. Financial services and public administration are also expected to be big beneficiaries, as they turn to 5G to digitally transform services and operations. To help support this growth the GSMA today launched the GSMA APAC Fintech Forum, a new community program to unite the connected fintech

and commerce sectors with Asia Pacific's mobile network operators through new technologies.

The Mobile Economy APAC 2024 Report, published today during the Digital Nation Summit Singapore hosted by the GSMA and Singtel, highlights the key trends and forecasts shaping the mobile ecosystems in the region. Key findings include:

- **Mobile internet users in APAC will grow from 1.4bn (51% penetration rate) to 1.8bn (61% penetration rate) in 2030.**

- **Mobile data traffic in Asia Pacific will quadruple between 2023 and 2030 driven by an increase in data intensive content and growth in 5G adoption.**

- **Satellites and non-terrestrial networks can help reduce the connectivity gap, by bringing communications to the region's challenging terrains – including archipelagos, rainforests, deserts, and mountain ranges – where traditional infrastructure is expensive and difficult to build.**

- **Operators across the Asia Pacific region are harnessing the power of generative AI (genAI) to drive internal transformations and seize new revenue streams through AI investment. For example, operators including Singtel, SK Telecom, Softbank and e& have formed the Global Telco Alliance to co-developing their own telecoms-specific AI models, benefiting from a global customer base of 1.3 billion across 50 countries.**

However, while a number of APAC country's including Singapore, South Korea, Australia, Japan, and New Zealand rank as some of the world's most digitally advanced nations, large swathes of Asia's population in other parts of the region still remain unconnected, despite most of them being within areas where there's mobile coverage. This usage gap remains stubbornly high in some markets, notably Bangladesh, India, and Pakistan. Key adoption barriers include lack of

affordability, particularly for devices, and a lack of digital skills, particularly among older citizens.

Julian Gorman, Head of Asia Pacific at the GSMA, said: "The growth in Asia Pacific's mobile internet usage over the past decade has been nothing short of remarkable and the region continues to innovate at a pace. Asia's rapid adoption, and invention, of new mobile digital services is bringing new use cases to life, that the rest of the world can learn from."

"The large 5G investments mobile operators and governments are making puts many of Asia Pacific's nations in a leading position to secure strong economic growth, unleashing a new era of innovation particularly in sectors such as fintech and manufacturing. However, in other parts of Asia Pacific, hundreds of millions of people are still missing out. Addressing this usage gap and building online trust are crucial to closing this digital divide and ensuring everyone can benefit from the life-enhancing applications mobile can provide in area such as finance, education, and health," he added.

Yuen Kuan Moon, Singtel Group CEO, added: "We see the exponential rise in enterprise mobile applications and solutions as a big boost to businesses, especially given the emergence of GenAI and the shift to the cloud as digitalization continues to accelerate. This is why we've been working with many industry leaders to leverage intelligence, machine learning and robotics and cloudification to improve their productivity and customer engagement as well as innovate and scale their operations. While we ensure that our customers are well-supported in their digital transformation journey, we're also mindful of the need to continue to provide vulnerable groups with access to digital tools so they too can be empowered and engaged in a digital economy."

Digital Nation Singapore Summit

The APAC Mobile Economy report

was launched at the GSMA's Digital Nation Summit in Singapore, an event that brings together industry leaders, policymakers, and innovators to explore the critical role mobile technology has in driving economic growth and creating a more inclusive digital future for Asia Pacific. The summit agenda features insightful keynote addresses, panel discussions, and fireside chats with executives from leading companies like Singtel, Google, and Grab.

This year's summit also included The GSMA APAC Fintech Forum a new community program to unite the connected fintech and commerce sectors with Asia Pacific's mobile network operators. The vision of the forum is to accelerate innovation and integration of mobile networks to advance the mobile economy and nurture digital trust as the foundation for sustainable and inclusive digital nations in the region.

The Mobile Economy report also highlights the need for greater collaboration in this space. The report says that with the rise of cybercriminals targeting consumers and businesses, particularly in the area of online payments and financial services, it is crucial governments, mobile operators and other digital ecosystem players work together to build consumer trust and online safety.

The fintech forum builds on the GSMA Open Gateway initiative, launched in 2023 and supported by over 280 mobile operators worldwide, serving two thirds of the world's mobile users. Recently launched online security and anti-fraud APIs (Application Programming Interfaces) are now starting to be used by banks and online retailers to mitigate identity fraud and transaction risks. Asia Pacific mobile operators have been particularly proactive in this area, with operators in Australia, Indonesia, Japan, Malaysia, Singapore, South Korea, Sri Lanka, Thailand, and Vietnam committing to launch more online security services. ■

Ooredoo Kuwait unveils 5G-enabled "Home Internet" solution

Ooredoo Kuwait has launched its cutting-edge home networking solutions, "Home Internet." This next-generation service is designed to deliver reliable, high-speed internet connectivity tailored to meet the needs of every household, offering a range of coverage, speed and stability options that cater to the diverse demands of its customers.

In a word from Tapan Tripathi, Chief Commercial Officer at Ooredoo Kuwait, on this special occasion, said: "At Ooredoo Kuwait, we are truly excited to be launching our exclusive set of 'Home Internet' solutions. We are certain that the launch will captivate our customers, exceed their expectations, ultimately garnering their satisfaction in our services.

Adding to his statement, Tripathi reiterated: "With the successful launch of the new 'Home Internet' solutions, Ooredoo Kuwait is now able to address the growing demand for a centralized home internet service that provides ultra-fast, uninterrupted connectivity, with options that perfectly align with the modern lifestyle of Kuwaiti families, and varying needs whether to speed, coverage range, or stability".

Recognizing the increasing reliance on robust internet access, Sarah Al-Hilaly, Senior Manager - Postpaid Marketing at Ooredoo Kuwait, explained that the new 'Home Internet' solutions ensure that every member of the household enjoys seamless online experiences, whether for work, education, or entertainment.

She further noted: "Ooredoo Kuwait's 'Home Internet' solutions aim to empower the tech-savvy youth of Kuwait, who seek advanced communication technologies that seamlessly integrate with their daily lives. By harnessing the power of 5G technology, 'Home Internet' opens up new possibilities



for smart home connectivity, remote device management, and immersive entertainment experiences", positioning Ooredoo as the gateway to a truly connected digital future.

As part of its commitment to supporting digital transformation in the country, Ooredoo Kuwait has integrated 5G technology into the "Home Internet" service, offering users unprecedented opportunities in areas such as remote learning, home-based work, and online gaming. These advancements require a stable, high-speed internet connection, and Ooredoo delivers just that, enhancing users' ability to stay connected, productive, and entertained without limits.

To ensure customer satisfaction, Ooredoo Kuwait invites everyone to experience Ooredoo's 5G network with their "Try and Buy" feature, allowing them to discover the benefits of a reliable, centralized internet connection that exceeds expectations.

The launch marks another significant achievement for Ooredoo Kuwait this year, as it continues to lead the way in providing top-tier internet services. By delivering solutions that meet the widest range of user needs, Ooredoo reaffirms its position as a pioneering force in the digital landscape, fully equipped to respond to the evolving demands of its customers in an increasingly connected world. ■

e& UAE achieves Platinum status in TM Forum's Open API certification

e& UAE has received TM Forum's coveted Platinum Open API certification, making it the first telecommunications operator in the MENA region to attain this level of accreditation for 20 unique APIs.

This certification is designed to foster enhanced connectivity, interoperability, and system portability across the global telecommunications sector. e& UAE has consistently led the way in embracing these standards, propelling the industry toward a more streamlined and innovative Open Digital Architecture (ODA).

Khaled Murshed, CTIO, e& UAE, said: "Achieving the TMF Platinum Certification is a testament to our strategic vision and operational excellence. Integrating TM Forum Open API has significantly streamlined our operations, minimized manual errors, and boosted the quality of our services, positioning e& UAE as a pioneer in technological advancements within the telecom sector."

e& UAE launched a state-of-the-art Developer Portal, that will provide free access to a suite of well-defined, standardized, and interoperable APIs. The portal serves as a central hub for digital innovators to discover, explore, and utilize an extensive range of APIs in service management, customer management, product catalogue, billing, and network exposure. It fosters an ecosystem where developers and startups can thrive, creating cutting-edge solutions that drive the future of connectivity.

The certification underscores e& UAE's commitment to providing standardized APIs that facilitate seamless integration and optimize the development and operational processes of complex services.

Since initiating its adoption of TM Forum Open API standards in late May 2023, e& UAE has rapidly achieved 20 unique certifications in just 12 months, culminating in its Platinum Tier certification—an essential step towards the elite Diamond Tier. **■**

e& UAE launches Fibre-To-The-Room facility

e& UAE has launched a Fibre-To-The-Room (FTTR) high-speed internet solution that supercharges the performance of in-home Wi-Fi networks.

The new service solves the challenges of inconsistent Wi-Fi coverage and speed in large residential spaces, including apartments and villas, serving a variety of customer needs. Additionally, Fibre To The Room (FTTR) is an ideal solution for smart homes, gamers, and other tech-dependent users who require high-speed internet connections with the lowest possible latency to ensure peak performance.

Khaled ElKhouly, Chief Consumer Officer, e& UAE, said: "Fibre To The Room (FTTR)

is a significant leap forward in fast Wi-Fi for homes, and we're excited to bring it to UAE residents. By bringing fibre optic connectivity directly to every room, we're ensuring every home is a hub for work, entertainment, and limitless possibilities."

This innovative service tackles the challenge of Wi-Fi coverage in large spaces. Unlike traditional Wi-Fi solutions that can struggle with distance and interference, Fibre To The Room (FTTR) delivers fibre optic connectivity directly to each room. This bypasses the limitations of Ethernet cables and ensures robust, high-speed internet access throughout the entire home, guaranteeing a seamless and uninterrupted connection in every room. **■**

e& enterprise launches AI-powered Utility Co-Pilot on Microsoft Marketplace

e& enterprise has announced the launch of its Utility Co-Pilot, an innovative utility virtual assistant, now available in the Microsoft Marketplace. This cutting-edge solution leverages GenAI and advanced data management techniques to revolutionize utility management, offering unprecedented efficiency, transparency, and customer satisfaction.

The e& enterprise Utility Co-Pilot seamlessly integrates AI into existing infrastructure, providing access to underutilised data from Smart Grid implementations. By harnessing the power of AI and data, the Utility Co-Pilot enhances operations, streamlines reporting, and empowers key departments with real-time assistance for utility management.

Salvador Anglada, CEO, e& enterprise commented, "By combining our extensive domain knowledge with Microsoft's advanced AI innovations, we are ushering in a new era of smart utility management. This robust solution will enable our clients to fully leverage their data, leading to more efficient operations, improved customer experiences, and sustainable growth. We are opening the door for utilities to embrace the limitless possibilities of generative AI and redefine the future of their industry."

Key features of the Utility Co-Pilot include advanced tools that streamline operations and enhance decision-making across departments. It helps transform data into comprehensive reports for informed management decisions. Supported by a team of data scientists, data engineers, prompt engineers, domain experts, and business leaders, e& enterprise have utilised the Microsoft's OpenAI services and Azure services to create a scalable, trustworthy GenAI solution for various business use cases. **■**

stc Group provides unparalleled gaming experience at Esports World Cup

stc Group played a key role in driving Saudi Arabia to become the world's most connected and digitalized nation, in line with Vision 2030. Furthermore, the stc Group supported the kingdom to become the premier global hub for gaming and esports.

As an Elite and Founding Partner of the inaugural Esports World Cup (EWC), stc Group delivered seamless connectivity across all competition venues. stc Group was a naming partner for three key locations—stc Arena, stc Play Gaming Hall, and stc TV World Cup Studios—offering dynamic and immersive digital and gaming experiences. As part of its commitment to operational excellence, the Group provided a range of services designed to optimize network performance and enhance the gaming experience for gamers and audiences alike.

Monitoring and Service Optimization

To ensure an exceptional gaming experience, stc Group established one of the first and largest operating centers dedicated to monitoring the gaming services infrastructure in real time, supported by high resolution 168-megapixel screens for continuous world-class service optimization. Real-time performance monitoring probes were utilized along the entire EWC circuit path to measure performance KPIs every 30 seconds, with a 24/7 monitoring process ensuring over 99.9% uptime for all EWC-related services. A dynamic escalation process and real-time alert mechanism were also set up via Telegram to ensure a swift response to resolve any potential issues. stc Group's service optimization and tracking capabilities further enhanced the gaming experience. By monitoring over 25 online games and streaming IP addresses, stc Group guaranteed a 100% optimal path for connectivity. Sophisticated software conducted forensic analysis on IPs, ensuring



precise and efficient management of network traffic.

Uninterrupted Gameplay

stc Group's commitment to seamless connectivity included achieving significant latency reduction across key gaming servers, ensuring a highly responsive and outstanding gaming experience. By optimizing link utilization to maintain less than 70% usage during peak times and implementing end-to-end Quality of Service configurations, stc Group guaranteed smooth and uninterrupted gameplay. Utilizing advanced SDN controller technology, traffic was steered over low-latency, uncongested links, providing minimal delays and maximum performance. In addition, stc Group worked to increase 5G capacity in the area of the event by more than 42% and expanded the coverage in the surrounding areas by 20%. Automated intelligence was employed to identify the shortest gaming links between gamers and servers, ensuring recovery times of less

than 50 milliseconds, and maintaining high performance even during disruptions.

Supporting the Kingdom's Gaming Industry

As an Elite and Founding Partner of the inaugural Esports World Cup (EWC), stc Group showcased its world-class connectivity and commitment to delivering an unparalleled gaming experience through its innovative solutions and leading technological expertise. stc Group's role in the industry was also reflected through stc play, the Group's gaming division, which offered engaging activities, including an ongoing prediction segment for all tournaments on its platform, as well as a shop featuring the latest gaming gear and setup. The Group's extensive range of services and cutting-edge connectivity solutions were integral to this transformation, aligning with Vision 2030's goal of establishing the kingdom as a premier global gaming and esports destination. **■**

Yahsat reports first half results for 2024

Yahsat has announced its consolidated financial results for the six-month period ended 30 June 2024.

Whilst revenue marginally fell by 3% versus the prior year to AED 734 million [US \$200 million], EBITDA surged by 25% to AED 566 million [US \$154 million]. Net income also increased strongly by 62% to AED 269 million [US \$73 million]. On a normalized basis, adjusting for material, one-off items to allow for like-for-like comparison, EBITDA was stable versus the prior year at AED 462 million [US \$126 million]. Normalized Net income, which reached AED 175 million [US \$48 million], also remained stable versus the prior year notwithstanding the material impact of UAE corporate tax which was adopted by Yahsat for the first time this year.

This resilient performance was driven by revenue growth across two segments. Infrastructure, the Group's largest segment providing communications capacity to the UAE Government by means of an index-linked long-term contract, continued to grow its year-on-year revenues by 1%. Managed Solutions, the Group's second largest segment by revenue, providing complete value-added satellite communications solutions primarily to the UAE Government and related entities, reported impressive revenue growth of 15%, maintaining robust EBITDA margins of more than 60% and building on a strong prior year performance. The Mobility Solutions segment, which provides mobile satellite services using L-band spectrum, recorded lower revenues, mainly on fewer equipment sales following the Thuraya 3 satellite anomaly in April 2024. Data Solutions, the Group's smallest segment, offering satellite-based broadband data solutions, saw a slight reduction in revenue on lower subscriber numbers and associated equipment sales as the business strategically pivots towards higher margin markets.



Ali Al Hashemi
Group Chief Executive Officer of Yahsat

Highlights for the period include:

- Revenue of AED 734 million [US \$200 million], 3% lower year-on-year with growth achieved in the Infrastructure and Managed Solutions segments.
- Normalized EBITDA of AED 462 million [US \$126 million], stable versus the prior year, with an 7% reduction in the normalized cost base resulting in an expanded margin of 63% (prior year 61%).
- Normalized Net Income (profit) of AED 175 million [US \$48 million], stable versus the prior year, due to higher net finance income absorbing higher depreciation and the impact of the introduction of UAE corporate tax (9% rate); margins remained strong at 24% (prior year 23%).
- Contracted future revenue of AED 24.5 billion [US \$6.7 billion], equivalent to approximately 15 times last-twelve-month revenue and only 2% lower versus the beginning of 2024.
- Strong cash generation with Discretionary Free Cash Flow ("DFCF") of AED 287 million [US \$78 million], slightly lower than the prior year but well ahead of expectation.
- Strong balance sheet with a strong cash position of AED 1.5 billion [US \$398 million], Net Debt of only AED 115 million [US \$31 million] and AED 3.7 billion [US \$1 billion]

expected in new advance payments to be received over the construction period of the AlYah 4 and AlYah 5 satellites. The Group also has access to an AED 1.1 billion [US \$300 million] bridge facility, which was partially drawn down in July, and enjoys long-term visibility and security of future cash flows up to 2043.

- Guidance for revenue, EBITDA and cash flow is reiterated but expected CapEx has been revised lower for the full year to AED 1.5-1.6 billion [US \$400-430 million] from AED 1.7-1.8 billion [US \$470-500 million] following the signing of the full procurement contract for AlYah 4 and AlYah 5 with Airbus in June 2024.

Ali Al Hashemi, Group Chief Executive Officer of Yahsat, commented: "Yahsat has achieved another set of resilient results, demonstrating solid growth in our core government business, offsetting headwinds in our mobile satellite services segment.

"We continue to progress toward finalizing the full contract for the new US\$5.1 billion Capacity and Managed Services Mandate with the UAE Government and have signed, during the last quarter, the full procurement contract with Airbus for two new satellites, AlYah 4 and AlYah 5. Further, we continue to work towards a successful launch of the Thuraya 4 next generation satellite in the fourth quarter of this year, which will significantly upgrade Thuraya's capabilities and product line for many years to come. "Finally, we are looking forward to completing the merger with Bayanat in the second half of the year and are finalizing plans for the successful integration of both companies. This merger will position the new combined entity – Space42 – as an AI-powered space technology champion in the MENA region with global reach. For the first time in our industry, we will combine advanced satcom solutions and geospatial analytics, operating communication and Earth Observation satellites across multiple orbits." ■

Es'hailSat and Algeria TV to discuss collaboration

Es'hailSat Senior Management team meets with Algeria TV to discuss avenues for joint initiatives in Satellite Services

Es'hailSat visited Algeria TV recently to discuss areas for potential collaboration on broadcasting of TV channels in the country with Es'hailSat's premier satellite services.

Es'hailSat provides satellite, broadcast, teleport and managed services from Doha, Qatar and powers this relationship with more than 12 years of experience in catering to governments, broadcasters, telecommunication companies, enterprises, and mobility applications across the Middle East and North Africa. Es'hailSat's infrastructure includes two satellites at 25.5/26 East together with our 50,000 sqm teleport facility and provides reliable and robust connectivity services.

"Es'hailSat is delighted to collaborate with Algeria TV to support various broadcasting initiatives via our satellite infrastructure." said Ali Ahmed Al-Kuwari, President and



CEO, Es'hailSat. "We believe that the experience in providing satellite services to the premier broadcasters, governments and enterprises across Middle East and North

Africa aligns Es'hailSat perfectly Algeria TV approach of continuous improvement of the broadcasting and information technology sectors of Algeria." ■

Hughes surpasses 5,000 ESA terminals for OneWeb

Hughes Network Systems has announced the shipment of over 5,000 HL1120W electronically steerable antenna (ESA) Low-Earth Orbit (LEO) terminals. This milestone solidifies Hughes as a leading supplier of enterprise-class OneWeb LEO terminals.

The HL1120W terminal boasts a low-profile, full-duplex, self-aligning design with a built-in modem. Tailored for the Eutelsat OneWeb LEO constellation, it utilizes a phased array antenna with no moving parts, supporting Eutelsat OneWeb's impressive speeds of up to 195 Mbps down and 32 Mbps up. Its seamless transition from one satellite beam to the next every 11 seconds ensures uninterrupted connectivity. The terminals are manufactured at a new

Hughes facility in Germantown, Maryland.

"We are seeing a digital transformation of both business and government services. This is creating a future where high-speed, low-latency connectivity needs to be ubiquitous," said Paul Gaske, COO of Hughes. "The EchoStar family of companies is meeting this demand by developing enterprise-class technologies that are mult-orbit, multi-transport, and globally available."

Hughes also develops and manufactures the gateway electronics and core modules used in every terminal on the Eutelsat OneWeb LEO system. These gateways are capable of facilitating more than 10,000 beam-to-beam and satellite-to-satellite handoffs per second.

"We are pleased to work with Hughes as an engineering and distribution partner for the Eutelsat OneWeb service," said Massimiliano Ladovaz, COO, Eutelsat Group. "Our LEO constellation offers customers a high-speed, low latency global connectivity experience and together with Hughes, we are able to support digital transformations in business and government."

Hughes offers a fully managed LEO service that includes design, installation, maintenance, and capacity. This enterprise-grade, reliable, low-latency broadband service offers connectivity in remote locations. Coupled with Hughes Managed SD-WAN capabilities, business and government users can get connected when and where they need to do work. ■

Azercosmos to launch satellite services in Botswana

Azercosmos, Azerbaijan's space agency, and the Civil Aviation Authority of Botswana have announced a new partnership.

Under this long-term agreement, the Botswana government agency will utilize data services provided via the Azerspace-1 telecommunication satellite. Notably, this marks the inaugural provision of satellite data services to Botswana via the African C band coverage on the Azerspace-1 satellite.

Azercosmos currently supplies satellite



services to nearly half of the 13 countries in Southern Africa. This collaboration with Botswana will enhance the

deployment of Azerspace satellite services in large-scale data projects across Southern Africa. **■**

Gilat awarded over \$9m for its GEO and NGSO satellite communications solutions

Gilat has been awarded over \$9 million in cumulative orders from multiple satellite operators to expand their global SATCOM networks utilizing Gilat's innovative and field-proven solutions.

Gilat's solutions will be used to enable a wide range of services and applications over GEO and NGSO, including in-flight connectivity, maritime mobility, cellular backhaul, and enterprise services and more.

"These orders reinforce our position at the forefront of the new space era industry, as satellite operators rely more and more on Gilat to meet the complex demands of multi-orbit operation," said Hagay Katz, Chief Product and Marketing Officer at Gilat.



"This achievement underscores our commitment to innovation and reliability, enabling us to deliver cutting-edge

solutions that address the massive growth and evolving challenges of the satellite communications industry." **■**

du, Nokia, and MediaTek pioneer 5G uplink performance

du in collaboration with Nokia and MediaTek have announced a major milestone in the integration and enhancement of 5G technologies in the Middle East and Africa (MEA). This innovative trial, a first in the region, has successfully boosted uplink (UL) performance by 70% on du's 5G Advanced network, simultaneously offering expanded indoor coverage to premium customers.

Executed in Abu Dhabi utilizing du's operational 5G Advanced network, the trial achieved significant advancements in UL speeds and coverage. This technology promises robust connectivity and superior network efficiency by integrating multiple frequency bands and enhancing transmission pathways, essential for high-demand applications such as video conferencing, live streaming, and substantial data uploads.

Hasan Alshemeili, Head of Infra Technology Planning at du, said: "This trial not only accelerates the uplink performance of our network but also aligns with our ongoing commitment to enhance customer connectivity since our initial 5G launch in 2019. Our continuous upgrades to our state-



Hasan Al Shemeili
Head of Infra Technology Planning du

of-the-art network infrastructure ensure an unmatched 5G user experience."

The trial featured a pioneering technique employing three transmitter antennas (3Tx) combined with 2-component Carrier Aggregation (2CC) across FDD and TDD bands, incorporating TDD UL MIMO on du's existing infrastructure. Nokia's role spanned the deployment of its state-of-the-art AirScale portfolio inclusive of baseband, Massive MIMO radios, and macro remote radio heads to boost capacity, coverage, and performance. MediaTek contributed its advanced T830 5G mobile FWA platform,

further exemplifying the collaborative effort that spearheaded this achievement.

Mohamed Samir, Vice President, Mobile Networks, Middle East at Nokia, said: "This trial underscores our commitment to leading-edge technological solutions that cater to and exceed the dynamic needs of our connected societies. Our technologies are designed to empower mobile operators to maximize radio network performance effectively."

Dr. Ho-Chi Hwang, General Manager of Wireless Communication System and Partnerships at MediaTek, said: "Our joint trial sets a significant benchmark in the region and reaffirms MediaTek's dedication to advancing wireless communication technology. Our T830 platform, now accessible to customers, leads the market with its proven high-performance capabilities."

Carrier Aggregation is pivotal in allowing mobile operators to optimize their spectrum and network resources to enhance user connectivity experiences, delivering increased data rates and improved coverage extensively. **■**

Sectigo partners with TRINEXIA to enhance digital trust across MEA

Sectigo has announced a new distribution partnership with TRINEXIA, aimed at expanding its footprint in the Middle East and Africa. Trusted by over 700,000 businesses worldwide, Sectigo's digital security solutions are relied upon by more than 36% of Fortune 1000 companies, many of which have their headquarters in the MEA region, including the UAE, South Africa, Saudi Arabia, Qatar, and Nigeria. These companies span industries such as real estate, entertainment, financial services, and property management.

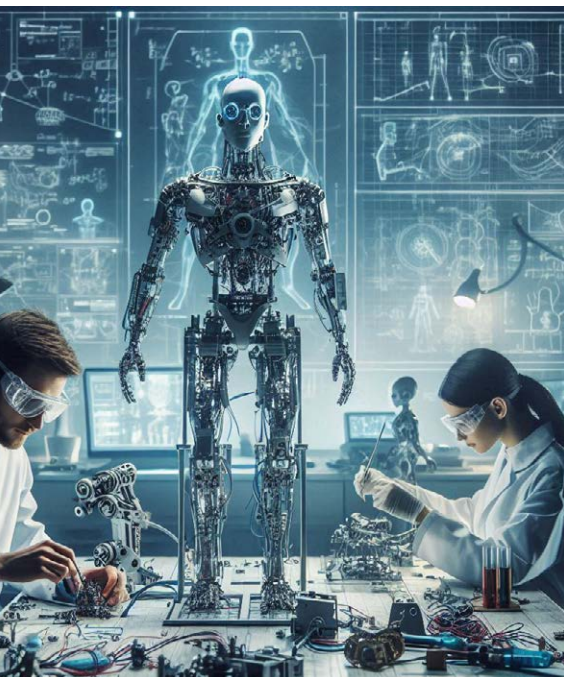
Digital certificates play an essential role in authenticating and securing online

communications in organizations of all sizes. The parallel trend of proliferation of certificates and shortening certificate lifespans over the years have resulted in an increased need for certificate management.

The Middle East and Africa regions face significant cybersecurity challenges, Sectigo's presence in these markets demonstrates a strong commitment to making CLM a standard practice for enterprise customers as they transition to 90-day certificate lifecycles as well as helping them embracing the post-quantum cryptography (PQC).

Many organizations are unprepared for quantum computing, and PQC is increasingly becoming a pressing C-level issue. The current risk involves harvest-and-decrypt attacks, where cybercriminals steal encrypted data today with the intention of decrypting it in the future using quantum computers.

Organizations need to prepare now by transitioning to quantum-resistant cryptography and Sectigo is at the forefront of this transition, offering comprehensive and proactive approaches along with strategic blueprints to ensure quantum resilience. **■**



Beijing Economic-Technological Development Area (BDA or Beijing E-Town) has announced at World Robot Conference (WRC 2024) that it will focus on key segments of the industrial chain, intensify efforts in tackling critical technologies, implement 50 demonstration projects for application scenarios, launch a series of "Robotics+" application demonstrations, expand typical application scenarios, and accelerate the construction of a national robotics industry innovation hub.

"Technological breakthroughs are the driving force of industrial development," said Wang Lei, a member of the Party Working Committee and Deputy Director of the Administrative Committee of BDA. Beijing E-Town is committed to supporting critical technological advancements, focusing on key segments of the robotics industry chain. It supports eco-friendly enterprises in collaborating with universities and research institutes to establish common technology platforms, enhancing the platforms' capabilities in common technology research and application services. Additionally, Beijing E-Town supports upstream and downstream enterprises in the industrial chain in jointly tackling product challenges

Beijing E-Town accelerates the construction of a National Robotics Industry Innovation Hub

and building production lines, fostering simultaneous growth in various types of robots, including those for healthcare, special purposes, and logistics.

Particularly in the field of humanoid robots, E-Town is leveraging the leadership role of the "One Center"—the Embodied Intelligence Robotics Innovation Center—to establish a high-level innovation center. This center is supported in its collaboration with major research institutions and upstream and downstream enterprises in the industry chain, driving key technological breakthroughs in areas such as humanoid robot prototypes, general-purpose humanoid robot models, motion control systems, toolchains, open-source operating systems, and developer communities. In April of this year, the center released "Tiangong," a self-developed general-purpose humanoid robot platform, and achieved the world's first anthropomorphic running by a full-size, all-electric humanoid robot.

Wang Lei further explained that E-Town is focusing on expanding typical application scenarios, enabling the orderly deployment of robots across various industries and fields. It will implement 50 demonstration projects for application scenarios, launch a series of "Robotics+" application demonstrations, and accelerate the formation of iconic scenarios, services, models, and formats. This will drive the specific demonstration and application of robots in intelligent manufacturing, education, training, healthcare, elderly care, and safety emergency response scenarios.

Previously, E-Town released a plan to build a city-wide artificial intelligence hub, according to which it will launch the construction of ten benchmark application scenarios including "AI + Healthcare," "AI + Transportation," and "AI + Humanoid Robots," and promote the incubation, city-wide application, and comprehensive

empowerment of AI technologies.

Moreover, E-Town will also focus on promoting industrial clustering and strengthening the guarantee of key elements. "We are elevating the level of 'One Park' by leveraging the 250,000-square-meter E-Town Robotics Industrial Park to host key projects in the robotics field, attracting upstream and downstream 'Robotics+' enterprises to settle," Wang Lei said. Additionally, E-Town will activate the roles of "One Fund," "One Group of Platforms," and "One Cluster of Talents," such as establishing a 10-billion-yuan government-guided investment fund to support the continued development of robotics enterprises. The BDA will also establish high-level innovation platforms, and fully utilize urban renewal spaces and vacant industrial land to create a robotics industry expansion zone and meet the needs of large-scale production. Furthermore, E-Town will cultivate high-level industry talents, support leading robotics enterprises in enhancing industry-education integration, and enhance the training of highly skilled robotics talents.

Through a series of strategic deployments, E-Town is now home to over a hundred robotics ecosystem enterprises, half of which are specialized and innovative enterprises. It has attracted leading humanoid robot companies such as Ubtech and key robotics component companies like SMC, with a production scale nearing 10 billion yuan, accounting for about half of the city's robotics industry. This has essentially formed a full robotics industry chain covering chips, operating systems, core components, complete machines, and application scenarios. "We will accelerate the construction of a domestically leading and internationally advanced robotics industry cluster, creating a 'Beijing model' for the innovation and development of the robotics industry," Wang Lei stated. ■



GSMA highlights Pakistan's digital progress and potential to spur accelerated economic growth

Pakistan is poised to unlock its economic potential through accelerated digital transformation, according to a new report, "Realising Pakistan's Aspiration to become a Digital Nation," launched by the GSMA at its Digital Nation Summit Islamabad. The report underscores the country's significant strides in mobile connectivity and smartphone adoption while outlining a clear path to maximize these gains for the benefit of its citizens. However, achieving these aspirations will require concrete action and reforms.

The event was inaugurated by Ahsen Iqbal Chaudhry, Pakistan's Federal Minister for Planning, Development and Reform, who reiterated the government's commitment to building a Digital Pakistan and emphasized the government's support for the tech industry and startups, alongside efforts to foster innovation and drive digital progress.

The GSMA's supporting report revealed a substantial increase in mobile broadband coverage in Pakistan, with 81% of the adult population now in areas covered by 3G or 4G networks, up from just 15% in 2010. Additionally, smartphone ownership reached 63% by the end of 2023. However,

only 23% of the population subscribes to mobile internet services, underlining the scale of the challenge to connect the unconnected.

The report reveals the blueprint to address these challenges: infrastructure, innovation, data governance, security, and people. These five pillars are the foundation for a thriving digital nation. The report emphasizes the importance of financial reforms and strategic initiatives. Recommendations include eliminating the 15% Advance Income Tax and the 19.5% sales tax on mobile services, addressing high spectrum prices, and introducing a smartphone financing policy to improve access to affordable devices. Additionally, the GSMA advocates for a rational approach to spectrum pricing ahead of the planned 5G spectrum auction in early 2025.

Julian Gorman, Head of APAC at the GSMA, said: "Pakistan has the potential to realize its aspiration to become a Digital Nation. First it must scale its connected population to strengthen its basic digital economy enabler. Then by adopting a whole-of-government approach and investing in the five key pillars of infrastructure, innovation, data governance, security, and people,

Pakistan can unlock its full digital potential, improve the lives of its citizens, and drive sustainable economic growth. The GSMA is committed to supporting the country's digital journey and working in partnership to build a connected, inclusive, and prosperous future."

However, achieving these goals requires addressing significant regulatory and fiscal challenges. While market reforms are hoped for, without changes to the regulatory framework and a reduction in tax, progress will be limited, and the substantial usage gap will remain difficult to bridge.

Adding to the momentum, the upcoming edition of M360 Asia Pacific in Seoul this October will see the release of the first pan-Asia Pacific Digital Nation Report, which will compare the digital progress of 20 nations across the Asia Pacific region. This event follows the recently published Mobile Economy APAC 2024 Report, which highlights key trends and insights shaping the mobile industry in the Asia Pacific region. The report provides valuable data and analysis on the growth trajectory and economic impact of mobile technology, reinforcing the strategic importance of digital advancement in Pakistan and beyond. ■

As the 'Age of AI' Beckons, it's time to get serious about data resilience

Rick Vanover, Vice President of Product Strategy, Veeam

Almost two decades ago, Clive Humby coined the now-infamous phrase "data is the new oil". With artificial intelligence (AI), we've got the new internal combustion engine. The discourse around AI has reached a fever pitch, but this 'age of AI' we have entered is just a chapter in a story that's been going on for years - digital transformation.

The AI hype gripping every industry right now is understandable. The potential is big, exciting, and revolutionary, but before we run off and start our engines, organizations need to put processes in place to power data resilience and ensure their data is available, accurate, protected, and intelligent so that their business continues to run no matter what happens. Look after your data, and it will look after you.

Take control before shadow sprawl does

It's far easier to manage with training and controls early on when it comes to something so pervasive and ever-changing as a company's data. You don't want to be left trying to 'unbake the cake.' The time to start is now. The latest McKinsey Global Survey on AI found that 65% of respondents reported that their organization regularly uses Gen AI (double from just ten months before). But the stat that should give IT and security leaders pause is that nearly half of the respondents said they are 'heavily customizing' or developing their own models.

This is a new wave of 'shadow IT' – unsanctioned or unknown use of software, or systems across an organization. For a large enterprise, keeping track of the tools teams across various business units might be using is already a challenge. Departments or even individuals building or adapting large language models (LLMs) will make it even harder to manage and track data movement

and risk across the organization. The fact is, it's almost impossible to have complete control over this, but putting processes and training in place around data stewardship, data privacy, and IP will help. If nothing else, having these measures in place makes the company's position far more defensible if anything goes wrong.

Managing the risk

It's not about being the progress police. AI is a great tool that organizations and departments will get enormous value out of. But as it quickly becomes part of the tech stack, it's vital to ensure these fall within the rest of the business's data governance and protection principles. For most AI tools, it's about mitigating the operational risk of the data that flows through them. Broadly speaking, there are three main risk factors: security (what if an outside party accesses or steals the data?), availability (what if we lose access to the data, even temporarily?), and accuracy (what if what we're working from is wrong?).

This is where data resilience is crucial. As AI tools become integral to your tech stack, you need to ensure visibility, governance, and protection across your entire 'data landscape'. It comes back to the relatively old-school CIA triad - maintaining confidentiality, integrity, and availability of your data. Rampant or uncontrolled use of AI models across a business could create gaps. Data resilience is already a priority in most areas of an organization, and LLMs and other AI tools need to be covered. Across the business, you need to understand your business-critical data and where it lives. Companies might have good data governance and resilience now, but if adequate training isn't put in place, uncontrolled use of AI could cause issues. What's worse, is you might not even know about them.



Building (and maintaining) data resilience

Ensuring data resilience is a big task - it covers the entire organization, so the whole team needs to be responsible. It's also not a 'one-and-done' task, things are constantly moving and changing. The growth of AI is just one example of things that need to be reacted to and adapted to. Data resilience is an all-encompassing mission that covers identity management, device and network security, and data protection principles like backup and recovery. It's a massive de-risking project, but for it to be effective it requires two things above all else: the already-mentioned visibility, and senior buy-in. Data resilience starts in the boardroom. Without it, projects fall flat, funding limits how much can be done, and protection/availability gaps appear. The fatal 'NMP' ("not my problem") can't fly anymore.

Don't let the size of the task stop you from starting. You can't do everything, but you can do something, and that is infinitely better than doing nothing. Starting now will be much easier than starting in a year when LLMs have sprung up across the organization. Many companies may fall into the same issues as they did with cloud migration all those years ago, you go all-in on the new tech and end up wishing you'd planned some things ahead, rather than having to work backwards. Test your resilience by doing drills - the only way to learn how to swim is by swimming. When testing, make sure you have some realistic worst-case scenarios. Try doing it without your disaster lead (they're allowed to go on vacation, after all). Have a plan B, C, and D. By doing these tests, it's easy to see how prepped you are. The most important thing is to start. ■

Industrial enterprises will generate a stunning 4.4 Zettabytes of OT data by 2030

According to a new report by global technology intelligence firm ABI Research, by 2030, the manufacturing industry will generate 4.4 zettabytes of data worldwide. In a broader context, the research suggests that enterprises will generate almost as much Operational Technology (OT) data as will be generated in telco networks – mainly by consumers – by 2030.

"In the wake of Industry 4.0, data is becoming the lifeblood of industrial enterprises, driving innovation and efficiency, and the comparison to telco (consumer data) is compelling," says Leo Gergs, Principal Analyst for Hybrid Cloud & 5G Markets at ABI Research. "The vast volume of data enterprises generate only reveals part of the picture. OT data in enterprises often involves conditions in extremely hazardous environments, where any data malfunction could lead to severe consequences. On the other hand, a significant portion of data in telecommunications networks consists of cat videos and other entertaining memes. While there's nothing wrong with enjoying internet memes, OT data in enterprises is crucial for ensuring safety and maintaining business operations."

As ABI Research identifies, targeting the enterprise OT opportunity requires distinctive capabilities across three main domains:

- 1. Infrastructure and Storage Needs:** Enterprises will need to invest heavily in data storage solutions to handle the large volumes of OT & upgraded network infrastructure will be necessary to support the high bandwidth required for transmitting massive amounts of data.
- 2. Data Management and Processing Capabilities:** There will be a greater demand for sophisticated data management systems to efficiently organize, store, and retrieve



OT data. "At present, only a shocking 5% of enterprise OT data is properly utilized due to high friction between data siloes," says Gergs. "To maximize the benefit of all their data for advanced use cases, like Generative AI and others, enterprises will demand integration solutions that help tear down the walls of individual data siloes." High-performance and edge computing solutions will be essential to process and analyze the data in real-time.

3. Cybersecurity Concerns: The large volume of OT data, often generated by critical infrastructure, presents a tempting target for cyberattacks, necessitating robust cybersecurity measures.

"The massive IT outage following a malfunction CrowdStrike software update laid bare in a shocking way the importance of a thorough security strategy and robust data storage and accessibility strategy," Gergs says. "Enterprises are overwhelmed

by the complexity this entails. Therefore, they will turn to digitization partners to provide these strategies as part of a comprehensive data & cloud offering."

"The opportunity around enterprise data is immense, but integration vendors, cloud service, and connectivity providers must rise to the challenge by investing in scalable solutions, enhancing data security, leveraging advanced analytics, and ensuring interoperability," Gergs concludes.

These findings are from ABI Research's Industrial Data Generation Forecast market data report. This report is part of the company's Hybrid Cloud & 5G Markets and Industrial & Manufacturing Markets research services, which include research, data, and ABI Insights. Market Data spreadsheets comprise deep data, market share analysis, and highly segmented, service-specific forecasts to provide detailed insight into where opportunities lie. ■

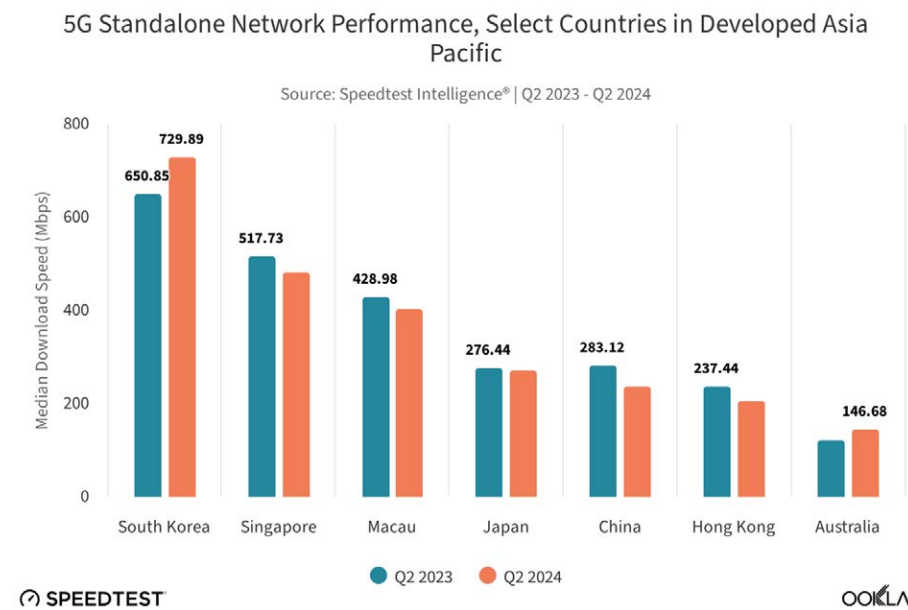
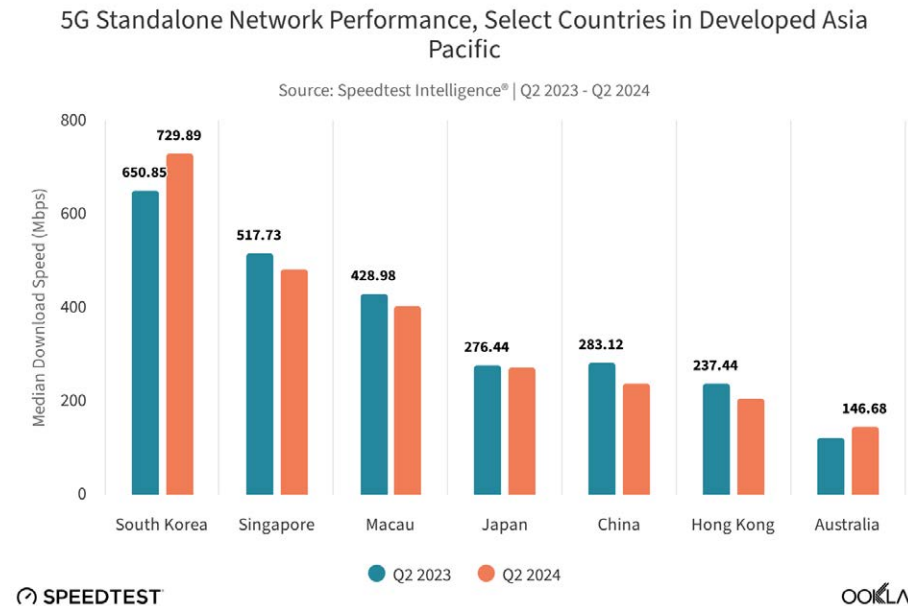
Faster speeds and the promise of new use cases is driving 5G SA adoption

Karim Yaici, Lead Industry Analyst at Ookla

The deployment of 5G networks is progressing as demand for faster and more reliable connectivity continues to grow. The standalone (SA) deployment model marks a significant milestone in the evolution of 5G, aiming to offer lower latency, increased bandwidth, and improved reliability compared to earlier network configurations. In this article, we use Ookla Speedtest Intelligence® data to track 5G SA deployments since Q2 2023, 5G SA service adoption, and examine its impact on network performance. We also highlight key regions and countries that made notable advancements in 5G SA infrastructure.

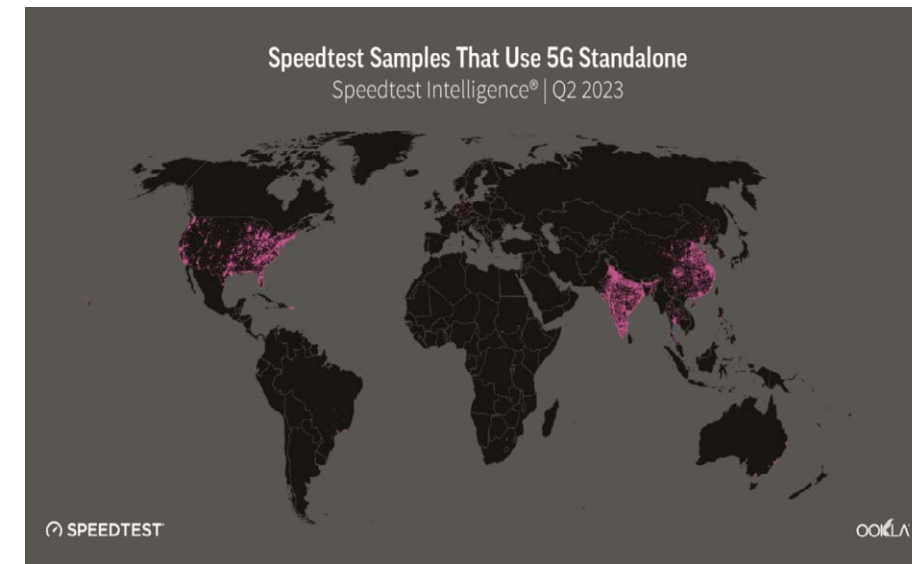
Key Takeaways:

- India, the U.S., and Southeast Asia are at the forefront of 5G SA adoption. T-Mobile and SK Telekom were among the first to launch 5G SA in 2020, while Chinese operators and Jio in India lead in terms of active 5G SA users. Europe somewhat lags, with operators still hesitant due to the relatively low ROI on existing 5G investments and unclear business cases for 5G SA. However, Europe has the highest number of operators planning to launch it.
- The U.A.E. and South Korea lead the world in 5G SA performance. 5G SA download speeds reached 879.89 Mbps and 729.89 Mbps, respectively. Their 5G SA upload speeds were also impressive, at 70.93 Mbps and 77.65 Mbps, respectively. This performance is a result of significant advancements made by local operators in deploying 5G SA and testing advanced features such as network slicing and mobile edge computing (MEC).
- The change in speed of 5G SA varied widely between countries over a year. Speedtest Intelligence data shows that 5G



SA performance declined in many countries between Q2 2023 and Q2 2024, primarily driven by increased user base and network traffic. Conversely, markets such as Canada and the U.S. improved their performance

thanks to access to additional spectrum. 5G SA deployments are expected to increase this year as adoption gains momentum and ecosystem matures



Most existing 5G deployments use the non-standalone (NSA) model which uses the 4G core network. This model is faster to roll out, requires less investment, and maximizes existing network assets. Unlike 5G NSA, 5G SA uses a dedicated 5G core network, unlocking the full capabilities of 5G with better speed, latency, support for large numbers of devices, and more agile service creation. It also enables new features such as network slicing where an operator can dedicate a network segment to specific customers or use cases. Furthermore, the core network functions provided by a cloud-native architecture enable more scalability and automation than physical or virtualized architectures. However, this comes with higher infrastructure complexity, investment as well as staff training costs. Many operators use NSA as a stepping stone towards SA, with a few exceptions, such as DISH in the U.S. and Jio in India, which adopted SA from the outset. Other scenarios for deploying 5G SA include an overlay for a public 5G NSA network or as a private network for enterprise use cases.

The Global Mobile Suppliers Association (GSA) identified 230 operators that had invested in public 5G SA networks as of the end of June 2024. 5G SA represented more than 37% of the 614 operators known to have invested in 5G either through trials or deployments. The GSA reported 1,535

commercially available devices, including handsets and fixed wireless access (FWA) customer premises equipment (CPEs), that support 5G SA, demonstrating the growing maturity of the device ecosystem.

However, only 11 new 5G SA deployments in nine countries were recorded (out of 46 new 5G networks launched in 32 countries) in 2023, according to Analysys Mason, showing a slowdown in deployments. We expect the pace of 5G SA launches to accelerate in 2024 and beyond supported by the growing device ecosystem and commercial appetite for new 5G use cases.

To identify where 5G SA access has been activated and the network expanded between Q2 2023 and Q2 2024, we used Speedtest Intelligence® data to identify devices that connect to 5G SA. The maps below confirm that the number of 5G SA samples increased year-on-year and that coverage has expanded beyond urban centers. However, mobile subscribers in most of Africa, Europe, Central Asia, and Latin America have yet to experience 5G SA.

The developed Asia-Pacific (DVAP) region is at the forefront of 5G SA launches

Operators in this region boast 5G SA networks, with launches happening as early as 2020. Strong government support, operators' technology leadership, and a

high consumer appetite for high-speed internet services drove this rapid adoption.

South Korea is considered a pioneer in the adoption and deployment of 5G technology, with SK Telecom deploying one of the first 5G SA services in H1 2020, and supporting advanced features such as network slicing and mobile edge computing (MEC). Speedtest Intelligence data shows that the country led the region in download and upload speeds in Q2 2024. South Korea has one of the highest median speeds among the countries analyzed at 729.89 Mbps (download) and 77.65 Mbps (upload). The other top-performing country is the U.A.E with a median download speed of 879.89 Mbps and a median upload speed of 70.93 Mbps.

All three service providers in Singapore commercialized 5G SA services, covering more than 95% of the country. Users experienced excellent download speed with a median value of 481.96 Mbps. However, Singapore lagged in upload speed with a median value of 32.09 Mbps.

Macau and Japan are second and third in the region with median download speeds of 404.22 Mbps and 272.73 Mbps, respectively. Mainland China followed with a median speed of 236.95 Mbps. Policies and initiatives such as network-sharing agreements and government subsidies supported 5G growth.

In Australia, TPG Telecom launched its 5G SA network in November 2021, following Telstra's announcement in May 2020. However, the country lagged behind its regional peers with median download speeds and upload speeds of 146.68 Mbps and 17.69 Mbps, respectively.

The performance of most reviewed DVAP countries remained largely stable or slightly declined between Q2 2023 and Q2 2024. The only two exceptions are South Korea and Australia where performance improved by 12% and 18%, respectively. The most substantial declines were observed in upload speeds, while South Korea stood out with a 17% boost in performance. █

Streamline Hybrid Cloud for tomorrow's innovation

There are – at a minimum – two constants in IT: growth and change. With 90% of organizations reporting increased complexity in the past two years, the continued, explosive growth of applications and data has made it more and more critical to manage applications and workloads efficiently. Furthermore, predictability and stability of infrastructure costs regularly surface as prominent concerns. These challenges underline the critical need for organizations to be strategic in their decisions putting an even greater emphasis on the importance of flexibility and choice.

To drive simplicity and provide more choice to the teams navigating the IT waters, Dell Technologies and Nutanix are building on their 14+ year relationship with two new innovative solutions. These new offerings, sold and delivered by Dell, are redefining flexibility and control in Nutanix environments, with each solution addressing key IT challenges head-on to help future-ready enterprises pave a path forward.

Introducing Dell XC Plus

Dell XC Plus is a turnkey, HCI-based appliance designed to streamline the complexities of on-premises and hybrid cloud environments by integrating the Nutanix Cloud Platform software stack on Dell PowerEdge servers, offering customers more choice and control to meet evolving IT requirements. Featuring a centralized control plane, robust automation, the integrated Nutanix AHV hypervisor, and a resilient distributed cloud architecture, this solution is engineered to enable enterprises to:

- **Simplify Hybrid Cloud:** Combining user-friendly software from Nutanix and robust PowerEdge server from Dell enables seamless management and a unified hybrid cloud framework so IT teams can focus on growth and strategic business outcomes.
- **Streamline Operations:** Automation capabilities create a more secure, resilient



Travis Vigil, SVP Product Management, Dell Technologies (L) and Thomas Cornely, SVP Product Management, Nutanix (R)

and agile IT environment that directs energy toward breakthroughs instead of maintenance.

- **Optimize Performance:** The solution continuously fine-tunes itself using AI and machine learning to enhance performance and optimize resource planning for both traditional and modern workloads.

Customers can leverage the modern, flexible, and secure XC Plus solution to accelerate application deployment and simplify hybrid cloud today.

A Sneak Preview: Dell PowerFlex with Nutanix Cloud Platform adds choice and flexibility

We have heard our customers and understand their need for flexibility in infrastructure architecture. In response, Dell and Nutanix are proud to announce that Dell PowerFlex will be the first external storage supported and integrated with the Nutanix Cloud Platform. This solution natively integrates Dell's premier software-defined infrastructure with the Nutanix AHV hypervisor and the Nutanix Cloud Platform to create an enhanced hybrid cloud experience. Our joint customers will gain greater storage flexibility with the

ability to manage compute and storage independently, run their choice of hypervisor and achieve extreme performance at scale all while maintaining the full suite of Nutanix software features, which includes enterprise data protection and disaster recovery, networking and security, and more, to tackle complex infrastructure challenges with ease.

Stay tuned for more details on this solution which is currently in development and will be available to customers in early access later this year.

Dell and Nutanix – Paving the Path for Hybrid Cloud Innovation Together

The extended collaboration between Dell Technologies and Nutanix reflects our shared commitment to innovation, leveraging decades of combined expertise to deliver these new offerings. In fact, this is just the beginning. Over time, we intend to explore expanding Nutanix Cloud Platform integration with other Dell IP-based storage solutions. As you navigate the hybrid cloud landscape, rely on the simplicity and robustness that XC Plus offers today. Meanwhile, look forward to the increased agility, expanded choice, and unparalleled flexibility of PowerFlex with Nutanix Cloud Platform. **■**

Grid Telecom and Dawiyat Integrated to build new cable system between Greece and KSA

Grid Telecom, a wholly owned subsidiary of the Independent Power Transmission Operator (IPTO) of Greece and Dawiyat Integrated, a wholly owned subsidiary of Saudi Electricity Company (SEC), signed a Memorandum of Understanding (MoU) for a strategic collaboration to build a new high-capacity cable system connecting Greece with the Kingdom of Saudi Arabia.

This MoU is a testimony of the strategic cooperation between Grid Telecom and Dawiyat Integrated, which is aligned with their strategy in expanding their international networks. The new cable system will connect Saudi Arabia to the Island of Crete extending westwards to major destinations in Europe and eastwards to the entire Arabian Peninsula. The partnership between Grid Telecom and Dawiyat Integrated will provide synergies for their participation in additional transformative projects that create long-term value, such as the development of hyperscale-ready data centers, providing gateways between continents.

Dawiyat Integrated future investments in digital infrastructure will enhance Saudi Arabia's digital transformation and business development, aiming to position Dawiyat at the forefront of the telecommunications industry, by providing state-of-the-art integrated and innovative solutions to its customers. Grid Telecom is emerging as the prime wholesaler in the Greek market, exploiting IPTO's extensive optical network in Greece and neighboring countries, integrating this with its own fiber networks and points-of-presence, creating a new carrier neutral, open-access, connectivity hub in the Balkan - Mediterranean region. The strategic partnership between Grid Telecom and Dawiyat Integrated will bring advanced data transport solutions to the market, creating a new telecommunications bridge between Europe and the Middle East.



The Chairman of Grid Telecom, Kostas Agathakis, said: "We are continually looking for ways to strategically expand our services to partners and customers. In this framework, our collaboration with Dawiyat Integrated in building a new cable system, will support the implementation of a new corridor between Greece and Saudi Arabia. Moreover, it will enhance the strategic role of Crete as a regional open-access interconnection node in the Eastern Mediterranean and the Balkans".

The CEO of Dawiyat Integrated, Wael Ali Al-Ghamdi, said: "With the increasing demand for connectivity regionally and globally, Dawiyat Integrated is continuously working on enhancing and extending its international network. Our partnership with Grid Telecom in a consortium to build a new cable system will increase our network's resiliency and reach. Leveraging on the strategic position of Crete, it will create a new cable system, interconnecting the Kingdom of Saudi Arabia with Greece and the Balkans, providing a new entry point to Europe".

The Chairman and CEO of IPTO, Manos Manousakis, said: "IPTO is building critical infrastructure for tomorrow's electricity and telecommunications backbone networks throughout Greece and beyond, interconnecting the future. IPTO is already collaborating with Saudi Electricity Company (SEC) through its wholly owned subsidiary National Grid, by establishing "Saudi Greek Interconnection", as a special purpose company for conducting the feasibility studies related to the implementation of the Greece-Saudi Arabia electricity interconnector and now, by joining forces with Dawiyat Integrated, also wholly owned by SEC, for building a new diverse cable link in the Eastern Mediterranean, bringing innovative total telecommunications solutions in the region. In this way, we fully exploit synergies and create win-win Eurasian business opportunities, transforming both Greece and the Kingdom of Saudi Arabia into critical energy and data hubs of high geopolitical value, at the crossroads of Europe, Africa and Asia." **■**

Transformational Opportunity of AI on ICT Jobs Report: 92% of technology roles evolve, indicating urgency for reskilling

AI-Enabled ICT Workforce Consortium—led by Cisco with industry leaders Accenture, Eightfold, Google, IBM, Indeed, Intel, Microsoft and SAP, along with key advisors—released its inaugural report, “The Transformational Opportunity of AI on ICT Jobs.”

The leading technology companies collaborated to develop a comprehensive report which examines AI’s impact on 47 ICT roles across seven job families using a Job Transformation Canvas. The initiative and resulting report seek to empower workers to reskill and upskill with recommendations underscored by today’s evolving job requirements. With the introduction of technology and tools such as ChatGPT, Gemini, Midjourney and further emergence of AI tools, workers must prepare for digital work environments increasingly adept at mimicking human capabilities.

The Job Transformation Canvas goes further to outline how AI will influence each role and identify future skills required; skills made less relevant by AI as well as those complemented by it. Workers can use the Job Transformation Canvas as a training companion as they ready for an AI-fueled job market. Employers can leverage the report as a training development guide to cultivate and enable their AI-ready workforces.

“AI presents a generational opportunity for technology to positively impact critical industries and wider society. We must act intentionally to ensure that populations in our region are equipped with the necessary skills,” said David Meads, Vice President, Cisco Middle East and Africa. “With countries in the Middle East marching forward to realize their AI goals, upskilling has never been more crucial. This is why the ICT Workforce Consortium of global leaders has come together, committing to train and upskill 95 million people over the next 10



David Meads - Vice President, Cisco Middle East, Africa, Romania & CIS Countries

years, ensuring everyone can participate and thrive in the era of AI.”

Key Findings: Every Job Becomes an AI-Influenced Job

- 92% of ICT jobs analyzed are expected to undergo either high or moderate transformation due to advancements in AI.
- Entry-level and mid-level ICT professionals are at the forefront of AI transformation with 40% of mid-level positions and 37% of entry level positions expected to have high levels of transformation.
- As AI continues to redefine job functions, certain skills will rise in importance (such as AI ethics, responsible AI, prompt engineering, AI literacy, Large Language Models [LLM] architecture and agile methodologies), while others may become less relevant (traditional data management, content creation, documentation maintenance, basic programming and languages, and research information).
- Foundational skills are needed across ICT job roles for AI preparedness, including AI literacy, data analytics and prompt engineering.

Our Commitment to Training

Consortium members have established forward-thinking goals with skills development and training opportunities to positively impact over 95 million individuals around the world over the next 10 years.

Their goals include:

- Cisco to train 25 million people with cybersecurity and digital skills by 2032.
 - IBM to skill 30 million individuals by 2030 in digital skills, including 2 million in AI by the end of 2026.
 - Intel to empower more than 30 million people with AI skills for current and future jobs by 2030.
 - Microsoft committed to training and certifying 10 million people in digital skills by 2025, surpassing this goal by training and certifying 12.6 million people a year ahead of schedule.
 - SAP to upskill two million people worldwide by 2025.
 - Google has recently announced over \$130 million in funding to support AI training and skills for people across the US, Europe, Africa, Latin America and APAC.
- Cisco’s commitment to upskilling professionals dates back to 1997, with the launch of Cisco Networking Academy, which supports Cisco’s purpose of powering an inclusive future for all. As one of the world’s longest-standing IT skills-to-jobs programs, the Networking Academy partners with learning institutions worldwide to empower professionals and students, fostering a future-ready workforce. Since its inception, Cisco Networking Academy has reached 17.5 million learners in 190 countries, including 506,600 learners in the GCC. 🇮🇪

Red Hat highlights evolution of AI in Middle East at Red Hat's EMEA AI Open Talks

The Middle East is quickly establishing itself as a global leader in artificial intelligence (AI) innovation, thanks to large investments made to improve productivity, safety, and reliability of the AI-powered tools. Several industry leaders are driving this shift to improve business outcomes by improving technology and broadening its applications across key sectors. At the forefront of this change is Red Hat, a leader in open-source solutions, leveraging AI to drive business efficiency and support regional sustainability goals.

The Hype Cycle

At the recent Red Hat's EMEA AI Open Talks, Red Hat shed light on several key advancements in artificial intelligence (AI) and the company's perspective on them. The discussion addressed the tremendous expansion and excitement that the AI industry has experienced, leading some to speculate that the hype cycle around AI is nearing its end. However, in the Middle East, AI's enormous potential continues to spark significant investments, driving innovation and economic growth.

Red Hat emphasized the importance of practical AI applications, ensuring that the technology remains influential and productive. While hype surrounding generative artificial intelligence (GenAI) persists, it has transcended the peak of inflated expectations. In 2024, projects utilizing other AI techniques – either alone or in conjunction with GenAI – that have standardized procedures to facilitate implementation is expected to yield greater benefits. AI leaders should therefore combine developments from all stages of the ‘Hype Cycle’ to create composite AI techniques as the foundation for future system architectures in order to maximize



Jan H Wildeboer
EMEA Open Source evangelist

benefits.

Swarm AI

Red Hat then continued to advocate for Swarm AI, a bottom-up approach to AI that places a strong focus on transparency, community-driven development, and ethical principles. Swarm AI improves data exchange and offers more precise and efficient solutions by utilizing a collective of smaller models. More importantly, this method differs from the conventional dependency on big, monolithic AI systems.

Impact on Key Domains

Red Hat's AI solutions are also renowned for having a significant impact on several key industries, like the stock market, fraud management, and healthcare. AI is used in healthcare to improve patient care and expedite operations, while AI-driven fraud management systems can detect and prevent fraudulent activities in finance. It also supports the stock

market by offering predictive analytics to inform investment strategies.

Significance of Small Models

It was noted that while major players such as Microsoft, Google, and Meta dominate the AI landscape, Red Hat's strategy focuses on small, domain-specific models. By using company-specific data to train the models, more reliable and customized solutions can be offered. This method works particularly well for business applications as it addresses privacy concerns and boosts productivity.

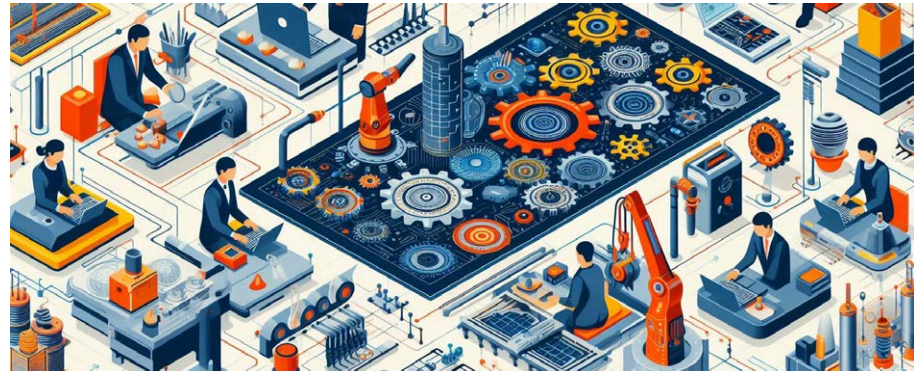
AI and Sustainable Development

Above all, the Middle East's investments in AI demonstrate its commitment to sustainable development. Red Hat makes sure that advancements in AI have a positive impact on environmental factors by aligning its developments with regional sustainability goals. This entails maximizing resource efficiency, cutting carbon footprints, and optimizing energy use. The company also supports startups and early-stage innovations, fostering a vibrant ecosystem that encourages advances in AI. Red Hat supports these companies in the development of cutting-edge AI technologies by lending resources and expertise.

Red Hat is committed to spearheading AI innovation in the Middle East, giving practical applications, sustainability, and ethical development top priority across a range of industries. The Red Hat OpenShift AI is an open-source platform that supports this vision, and allows for developing, training, testing, and serving models for your own AI-enabled applications. By embracing smaller, more effective AI models that promote regional initiatives, Red Hat hopes to make AI a productive and transformative force in the region. 🇮🇪

Industrial AI uptake is just getting started but majority of sector is uncovering new use cases - Honeywell Research

Honeywell has released its Industrial AI Insights global research study, which captures the state of Artificial Intelligence (AI) in the sector. While only 17% of AI decision makers around the world have fully implemented their initial AI plans, more than 9 in 10 say they are uncovering unexpected new use cases whether they are in the prototyping, launch, or scaling stages of AI implementation.



The research also finds AI leaders are “sold” on AI for industrial applications. The enthusiasm for a deeper commitment to AI investment is nearly universal, with 94% of those surveyed saying they have plans to expand their utilization of AI.

“There is no question that AI is currently at a pivotal moment,” said Kevin Dehoff, Honeywell’s Chief Strategy Officer. “With the advent of Gen AI and more sources of data from advanced analytics, Industrial AI is poised to grow exponentially, and the possibilities are endless for revenue growth and employee satisfaction.”

AI Unlocks Workplace Benefits

When asked for their thoughts on the impact of AI on industrials, nearly two-thirds (64%) of AI leaders cited efficiency and productivity gains among the most promising benefits. Sixty percent say improved cybersecurity and threat detection result from AI and 59% report better decision making due to real-time data generation.

Several other benefits of AI for workers were also cited by respondents, including:

- Increased work flexibility (49%)
- Greater job satisfaction (45%)
- More time for skills development and creative thinking (44%)
- Increased workplace safety (39%)

Khaled Hashem, President of Honeywell Middle East and Africa, commented: “Honeywell is an ardent supporter of the UAE’s forward-thinking approach of harnessing the power of AI to develop skills and boost socio-economic growth. The data from our latest research demonstrates the vast potential of AI to support industry, empowering workers to achieve greater efficiency, productivity and safety in their operations.”

Skills development is crucial in today’s economy with baby boomers retiring and fewer replacements entering the workforce. Through AI, employers can more quickly upskill and reskill workers. AI will transform industrials as it enables workers to perform jobs at higher levels, providing greater job satisfaction while increasing productivity and addressing the skills shortage.

Lucian Boldea, President and CEO of Honeywell Industrial Automation, offered one direct example: “There can be tens of thousands of instruments, equipment, and valves needed to process and manufacture a product and many of the parts we supply manufacturers require highly experienced technicians for operation and maintenance – and there are fewer and fewer of those experienced technicians available. With AI training and AI as a “co-pilot” the skills of a less experienced technicians can more quickly be upgraded, turning them into more elite experts that perform tasks based

on enterprise knowledge and best practices. In turn, plants’ operations can run more safely and reliably by dramatically reducing human error.”

What’s Next for AI

While the enthusiasm for AI to expand is palpable, there are still some challenges in the way of full adoption. More than a third of survey respondents (37%) feel that their C-Suite fully doesn’t understand how AI works and almost half (48%) say they are having to continually justify or request resources needed to implement AI plans.

“Businesses of all types recognize that AI is transforming our world and creating new possibilities. For building operations – such as hospitals, campuses, and offices – it is clearly the future. As AI orchestrates controls that regulate HVAC, lighting and electricity usage, it helps to improve safety, operational and sustainability outcomes,” said Billal Hammoud, President and CEO of Honeywell Building Automation.

All of this suggests the pace of change will be driven by compelling use cases that can be measured in terms of improved business performance. As new solutions demonstrate clear benefits to workforce productivity, safety, and reliability, AI adoption will dramatically increase with the potential to transform industrial operations. ■

GLOBAL ICT, TELECOM & SATCOM EVENTS 2024-25

13-16 September 2024 Amsterdam Netherlands	15-17 October 2024 capacity EUROPE 2024 London, UK	19-20 November 2024 Bangkok, Thailand
01-02 October 2024 GSMA™ M360 APAC Seoul, South Korea	16-17 October 2024 Johannesburg, SA	03-05 December 2024 Manama, Bahrain
08-10 October 2024 NETWORK X Paris, France	04-07 November 2024 London-UK	03-06 December 2024 Singapore
14-18 October 2024 Dubai, UAE	05-07 November 2024 Bangkok, Thailand	03-06 March 2025 MWC™ GSMA Barcelona, Spain
14-18 October 2024 Dubai, UAE	14-18 November Africa Com Cape Town South Africa	06-08 May 2025 Dubai, UAE
14-18 October 2024 Dubai, UAE	18-19 November 2024 GSMA™ M360 MENA Doha, Qatar	13-15 May 2025 Dubai, UAE



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