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Lunar Data Centers: Pioneering the Future of Secure and Sustainable Data Storage

Centres de données lunaires : les pionniers de l'avenir du stockage sécurisé et durable

- Sekou Amadou BAH Navigating the Digital Data Center Landscape in Sierra Leone and Beyond
- E-Waste: The Role of Perception in Policy Transformation
- Is there a way of using our data on the Internet?
- Sekou Amadou BAH Naviguer dans le monde des centres de données numériques en Sierra Leone et au-delà
- Déchets électroniques : le rôle de la perception dans la transformation des stratégies
- Y aurait-il un mode d'usage de nos données sur Internet ?

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4 ■ Lunar Data Centers: Pioneering the Future of Secure and Sustainable Data Storage



8 ■ Our Lifeblood Below: How Subsea Cable Cables Empower Our World Today



10 ■ Sekou Amadou BAH: Navigating the Digital Data Center Landscape in Sierra Leone and Beyond



16 ■ The Sky's the Limit: How Surging Demand Is Driving AI Job Salaries

12 Human Touch: ChatGPT's Rise Still Dependent on Human Expertise

14 Industry News

18 A Green Tomorrow: Empowering Youth for a Sustainable Future

20 Scan to Pay: Enabling QR Code Payments in South Africa

22 Operators News

24 E-Waste: The Role of Perception in Policy Transformation

26 Spotlighting the EU's Quest for Smartphone Battery Replacements

28 Reports & Coverage News



Check the Cybersecurity Label: Know Which Device Is Safe for You

Approximately 40% of households around the globe possess a smart device, a modern convenience that may unfortunately be susceptible to cyberattacks. In the near future, these smart gadgets may come with a cybersecurity label to help buyers assess which product to buy.

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Fires Beware: Cutting-Edge AI Unleashes Wildfire Detection Innovation

Until recently, spotting wildfires primarily depended on human observation and reporting. A groundbreaking AI innovation is set to change that by offering a superior and precise alternative. Through a constant vetting of copious satellite imagery, the new technology swiftly identifies key wildfire indicators, including smoke columns and unusual heat patterns.

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Zoom's Updated Terms Are Empowering AI With Customer Data Training

Zoom's updated terms enable the use of customer data, excluding messages and files, for training AI models. Customers can opt into generative AI features and consent to their content being used for training, emphasizing performance enhancement and giving users control over data sharing.

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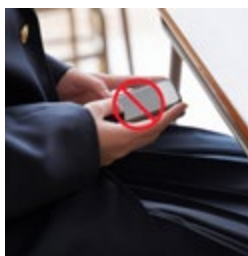

Nokia Aims for Connectivity on the Moon

Nokia Bell Labs is deploying the first cellular network on the Moon to demonstrate that cellular technologies can provide the critical communications needs for future lunar or Martian missions.

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Fusing Human Brain Cells With Chips for Advanced AI

Researchers have embarked on an innovative quest to merge human brain cells with computer chips, reshaping the realm of artificial intelligence (AI).

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UNESCO Recommends Smartphone Prohibition in Classrooms

In a recent report, the United Nations Educational, Scientific and Cultural Organization (UNESCO) recommended a worldwide ban on smartphones in classrooms as a measure to improve the quality of education and protect children from the perils of online bullying.

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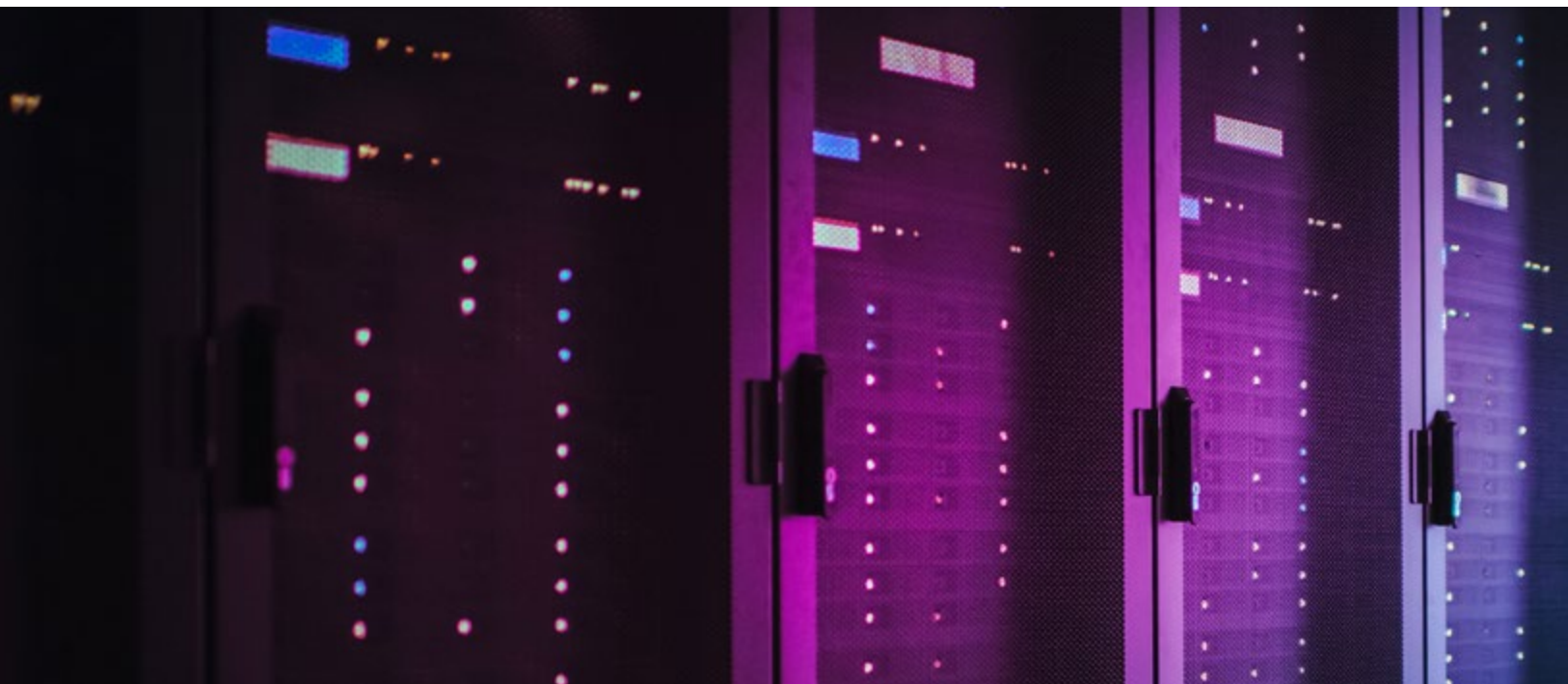
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Lunar Data Centers: Pioneering the Future of Secure and Sustainable Data Storage



In an era marked by a deepening reliance on digital technologies and unprecedented data generation, the quest for innovative data storage solutions may just launch humans and their pesky data beyond the confines of Earth. One of the more audacious ideas gaining traction is the potential establishment of data centers on the moon. As our natural and only satellite, the moon offers a unique blend of suitable environmental conditions and untapped potential that together present a creative reimagining of the future of data storage. This exploration seeks to integrate cutting-edge technology with lunar infrastructure to challenge conventional engineering approaches and usher in a new dawn of secure and sustainable information storage.



At the forefront of this paradigm shift is Lonestar Data Holdings, a visionary company that has embarked on this ambitious mission. Founded in 2019 by forward-thinking entrepreneurs, the company has garnered substantial funding, including \$5 million from notable investors such as SpaceX and Blue Origin. This robust financial backing is rapidly advancing both technology and infrastructure, setting the stage to soon make lunar data centers a reality.

The Lunar Advantage: Stability, Sustainability and Security

The moon presents something of a blank canvas for unforeseen data storage innovation — a unique convergence of factors that create unprecedented opportunities. In contrast to Earth, the moon offers a stable, serene environment, free from the Earth's atmospheric disruptions, seismic activities and turbulent weather patterns. This tranquil lunar setting lays the foundation for data centers to thrive with unmatched stability against the natural disasters that frequently disrupt terrestrial

facilities, ensuring unparalleled data security and accessibility by comparison.

Beyond mere tranquility, the moon's distinctive solar cycle, alternating periods of continuous sunlight and deep darkness, provides intricate energy pathways. Solar panels strategically positioned on the lunar surface harness the sun's unfiltered radiance during the fortnight, accumulating ample solar energy. This surplus energy can drive sustainable, autonomous data centers, reducing reliance on Earth's finite resources and significantly mitigating the overall carbon footprint.

Moreover, the moon's distinctive energy rhythm not only fosters sustainability but also enhances security, powering advanced encryption mechanisms that render lunar data centers impervious to external threats. This solar-fortified defense ensures the integrity of stored information, countering the cyber intrusions faced by their Earth-bound counterparts.

As the moon offers more in terms of stability, sustainability and security, the

potential for data storage innovation soars. With each passing lunar day and night, a transformative process unfolds — one that fuses cutting-edge technology with a harmonious interstellar advantage to not only store data but to shape its purpose.

Challenges and Considerations

While the concept of lunar data centers undoubtedly represents a new technological frontier, this ambitious endeavor is not without its challenges and complexities. As we embark on this innovative journey, addressing several key considerations is vital for successfully integrating lunar data centers into the broader data storage and exploration landscape.

- **Transportation and Space Debris:** Transporting materials and equipment from Earth to the moon for the construction and operation of data centers raises concerns about contributing to the growing issue of space debris. Amid global concerns about space sustainability, prioritizing viable transportation methods, such as reusable launch systems and responsible disposal practices, is crucial to minimizing the



accumulation of man-made debris in Earth's orbit and beyond.

- **Contamination Risks:** The moon's pristine environment holds immense scientific value, as well as insights into the solar system's evolution. Transporting materials from Earth introduces the risk of lunar surface contamination, compromising the moon's purity and hindering future scientific investigations. Implementing stringent measures, including sterilization protocols and adherence to planetary protection guidelines, is imperative to safeguard the integrity of lunar research.
- **Radiation Environment:** The moon's unique radiation environment presents a formidable challenge to data center operations. Shielding sensitive electronics from cosmic radiation and solar flares requires innovative design and engineering solutions. The development of radiation-resistant materials and shielding technologies is paramount for ensuring lunar data centers' reliability and longevity.

- **Surface Disruption and Preservation:** Establishing and operating lunar data centers must be done in a manner that preserves the moon's scientific, geological and exploratory value. Minimizing potential disruptions to the lunar landscape, including the altering of surface features, is crucial to maintaining the integrity of future lunar missions and research.

Transforming Industries and Furthering Exploration

The moon's substantial distance from Earth introduces logistical complexities but also unique advantages that can appreciably impact both industries and exploration. These distinct attributes offer fertile ground for innovation and transformation, opening new frontiers across various sectors.

- **Enhanced Data Security and Privacy:** The moon's remote location acts as a natural fortress, protecting data centers against physical breaches and unauthorized access. This heightened security offers a sanctuary for sensitive and confidential data, ideal for industries that demand uncompromised data integrity and privacy. In finance, for instance, lunar data centers could secure large-scale transactions that are impervious to cyber threats.
- **Revolutionizing Healthcare:** The healthcare industry is on the brink of a data-driven revolution, and lunar data centers can play a key role by storing vast medical databases, safeguarding patient records and facilitating the seamless exchange of critical information between healthcare professionals and researchers. The moon's isolation minimizes the risk of data breaches, thus preserving invaluable medical insights.
- **Pioneering Space Tourism and Mining:** As the nascent industries of space tourism and space

mining gain momentum, lunar data centers could play a pivotal role in their success, facilitating real-time communication, navigation and resource management, to name a few. For space mining, these centers could store and process essential data on resource extraction, refining and utilization and thus optimize the efficiency and sustainability therein.

- **Fostering Collaborative Research:** Lunar data centers would not only support established industries but also foster collaborative research and innovation en masse. They could unite scientists, researchers and explorers, and facilitate the exchange of their data, insights and discoveries related to lunar and space exploration and beyond. The moon's unique vantage point offers an unprecedented opportunity to better understand the cosmos, enabling collaborations that transcend boundaries.

What's Next?

The pioneering scope of lunar data centers represents a significant and imaginative step in addressing Earth's data storage challenges. By harnessing the moon's distinct attributes, these endeavors not only transform data management but also unveil a new era of collaborative lunar exploration.

This innovative pursuit requires a delicate balance between technological progress and environmental preservation. By harnessing lunar resources sustainably, any potential adverse effects can be mitigated, safely injecting human ingenuity into the cosmos.

This visionary quest to establish lunar data centers and redefine data storage is set to reshape industries, spur innovation and leave an indelible mark on the very concept of data management — both here on Earth and far beyond. **TE**



Our Lifeblood Below: How Subsea Cable Cables Empower Our World Today

The internet has become an integral part of our lives, allowing us to connect with people and information from around the world. What makes this global connectivity possible is the vast network of subsea cables traversing the ocean floor, transmitting data at the speed of light through narrow glass fibers. These cables, as thin as a garden hose, are technological marvels capable of carrying copious amounts of data, and they are the essential infrastructure behind our online lives.

The Backbone of Global Interactions
Although the cables are state-of-the-art technology, their installation process is surprisingly low-tech. Coated in tar and laid by ships, the process dates back to the 1850s, when the first transatlantic telegraph cable was laid. The cables have come a long way since then, and today they are the backbone of global commerce and communication, responsible for more than 99% of traffic between continents.

Tech giants like Meta, Microsoft, Amazon and Google not only provide the “brains” of the internet through their data centers but also increasingly control the internet’s nervous system through these very subsea cables. Their data demands are staggering, with hyperscalers’ subsea cables seeing a surge of 45 to 60% in data traffic per year. As the world’s hunger for content and connection continues to grow, the infrastructure must keep up.

The Adaptability of the Subsea Cable Network

Building a resilient subsea cable network is critical. The first subsea cables connected major communication routes, of course, but now newer routes are extending the network to far-off and remote places. Subsea cables are becoming a world-spanning mesh and are becoming ever more reliable and capable, thus coaxing more countries to join the global internet network.

Despite the many benefits of subsea cables, there are also risks. The cables are vulnerable to damage from fishing equipment, anchors and even geopolitical tensions. Repairing cut cables is a complicated process, and downtime can last weeks or even months, disrupting communication and internet services.

The Growing Need for Data

To accommodate the increasing demand for data, new subsea

cables with faster speeds are being built. Hyperscalers like Microsoft are investing in new technologies, such as hollow fibers, to reduce latency and improve network performance. Additionally, multiple data transmission cores inside fibers are being explored to further increase cable capacity.

Geopolitical tensions can also affect subsea cables, with certain countries exercising control over the installation and maintenance of cables in their territorial waters. However, the economic incentives for building these cables usually prevail, as countries want to be part of the interconnected world.

The Creation of Subsea Communications

In the present day, subsea cables can transmit up to 250 terabits per second of data, but the roots of their technology can be traced back to the 1800s. It was during this time that pioneers like Werner Siemens, a renowned scientist and engineer, made significant strides in laying telegraph cables under rivers, the English Channel and the Mediterranean Sea. However, the early attempts were fraught with failures, as the weight of the cables resting on the ocean floor coupled with the immense pressure caused them to tear apart.

Undeterred, investors saw the immense potential of rapid communications and decided to invest in the development of improved technology. Through such support, advancements were steadily made. Higher copper purity enhanced signal transmission; stronger protective sheathing reduced cable breaks; strategically placed repeaters bolstered signal strength; and polyethylene insulation replaced the earlier rubber-like material obtained from gutta-percha trees.

The evolution of subsea communications continued with the transition from telegraph messages to telephone calls. Notably, in 1858, the first successful transatlantic

cable project operated for a mere three months, managing to transmit only slightly more than one word per minute.

As technology progressed, so did the capabilities of subsea cables. By 1973, a transatlantic cable was capable of handling 1,800 simultaneous conversations. Further advancements were made in 1988 when AT&T installed the first transatlantic cable using glass fiber optic strands, a revolutionary innovation that boosted its capacity to handle a staggering 40,000 simultaneous phone calls. And today, we are witnessing unprecedented expansion, both in terms of the infrastructure itself as well as the data it transmits.

Despite its historic challenges, the subsea cable network is growing more robust and resilient at a seemingly breakneck pace. The geographic diversity of new landing sites and improved branching technology are making the network more reliable and less susceptible to disruptions. As the internet continues to enrich our lives, the subsea cables remain the lifeblood of the global economy, ensuring seamless connectivity and access to information worldwide. ■



The first subsea cables connected major communication routes, of course, but now newer routes are extending the network to far-off and remote places





Sekou Amadou BAH, CEO of Orange Sierra Leone

Sekou Amadou BAH: Navigating the Digital Data Center Landscape in Sierra Leone and Beyond

Sekou Amadou BAH, CEO of Orange Sierra Leone, gave an exclusive interview with Telecom Review Africa, with a focus on exploring the significance of digital data centers within the telecom sector and how Orange Sierra Leone seamlessly integrates them into its operations. During the discussion, Sekou detailed the hurdles encountered by Orange Sierra Leone during the establishment and upkeep of its digital data centers, along with the strategies it employs to surmount these obstacles. He gave his perspective on the coming years, identifying the most influential emerging technologies or trends he feels will shape the landscape of digital data centers moving forward.

Can you tell us more about the role of digital data centers in the telecommunications industry and how Orange Sierra Leone incorporates them into their operations?

Just like in any industry, our data center is a physical facility that hosts all our organization's IT operations and equipment for the purposes of storing, processing and disseminating data and applications.

Currently, we have one data center located in Freetown and another that is under construction in Bo, in the Southern District of Sierra Leone. Our data center does not only provide voice and internet services to our customers but also hosts all equipment and

infrastructure necessary to support the delivery of several VAS and data services such as video streaming, gaming, cloud services, etc.

What challenges has Orange Sierra Leone faced in implementing and maintaining digital data centers, and how has it overcome these challenges?

When it comes to establishing and maintaining our digital data centers, we've encountered several noteworthy challenges.

Firstly, the accessibility of equipment posed a hurdle; a substantial portion of the necessary equipment had to be imported from abroad during the data center's construction, which not only proved time-intensive but also incurred significant costs.

Secondly, a crucial concern revolves around limited technical expertise. Sierra Leone lacks readily available skillsets for the installation and upkeep of our data center's services, often necessitating the involvement of expatriate professionals and local staff training to ensure the effective delivery of these services.

Thirdly, the issue of operating costs arises. The global economic landscape has had a significant impact on operating expenses due to the majority of services and equipment being procured in foreign currencies.

Fourth, energy supply is a critical challenge. Our data center operations hinge on dependable energy sources, a demand that faces obstacles in regions with inconsistent grid availability. To counter this, our strategy involves implementing renewable energy solutions, exemplified by the planned installation of solar facilities at our data centers.

Lastly, the imperative for high-speed fiber connectivity between our dual data centers introduces another obstacle. To manage the substantial traffic volume and ensure redundancy, a dependable and secure

fiber connection becomes essential, prompting the need for reliable solutions to cater to this demand.

How does the company ensure the security and integrity of the data stored in its digital data centers, and what measures are in place to protect against cyberattacks and data breaches?

Ensuring robust data security and unwavering integrity in the face of ever-evolving cyber threats and the potential for data breaches stands as a paramount and intricate undertaking in today's digital landscape. This multifaceted endeavor necessitates the implementation of a comprehensive array of security measures and protocols that span various layers, incorporating the most cutting-edge and up-to-date procedures available.

To safeguard the integrity and functionality of IT-critical applications and devices, a vigilant watch is maintained by specialized information security teams hailing from the esteemed institutions of Orange Middle East and Africa, alongside the vigilant oversight of the Sonatel Security Operation Center (SOC), headquartered in the nation of Senegal. These expert teams operate as vigilant custodians, diligently monitoring the digital realm to promptly detect and counteract any potential threats or breaches that may compromise the confidentiality, availability, and overall security of the entrusted systems and data.

From your perspective, what emerging technologies or trends do you think will have the biggest impact on digital data centers in the coming years?

Envisioning the forthcoming wave of influential emerging technologies, three key contenders emerge. First, the evolution of 5G Networks promises not only heightened speeds but also reduced latency compared to previous cellular generations, thus facilitating real-time remote control, industrial automation, and novel applications. Second, the integration of Artificial Intelligence and machine learning algorithms emerges as a transformative force, optimizing operations, enhancing efficiency, and driving cost reductions. Third, the surging emphasis on Renewable Energy takes center stage, addressing the energy-intensive demands of data centers. Solar and wind sources are poised to play pivotal roles, ushering in a cleaner energy paradigm and diminishing carbon footprints.

What advice do you have for other companies looking to implement or improve their digital data centers, and what key considerations should they keep in mind?

I would advise firstly to have a mitigation plan to address implementation challenges and to put in place robust data security measures. It is also important to keep abreast of technological evolutions in the sector and be ready to invest in emerging technologies. 



Ensuring robust data security and unwavering integrity in the face of ever-evolving cyber threats and the potential for data breaches stands as a paramount and intricate undertaking in today's digital landscape





Human Touch: ChatGPT's Rise Still Dependent on Human Expertise

The rise of ChatGPT and similar large language model (LLM) artificial intelligence systems has generated significant attention and speculation across various domains. Some see them as potential replacements for conventional web searches, while others worry about their impact on job markets. There are even concerns about AI posing an existential threat to humanity. Amidst all this speculation, one fundamental truth is often overlooked: These AI systems, despite their complexity, rely entirely on human knowledge and labor. In other words, they cannot generate new knowledge independently. To understand this better, we must delve into how ChatGPT works and the critical role humans play in its functionality.

How ChatGPT Functions

Large language models like ChatGPT operate on a basic principle: They predict what characters, words and sentences should follow one another based on training data sets. In the case of ChatGPT, the training data consists of vast amounts of publicly available text gathered from the internet. The process is complex and resource-intensive and involves several stages. It's essential to recognize that training a language model is a supervised endeavor where the model learns to predict the probability of a word or phrase based on the context of the words that came before. It's applied through a plethora of systems and stages, including data collection, data processing, tokenization, vocabulary creation, model architecture, initialization, training objectives, training loops, back propagation, optimization and validation.

In practice, people express a wide range of opinions and information about topics such as quantum physics, politics, health or historical events. So the question becomes: how can the model differentiate between valid and invalid statements when people provide varying perspectives?

The Need for Feedback

Users of ChatGPT can rate responses as good or bad. If a response is rated as bad, users are asked to provide an example of what a good answer should look like. ChatGPT and similar models learn what responses are deemed good or bad through such feedback from users as well as from the development team and contracted workers who also label the model's output.

ChatGPT cannot independently compare, analyze or evaluate arguments or information. It can only generate text sequences similar to those used by others when making comparisons, analyses or evaluations. It prefers responses that resemble what it has been taught are good answers in the past.



When ChatGPT provides a good answer, it draws on a significant amount of human effort that went into defining what indeed constitutes a good answer. As can be imagined, there are numerous humans behind the scenes that contribute to this process, and their continued involvement is essential for the model to improve and expand its content coverage.

What ChatGPT Cannot Do

The importance of feedback is evident in ChatGPT's tendency to produce inaccurate answers, a phenomenon often referred to as "hallucination." Without proper training, ChatGPT cannot provide accurate responses, even when accurate information is readily available on the internet. This limitation becomes apparent when asking ChatGPT about obscure or less common topics.

LLMs lack the capacity to understand or evaluate information autonomously. They rely on humans to perform these tasks. They cannot, for example, determine the accuracy of news reports, assess arguments or make informed judgments. They depend on human input for all these functions.

Furthermore, if the consensus on a particular topic changes, such as the

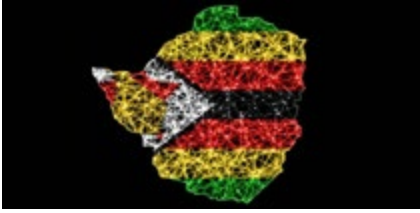
health effects of salt or the utility of early breast cancer screenings, these models need extensive retraining to incorporate the updated consensus.

In summary, large language models like ChatGPT exemplify the dependence of AI systems on human input. They rely not only on their designers and maintainers but also on users for feedback and improvements. When ChatGPT provides a useful answer, it is a result of the collective knowledge and labor of countless individuals who contributed to its training and refinement.

Rather than being autonomous superintelligences, these AI models are tools that amplify human capabilities. ChatGPT, like all technologies, is only as powerful as the knowledge and guidance provided by the humans who shape its functionality.

The mystique surrounding ChatGPT and similar LLMs often obscures the critical role humans play in their operation. These AI systems are not independent entities; they are products of human design and ongoing human involvement. Understanding their limitations and dependencies is crucial to navigating the evolving landscape of artificial intelligence. **TR**

Powertel Injects \$50 Million Into Zimbabwe's Fiber Network Expansion



Powertel Communications, a subsidiary of the Zimbabwe Electricity Supply Authority (ZESA Holdings Group), is focusing on enhancing its fiber-optic Internet services. They have recently unveiled a substantial investment plan of \$570 million aimed at expanding their telecom network over the next seven years.

This strategic initiative is expected to play a significant role in advancing the country's broadband coverage.

The expansion project is set to unfold in multiple stages, as outlined in their comprehensive roadmap. Powertel's strategy involves allocating \$355 million for fixed access development, \$112 million for mobile access improvements and \$50 million for the enhancement of 4G LTE and 5G capabilities, as well as the national backbone infrastructure. An additional \$4 million has been earmarked for investments in the Internet of Things (IoT) sector. Remarkably, connectivity

will be facilitated through the utilization of ZESA Holdings' power lines.

According to Willard Nyagwande, acting CEO of Powertel, this investment is part of the company's strategy to improve efficiency and profits. It takes place against a backdrop of digital transformation marked by high demand for connectivity in Zimbabwe.

According to the latest statistics from the Postal and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ), the country has 14.05 million TV subscribers.

Melon Digital Partners with Amdocs to Empower Customers on Digital Journey



Amdocs, a prominent software and services provider for communications and media companies, has announced a significant development in its partnership with Melon Digital, a digitally-led mobile virtual network enabler (MVNE) based in South Africa. Melon Digital has chosen Amdocs' cutting-edge eSIM Cloud platform to empower its customers

worldwide with a fully digital experience, incorporating eSIM capabilities on their primary and secondary devices.

Earlier this year, Melon Digital successfully launched its global MVNE platform, utilizing Amdocs' Digital Brands Suite as a Service to enhance customer care and monetization capabilities. Building

upon this success, the integration of Amdocs' eSIM Cloud platform will enable Melon Digital to deliver seamless digital experiences to consumers using smartphones, smartwatches and other connected devices, streamlining and simplifying eSIM adoption. This transformative solution will offer users on iOS, Samsung and Google (Android) devices the convenience of managing their profiles through the user-friendly Melon Digital consumer application.

Calvin Collett, founder and CEO at Melon Digital, expressed his company's satisfaction with the partnership, highlighting Amdocs' flexibility, responsiveness and ability to exceed expectations in creating a complete digital experience for consumers in South Africa and customers of new MVNOs worldwide. With this collaboration, Melon Digital aims to further revolutionize the customer experience through seamless eSIM adoption.

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5G —
DEPLOYMENT IN
NORTH AFRICA

Dive into 5G Deployment in North Africa and this timely update, where industry experts unveil why the North Africa region delayed this technology despite its importance and possibilities.

Get ready to explore the incredible potential of 5G in shaping the future via these relevant topics:

- Status of 5G deployment in North Africa, such as commercial testing by country, exploring the potential coverage, availability and adoption rates of 5G technology
- Opportunities and challenges of 5G in North Africa, such as spectrum issues, ROI expectations and 5G users' devices
- Economic impact and business opportunities such as GDP growth, job creation, operator revenue growth and foreign investment attraction
- Security and privacy considerations in 5G networks and the existing solutions

Join us for an interactive panel discussion to learn more about the 5G deployments in North Africa!



The Sky's the Limit:

How Surging Demand Is Driving AI Job Salaries

In the ever-evolving landscape of technology, artificial intelligence (AI) has emerged as a game-changing force, and companies are willing to pay top dollar for individuals with the right skills. Recent reports indicate that AI-related job positions are offering lucrative salaries, with some reaching up to a staggering \$900,000 per year. As businesses increasingly incorporate AI into their operations, the demand for professionals in this field has surged, leading to an unprecedented increase in compensation.

One notable player in this trend is Netflix, a leading streaming service that has not only transformed how we consume entertainment but also how we perceive job markets. Amid ongoing controversies, including actors' and writers' strikes, Netflix has posted job openings with eye-popping annual salaries, including one Data Scientist position based in Los Angeles with a focus on advertising boasting a salary range of \$390,000 to \$900,000.

The responsibilities tied to these lucrative positions are equally substantial. Netflix's job postings highlight the importance of AI skills in developing analytic tools, predictive models and machine learning (ML) algorithms. The goal? To create enhanced choices and product enjoyment for their subscribers.

However, Netflix is not alone in recognizing the value of AI expertise. Hinge, a popular dating app, is also on the hunt for an AI-focused Vice President to elevate the company into the realm of "AI-First." This position, with a base salary ranging from \$332,000 to \$398,000 annually, underscores the growing significance of AI in even unexpected industries.

Moreover, Amazon, the global tech giant, is another key player in the AI job market. The company's Senior Manager of Applied Science and Generative AI position comes with a base salary ranging from \$175,000 to \$340,000 per year, depending on the geographical market. Amazon's approach to this compensation is comprehensive, taking into account factors including job knowledge, skills, experience, equity and more.

Prominent retailer Walmart is also actively seeking AI talent. The position of Senior Manager of Software Engineering for their Conversational AI Platform Team, based in Sunnyvale, California, offers an annual salary range of \$168,000 to \$252,000.



While the allure of high salaries is undeniable, the supply of skilled AI specialists remains limited. The industry's rapid growth has led some companies to take matters into their own hands by committing to training their employees for AI-related projects. As AI continues to shape the future of technology and business, the competition for top AI talent is only expected to intensify, further driving up salaries and incentives.

Addressing the AI Skills Shortage and Envisioning the Future

While the allure of high salaries is undeniable, the supply of skilled AI specialists remains limited. The industry's rapid growth has led some companies to take matters into their own hands by committing to training their employees for AI-related projects, ushering in a new era of upskilling and reskilling. As AI continues to shape the future of technology and business,

the competition for top AI talent is only expected to intensify, further driving up salaries and incentives. This approach not only mitigates the scarcity of AI experts but also underlines a forward-thinking strategy to cultivate a sustainable pipeline of AI professionals. Overall, these efforts showcase the tech industry's commitment to fostering innovation from within, ensuring that the potential of AI is harnessed to its fullest extent.

Overall, the rise of AI-related job positions with staggering salaries showcases the increasing importance of AI skills in the tech industry. With companies like Netflix, Amazon and Walmart leading the way, the demand for AI professionals is at an all-time high. As the field continues to evolve, businesses are investing not only in AI technologies but also in the individuals who possess the expertise to harness their full potential. **TR**

A Green Tomorrow: Empowering Youth for a Sustainable Future

Approximately half of the global population is aged 30 or under, and this percentage is anticipated to grow to 57% by the end of 2030. This constitutes the largest demographic of young individuals ever witnessed. In this context, the significance of cultivating eco-friendly proficiencies among young people is crucial for facilitating an equitable shift towards a greener and more sustainable planet where all segments of society, including youth, can reap the benefits proportionately.

Understanding **Green Skills**
Green skills encompass a spectrum of technical knowledge, expertise and capabilities that

enable the proficient application of environmentally friendly technologies and processes across industries. These competencies draw upon a variety of insights, values and mindsets to facilitate ecologically conscious decision-making both in professional settings and in

our personal lives. While green proficiencies are essential for individuals of all age groups, they hold particular significance for the younger generation. This is due to their prolonged potential to contribute to ecological transformation over an extended timeframe.

Fostering a New Generation of Eco-Leaders

Kristy Drutman, co-founder of the Green Jobs Board, a platform that connects environmental job seekers with viable opportunities, noted that a major hurdle for young people entering green employment is the lack of clarity regarding career pathways and training resources. Additionally, there is a dearth of mentorship and support systems geared toward nurturing green careers.

The International Labour Organization (ILO) posits that transitioning to sustainable energy sources and a circular economy could yield the creation of 100 million jobs globally. However, this transition might render certain existing jobs obsolete. Furthermore, the advantages of this transition are unlikely to be evenly distributed geographically or demographically unless young individuals receive the requisite training and support mechanisms.

Marc Collado, a member of the Green Jobs Working Group within the official children and youth constituency for UN Climate Change (YOUNGO), emphasized the shared challenges that young people face globally. These include heightened vulnerability to living conditions, constrained incomes and uncertainties about the future. These shared experiences influence how the younger generation navigates the shift towards a green economy, setting them apart from previous generations.

A successful and equitable transition necessitates addressing the obstacles that young people encounter in acquiring green skills and weaving these requirements into national development strategies through robust policy coordination, social discourse and collaboration.

Fatou Jeng, Youth Climate Advisor to the United Nations Secretary General and founder of Clean Earth Gambia, underscores the importance of involving more young people in climate decision-making spheres. She stressed the need to view young individuals



as indispensable stakeholders in the journey towards low-carbon economies.

Developing Necessary Green Skills

Enabling green skills among the youth is an imperative endeavor, poised to mold a generation capable of driving a sustainable and environmentally conscious future. This transformation requires a multifaceted approach that intertwines education, experiential learning, vocational training and collaborative initiatives. By integrating environmental education into school curricula, focusing on themes like climate change, renewable energy and waste reduction, a foundational awareness of ecological issues takes root. Complementing this, interactive workshops, seminars and awareness campaigns have the power to ignite urgency and responsibility in young minds. Engaging in environmental clubs and activities further nurtures hands-on learning and active participation.

Cultivating green skills requires real-world encounters with sustainable technologies and practices. Organizing visits to renewable energy facilities, recycling centers and sustainable enterprises highlights eco-friendly methodologies in action. Vocational training programs and collaborations with technical institutes can showcase expertise in areas like solar installation and sustainable construction. Finally, internships and apprenticeships provide fledgling talents with the opportunity to work alongside seasoned professionals, bridging the gap between theoretical learning and tangible skill acquisition.

Online resources and courses encompassing subjects like sustainable design, green

entrepreneurship and environmental policy leverage the potential of the digital age to expedite the distribution of green skills. Simultaneously, competitive platforms such as hackathons challenge young minds to innovate while honing sustainable solutions. Community-driven projects like tree planting and clean-up drives can also actualize youth contributions. Collaboration and networking further amplify connections between aspiring green leaders and established professionals in eco-conscious sectors.

Furthermore, advocating for green entrepreneurship, hosting workshops on sustainable business practices, and supporting initiatives that champion favorable government policies equip the youth with the tools needed to shape a sustainable future. Role models and success stories in green skills provide tangible inspiration, motivating the younger generation to channel their passions into meaningful pursuits. Ultimately, the development of green skills is a continuous journey, where ongoing commitment is vital to nurturing a plethora of eco-literate and environmentally committed individuals. This group will steer humanity toward a more harmonious relationship with the planet and, undoubtedly, a more sustainable future.

By implementing these strategies, the amalgam of communities, educational institutions, businesses and governments can collectively contribute to equipping young people with the knowledge, skills, and motivation they need to actively participate in building a better tomorrow. **TR**



Scan to Pay: Enabling QR Code Payments in South Africa

As the world's second-largest continent, Africa has experienced a remarkable surge in smartphone adoption, resulting in a substantial increase in the number of smartphone users. This trend has led various industries in African countries to seek innovative ways to engage with the tech-savvy population.

The mobile revolution in Africa has yielded a noteworthy result: the swift embrace of mobile payments. Within the realm of various payment methods, QR codes have emerged as a straightforward yet potent technology, ensuring secure transactions for both customers and merchants. Notably, the QR code payment sector has experienced a remarkable surge in recent

years, with projections indicating a substantial global market value of US\$9.98 billion in 2022.

In Nigeria, "Scan to Pay" has become a widely popular method where merchants can display QR codes supporting Visa and MasterPass through local QR codes. This allows customers to conveniently scan the QR code with their banking apps and make direct payments from their bank accounts. Similarly, in South Africa, QR code technology

has gained significant traction, revolutionizing digital transactions. This transformation can be traced back to the brand progression of Masterpass to the innovative solution known as "Scan to Pay," powered by Ukheshe, a financial institution in South Africa.

The success of QR code payments can be attributed to their compatibility with almost any mobile handset equipped with a camera, making them a versatile

tool for enabling digital transactions. However, Ukheshe's Scan to Pay distinguishes itself by integrating USSD (Unstructured Supplementary Service Data) technology. Along with the QR code, a 10-digit number is displayed, resembling the USSD format that South Africans are familiar with, starting with * and ending with #. USSD's user-friendly nature has made it an ideal platform for delivering mobile financial services to a broader audience, including low-income customers, thereby contributing significantly to enhanced financial inclusion in the country.

Furthermore, for businesses, the adoption of Scan to Pay offers several significant benefits. Implementing QR code payments is cost-effective and straightforward, whether through e-commerce checkout, merchant websites, or face-to-face transactions. This accessibility makes QR superior to many other digital payment options that are usually limited to specific contexts or online environments. With broader acceptance points, businesses can accept payments both online and in person, providing consumers with increased payment choices, including transactions through their own banking apps.

On the other hand, security is a top concern for both merchants and consumers in the digital payments landscape. Here, Scan to Pay's QR code technology shines, especially its compatibility with bank applications. By integrating with well-established banking apps, the trustworthiness of these platforms combined with the inherent security features of QR code transactions reinforces the protective framework of the process. The transaction process itself incorporates multiple security protocols, such as cross-verifying the origin of the phone number against the card number entered by the customer, ensuring a secure and reliable payment experience.

Beyond these advantages, what makes QR codes truly exciting is



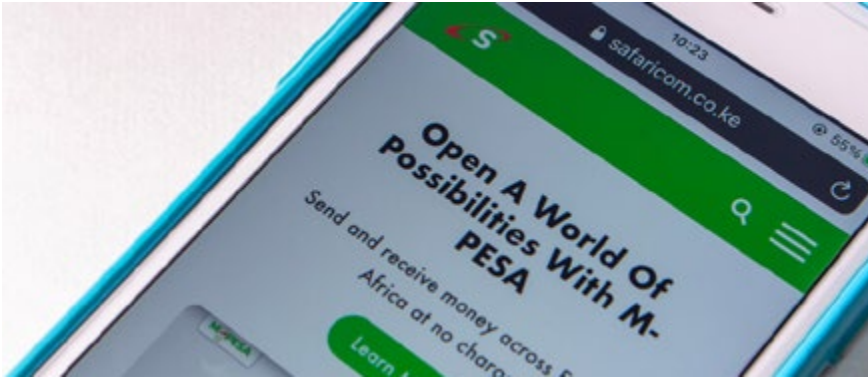
their versatility and the potential for industry-specific use cases. From street vendors and microbusinesses to large supermarkets, petrol stations and national service providers, QR payments extend beyond everyday purchases to cover utilities, fines and taxes. As QR technology becomes more convenient, affordable and widespread, it is set to become the preferred method of payment, gradually outweighing the benefits of cash transactions. For low-income earners, who are often affected by challenges such as limited access to ATMs and the risk of theft associated with cash withdrawals, QR codes offer a powerful solution, breaking down barriers to full economic participation and financial inclusion.

As the largest QR ecosystem in South Africa, Ukheshe's Scan to Pay has been thoroughly tested and trusted by millions of merchants and consumers. Its wide adoption is evident in its status as the QR payment platform of choice for

over 500,000 vendors, 14 banks and fintech companies, 94 payment service providers and six acquirers. Furthermore, Scan to Pay QR payments are integrated into all major banking apps in the country, and the dedicated Scan to Pay app is readily available for download on most mobile devices.

In conclusion, Scan to Pay is revolutionizing QR code payments in South Africa, unleashing the potential of mobile payments and driving financial inclusion. The innovative combination of QR codes and USSD technology, coupled with its simplicity, security and versatility, positions Scan to Pay as a powerful force in the country's payment landscape. As more consumers and businesses embrace this convenient and secure payment method, the future of digital transactions in South Africa looks promising, bringing financial services to all segments of society and contributing to a more inclusive economy. ■

Safaricom Unveils M-PESA Mobile Money Service in Ethiopia



Safaricom Ethiopia has revealed the introduction of its mobile money service, M-PESA, to Android users within the country. An iOS version is anticipated to be released in the upcoming weeks. This development arrives after the operator obtained a license from the National Bank of

Ethiopia, subsequent to a sequence of pilot tests.

Operating in five languages, the service will furnish Ethiopian subscribers with an array of financial capabilities, encompassing domestic and international money transfers, airtime

top-ups and retail merchant payments. Safaricom Ethiopia interim CEO Stanley Njoroge said, "We will continue to broaden the services our customers receive from the M-PESA platform that will improve the quality of life for our customers. M-PESA will play its part in fast-tracking digital inclusion and promoting innovation outlined in the Digital Payments Strategy 2025."

Paul Kavavu, the interim general manager of Safaricom M-PESA Mobile Financial Services, underlined the role of the platform in promoting financial inclusion in Kenya, where over 90% of the adult population now accesses mobile banking. Looking forward, Safaricom plans to augment the app's capabilities and collaborate with Ethiopians to fully harness the transformative potential of M-PESA.

MTN Group Releases Strong H1 Performance and Progress Toward 'Ambition 2025'



In the first half of 2023, MTN Group achieved resilient results, advanced the company's strategy through collaboration with Mastercard for the MTN fintech business and progressed plans to exit Afghanistan. These

accomplishments occurred within a challenging operating environment marked by heightened inflation, weaker local currencies, and regulatory changes across the Group's 19 markets.

MTN Group President and CEO, Ralph Mupita, stated, "A resilient performance in H1 23 and substantial strategic progress were made against a demanding macro backdrop."

During this period, service revenue for MTN Group expanded by 15% to nearly R108 billion in constant-currency terms. This growth was driven by a 24% increase in revenue from data services and a 22% increase from fintech services. Voice services revenue also rose by 6%.

As of June 2023, the subscriber base reached 292 million, a 4% increase compared to the same period the previous year. MTN Group prioritized shared value creation for these subscribers, enhancing their experience through lowered data rates and improved broadband access.

Telecom Egypt Shows Notable Gains in Consolidated Revenue and Customer Trust



Telecom Egypt, a prominent player in the telecommunications industry, has announced its operational achievements for the financial period concluding on June 30, 2023. The results were presented in accordance with Egyptian accounting standards, as reflected in the consolidated financial statements.

In this successful H1 2023 period, Telecom Egypt saw an impressive 38% increase in consolidated revenues, reaching a remarkable EGP 28.1 billion. This substantial growth was primarily attributed to a notable 75% surge in revenues from wholesale business units, a pivotal contributor accounting for 71% of

the overall revenue rise. The performance of retail business units further supplemented this positive trajectory.

Customer trust and base expansion were evident as Telecom Egypt showcased appreciable growth in its clientele across all services compared to the same period last year. Fixed telephone subscribers increased by 5%, while fixed high-speed internet customers saw an 8% rise. Mobile service subscribers reached an impressive 12.6 million, signifying a noteworthy 7% growth year-on-year (YoY).

Financially, Telecom Egypt showed strength with a 48% surge in profit before interest, taxes, depreciation and amortization, amassing EGP 12 billion. This achievement translated to a robust profit margin of 43%, bolstered by an upswing in revenues from high-margin services.

Airtel Kenya's Network Expansion Receives Significant Investment



Airtel Kenya, the second largest mobile operator in the nation in terms of subscribers, has revealed its intentions to invest a minimum of \$150 million in the upcoming three years. This substantial investment is aimed at

achieving an extensive expansion of its network coverage across the entire country. Ashish Malhotra, the CEO of the company, affirmed that these funds will be channeled towards the establishment of 649 new network

sites nationwide. This initiative will elevate the current count from 3,200 to encompass a broad 89% coverage of the entire country.

In the recent past, Airtel successfully launched its commercial 5G services in 16 counties and 180 wards. This was accomplished by deploying over 370 5G sites. Additionally, the company has strategic plans to deploy an additional 120 5G sites within the next three months. In response to the initial uptake of these services, Malhotra conveyed his observations, stating, "The response has been favorable, although the usage of 5G-enabled devices in the country stands at nearly 1% of our total device count. This is largely due to the cost factor associated with these devices."



E-Waste: The Role of Perception in Policy Transformation

Anyone who embarks on an exploration of the complex ecosystem that is electronic waste (e-waste) quickly uncovers the challenges met with its disposal, and the wilful initiatives to diminish its impact quickly come to light. As the international community focuses its attention on sustainability, sectors across the board are undergoing momentous change. This article will explore the fundamental drivers pushing the industry toward more environmentally conscious practices, revealing the pivotal individuals and intricate dynamics guiding this noteworthy shift in perspective.

Sustainability emphasizes the uncertainty of consumer priorities. Though consumers may express a preference for ethically produced and eco-friendly products, their purchasing decisions often gravitate towards the latest, most appealing and most affordable options. Additionally, governmental

participation and corporate influence also play significant roles by promoting adherence to regulations and maximizing investor expectations, respectively.

Corporate policies hold crucial significance for sustainability efforts. Notable brands, such as one known for its electronic devices, are aiming to incorporate sustainability

into their supply chains, prompting many of their competitors to do the same. At the same time, smaller companies are prioritizing recycling materials for their devices. While the ease of establishing a sustainable supply chain tends to favor smaller enterprises compared to large corporations, nonetheless, mounting pressure is compelling all businesses to embrace sustainability.



Well-implemented regulations can play a pivotal role in reaching the desired level of sustainability. EU regulations, such as the “right to repair” and the standardization of charging cables, are examples of how such regulations can spur significant changes. This underscores that consumers’ inclination towards sustainability has not yet solidified into a consistent preference.

From another perspective, the notion of responsibility among buyers requires a shift. Governments and businesses often collect used devices for recycling, assuming this is a responsible action. However, better alternatives exist. Frequently, recycling facilities become overwhelmed, leading to improper disposal or transfer of devices. The recycling process itself produces copious toxic emissions, underscoring the importance of extending device lifespans in the first place.

In developed markets, businesses frequently refurbish products for shipment to emerging markets. Yet, the potential benefits of prolonged use during the initial phase are substantial. This raises questions about the sustainability of exporting used products to regions lacking adequate policies or infrastructure.

Regarding sustainable purchasing, it’s evident that certain regions are outperforming others. This trend has prompted companies to adopt sustainability principles. For some brands, however, sustainability appears to be more of a compliance obligation than a core ethos.

Africa’s Role and Challenges

As a continent experiencing rapid technological growth, Africa plays a significant yet complex role in the e-waste landscape. With limited infrastructure for e-waste management, informal recycling practices often win out, leading to environmental and health hazards galore. However, growing awareness of the issue has inspired innovative solutions, including initiatives to establish proper recycling facilities and promote circular economy models. Such innovation is a testament to how e-waste challenges are being addressed on a global scale.

A noticeable shift in perspective is occurring in specific enterprises, indicating a broader industry-wide movement towards sustainability. Nevertheless, there is always a risk of “greenwashing,” the practice where companies may disproportionately highlight minor environmental

endeavors compared to their overall business practices in an effort to gain favor.

Efforts are underway to address environmental and human rights concerns tied to minerals produced and used in the devices themselves. It’s important to transition from linear material usage to a waste-free model. Tracing mineral origins could incentivize responsible practices, potentially reducing the dependence on virgin materials.

The matter of finite resources further compounds the urgency of curbing e-waste and promoting the recovery of reusable materials. Emerging markets — often the primary sources of these rare minerals — are significantly impacted by e-waste. Consequently, there exists a strong motivation within these regions to address these issues, despite their current resource constraints.

In conclusion, the intricate interplay of consumer behavior, corporate policies, regulations and sustainability initiatives shapes the e-waste landscape. As the world grapples with environmental challenges, the evolution and transformation of both perceptions and policies are vital for a sustainable future. ■



Spotlighting the EU's Quest for Smartphone Battery Replacements

In a recent development, the European Parliament voted on a tech regulation that features various measures, including requiring smartphone manufacturers to make their devices' batteries easily replaceable by users.

The core message is clear: the EU is progressing with its regulations that mandate smartphones feature easily replaceable batteries and better

foster environmental preservation and benefits to end users. However, given the complexity of the European Union's legislative processes, there's more to the story than meets the eye. Improved details can potentially reshape the landscape of compliance for smartphone manufacturers.

Competing Legislative Frameworks

Notably, there are some legal hurdles, and the deadline of 2027 for producing smartphones with readily replaceable batteries is not the only one. An additional piece of legislation, "Ecodesign for Smartphones and Tablets," is currently making its

way through the EU's legislative channels. This legislation shares similar objectives of facilitating battery replacement for smartphones but is expected to take effect sooner. To this end, by the time 2027 arrives, some smartphone manufacturers might have already introduced devices with user-replaceable batteries.

As per an initial draft of the ecodesign regulation available on the EU's official website, the battery replaceability should be doable "without tools, or with basic tools, product group-specific tools, other commercially available tools and proprietary tools, thermal energy, or solvents to disassemble it." Furthermore, it underscores the necessity for spare parts to be accessible for up to seven years following a phone's release and emphasizes that the replacement process should be feasible for a layperson. The ecodesign regulation is currently undergoing examination by the European Parliament and Council, with expectations of its passage into law in September this year, followed by the implementation of its smartphone battery replacement requirements a year and a half later.

The battery regulation that the European Parliament endorsed during this period has its own significance in addition to the synergy between the two legislative approaches. This is due to the fact that the battery regulation takes a more stringent stance compared to the ecodesign regulation in a crucial aspect: it doesn't provide an exemption that would allow smartphone manufacturers to sidestep the requirement for easily replaceable batteries if they manage to produce batteries with prolonged lifespans. Specifically, batteries must maintain at least 83% of their capacity after 500 charging cycles and 80% after 1,000 cycles to meet the criteria. Moreover, these devices must be engineered to be dust-tight and protected against immersion in water up to one-meter deep for a minimum of 30 minutes, in accordance with the ecodesign rules, capabilities often achieved through adhesive techniques.



Defining 'Removable' Batteries

The question is: what exactly qualifies as an "easy-to-replace" smartphone battery?

A significant part of the EU's definition hinges on the tools necessary for the replacement process. Although the term "removable" might evoke imagery from the era of feature phones or devices, which require minimal tools such as a fingernail for opening, the current battery regulation's interpretation is somewhat different. Instead of demanding complete tool-free removal, the regulation sets boundaries on the types of tools that would be required for battery replacement.

For some experts, the regulation emphasizes avoiding the necessity for proprietary tools or intricate methods rather than mandating tool-free replacement.

An additional point of contention revolves around the coexistence of user-replaceable batteries and waterproofing features. The battery regulation includes an exemption for devices "that are specifically designed to be used, for the majority of the active service of the appliance, in an

environment that is regularly subject to splashing water, water streams, or water immersion." Critics of such rules often highlight waterproofing as a feature that could be compromised if a device is designed for easy opening.

A Promising Start

Despite the progress achieved through this vote, the EU's regulations for user-replaceable batteries are still a work in progress. Formal endorsement from the Council of the EU is required for the battery regulation, while the ecodesign rules are subject to ongoing scrutiny by the European Parliament. Although the eventual enactment of both sets of rules seems likely given their current trajectory, discussions continue among various stakeholders, each advocating for their interpretation of the regulations' stringency.

In conclusion, it appears that smartphone users in Europe will have a smoother experience maintaining their devices and reducing electronic waste as battery capacities decline over time. And unless manufacturers choose to create devices with user-replaceable batteries exclusively for the European market, the global community is poised to benefit from these developments. **TR**

Huawei and MCIT Forge Alliance to Drive Egypt's Digital Evolution



Deputy Minister for Institutional Development at the Ministry of Communications and Information Technology, Ghada Labib, has sealed a momentous partnership

with global tech leader Huawei. The recent signing of an MOU and LOI underscores Egypt's commitment to AI and digital institutional development.

The MOU aims to elevate Egypt's AI performance by analyzing the current landscape and charting a strategic roadmap with Huawei's AI expertise. The LOI extends MCIT's efforts, focusing on operational excellence and establishing specialized training centers. The goal is to equip Egypt's citizens with vital digital skills, including big data, AI, cybersecurity and cloud computing.

This partnership aligns seamlessly with MCIT's mission to build a "Digital Egypt," fostering a digitally empowered society. As Egypt accelerates its digital transformation, Deputy Minister Labib's collaboration with Huawei stands as a testament to the nation's dedication to technological progress.

WhatsApp Steps Up to Challenge Zoom



WhatsApp, the popular messaging platform owned by Meta, has been on a roll lately, unveiling a series of exciting updates to elevate its user experience. In its latest move, the company has announced the introduction of screen sharing during video calls, further

solidifying its stance as a multifaceted communication powerhouse.

With this dynamic enhancement, WhatsApp steps into the realm of established video conferencing giants like Microsoft Meet, Google

Meet, Zoom and Apple's FaceTime, offering users an immersive screen-sharing feature that is both versatile and intuitive. Whether it's collaborating on work documents, sharing vacation plans with friends, or offering tech support to family members, the new screen-sharing option allows users to seamlessly present a live view of their screen during calls.

"Whether sharing documents for work, browsing photos with family, planning a vacation or shopping online with friends, or just helping grandparents with tech support – screen sharing lets you share a live view of your screen during the call," Meta stated. The announcement was accompanied by a social media post from Meta's CEO, Mark Zuckerberg, showcasing the feature in action during a group WhatsApp call.

UN Launches Global Initiative to Boost AI Impact on Healthcare



A new United Nations initiative was unveiled at the AI for Good Global Summit, aiming to accelerate the adoption of artificial intelligence (AI) solutions in the field of health.

The Global Initiative on AI for Health is a collaborative effort led by three UN specialized agencies: the International Telecommunication Union (ITU); the World Health Organization (WHO);

and the World Intellectual Property Organization (WIPO). Their joint mission is to maximize the potential of AI in supporting health diagnosis, treatment and the delivery of more efficient and inclusive healthcare services.

During the ITU-led summit, WHO Director-General Dr. Tedros Adhanom Ghebreyesus emphasized that AI is already playing a significant role in various aspects of healthcare, such as diagnosis, clinical care, drug development, disease surveillance, outbreak response and health systems management. He stressed the importance of ensuring universal access to AI innovations to prevent them from contributing to inequity in healthcare.

Major Global Telcos Forge Alliance for AI



SK Telecom, Deutsche Telekom, e& and Singtel have announced that they have formed the Global Telco AI Alliance to create a new customer experience for global citizens using AI technology.

The four members of the Global Telco AI Alliance aim to jointly accelerate the AI transformation of the existing telco

business and develop new growth drivers through new AI-powered business models.

Together, they signed a Multilateral Memorandum of Understanding (MOU) for cooperation in the AI business in Seoul. Key executives of the four telcos who attended online or in person

included Claudia Nemat, Board Member, Technology and Innovation at Deutsche Telekom; Hatem Dowidar, Group CEO of e&; Yuen Kuan Moon, Group CEO of Singtel; Chey Tae-won, Chairman of SK Group; and Ryu Young-sang, CEO of SKT.

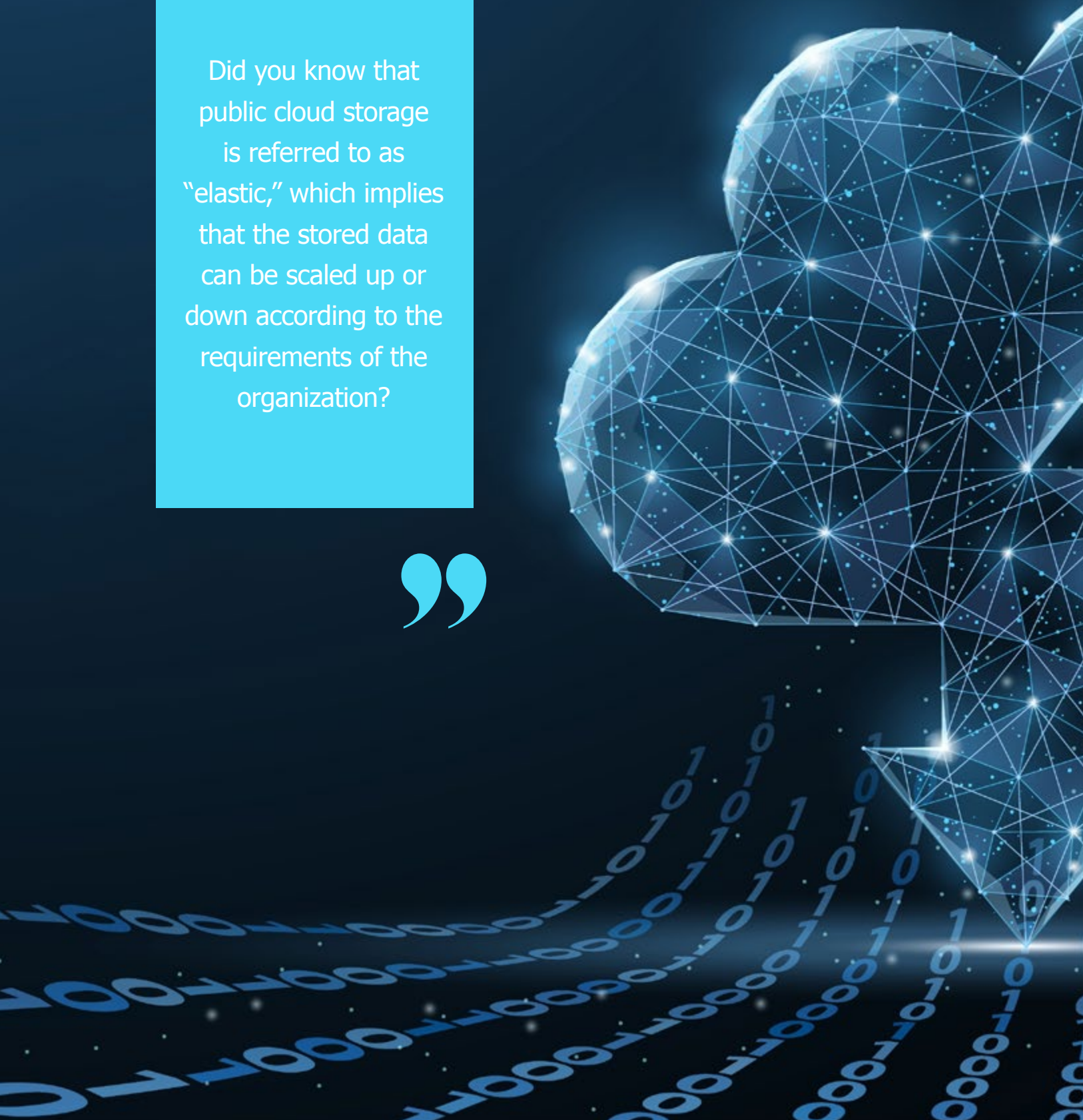
The Telco AI Platform is expected to serve as the core foundation for new AI services, including those designed to improve existing telco services, digital assistants and super apps that offer a wide range of services.

To facilitate the cooperation, they will form the Global Telco AI Alliance Joint Working Group, which will have detailed discussions on issues such as co-investment opportunities and the co-development of the Telco AI Platform to reach a definitive agreement. The issue of designating a C-level officer from each company to coordinate the overall collaboration will be discussed.

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Did you know that public cloud storage is referred to as “elastic,” which implies that the stored data can be scaled up or down according to the requirements of the organization?

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Saviez-vous que le stockage dans le cloud public est appelé “élastique”, ce qui signifie que les données stockées peuvent être ajustées à la hausse ou à la baisse en fonction des besoins de l’organisation ?

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34



- L'apport de l'intelligence artificielle en matière de gestion des ressources naturelles en Afrique

36



- Exploration des modes possibles de paiement par code QR. De quoi l'avenir est-il fait ?

40



- Quelles sont les modalités appliquées par les câbles sous-marins pour renforcer notre monde d'aujourd'hui ?

42



- L'évolution du travail : confrontations humains / robots, qui embaucher ?

33 Nouvelles de l'industrie

38 Nouvelles des operateurs

Rappel à l'ordre : les opérateurs privés congolais en scène de conformité



Dans le cadre de la Régulation des activités des opérateurs postaux privés, l'Agence de Régulation des Postes et des Communications Electroniques (ARPCE) a lancé une mission de contrôle de régularité desdits opérateurs par une *Taskforce* constituée des agents assermentés de l'ARPCE et des agents de la

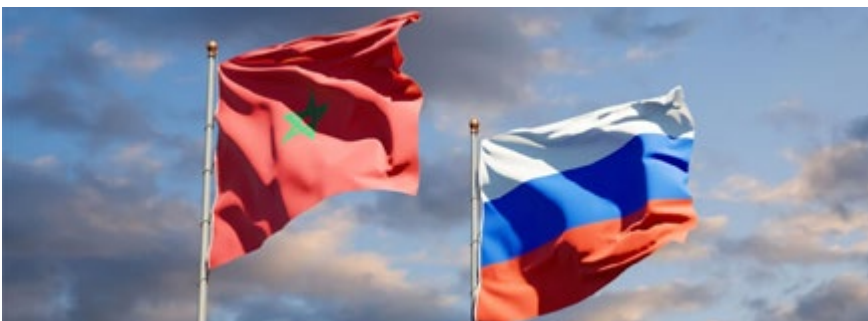
police administrative. Au total, 13 opérateurs postaux ont été visités par la *Taskforce*, et aucun n'a présenté des documents conformes.

En effet, en dépit de l'existence d'une réglementation postale légale au Congo, la loi n°10-2009 du 25 novembre 2009 portant

réglementation du secteur des postes et le décret n°2015-245 du 4 février 2015 émanant de ladite loi, qui fixent les conditions d'installation et d'exploitation des réseaux et services postaux en République du Congo, ce contrôle inopiné met en lumière le fait que certaines entreprises, établissements et particuliers exercent des activités postales sans autorisation préalable du Régulateur, et des invitations à la conformité et la régularisation lancées par le Régulateur n'ont jamais été suivies par ces acteurs.

L'opération menée à Brazzaville se poursuivra dans quelques jours à Pointe-Noire. Celle-ci s'inscrit dans le cadre d'une campagne de sensibilisation qui vise à éduquer et à informer tous les opérateurs postaux au respect de la réglementation postale en vigueur.

Vers une alliance russo-marocaine : nouvelle coopération pour la protection du cyberspace africain



La vice-présidente du Conseil d'affaires russo-marocaines, Raja Shafik El Ali, a annoncé que la Russie et le Maroc tendent vers une coopération accrue en matière de cyberdéfense. De plus, elle a déclaré que le Maroc manifeste un vif intérêt pour le développement de

la coopération commerciale dans les domaines de la pharmacologie et de la cybersécurité.

Raja a souligné que le Maroc accorde une importance particulière à la cybersécurité, et que les entreprises

russe, grâce à leur vaste expérience dans ce domaine, pourraient apporter des opportunités intéressantes pour l'ensemble du continent africain. Cette volonté de coopération renforcée en matière de cyberdéfense permettra ainsi au Maroc de protéger efficacement son cyberspace.

Grâce à ces partenariats en cybersécurité, le Maroc se démarque et se positionne comme un modèle exemplaire en matière de protection de ses infrastructures numériques en Afrique. Cette coopération prometteuse entre la Russie et le Maroc ouvre de nouvelles perspectives dans les domaines de la sécurité numérique, renforçant ainsi les liens bilatéraux entre les deux pays.



L'apport de l'intelligence artificielle en matière de gestion des ressources naturelles en Afrique

L'apport de l'intelligence artificielle (IA) en matière de gestion des ressources naturelles en Afrique est un domaine qui connaît une vraie envolée et promet de chambarder notre manière de préserver et d'exploiter nos précieuses ressources. À une étape où les difficultés environnementales s'intensifient toujours davantage en même temps que la pression qui s'exerce sur les ressources naturelles, c'est l'IA qui va intervenir pour dispenser des solutions novatrices lesquelles permettent de surveiller, de gérer et de protéger les écosystèmes africains plus utilement et durablement.z

Les richesses naturelles abondent en Afrique laquelle dispose de forêts tropicales à perte de vue, et recèle de vastes réserves de minéraux et de pétrole. La gestion de ces ressources bute souvent sur des défis tels que la nature qui se déboise, les ressources qui sont surexploitées, les diverses espèces vivantes qui se perdent et le climat qui change. C'est le moment où jamais l'IA s'y implique

pour mettre son potentiel énorme à profit et apporter une solution à ces problèmes complexes.

Les avancées technologiques majeures étant accomplies, l'IA en profitera pour recueillir, analyser et interpréter simultanément un grand volume de données environnementales, en ce sens que la qualité de l'air, de l'eau, des sols et des diverses espèces vivantes sera transmise par les détecteurs, les drones, les satellites et les réseaux de surveillance sous forme d'informations

précieuses et, à partir de là, l'IA les analysera pour détecter les modèles, les tendances et les anomalies, et ouvrira la voie à une prise de décision plus nette, explicite et clairvoyante en faveur d'une bonne gestion des ressources naturelles.

Dans le même ordre d'idées, la lutte anti-braconnage est l'exemple-type du recours à l'IA en matière de gestion des ressources naturelles en Afrique, et ceci est vrai dans la mesure où les braconniers posent en permanence une menace tant aux milieux naturels



qu'aux zones d'interdiction de chasse en Afrique, compromettant ainsi la faune sauvage typique du continent.

Grâce à l'IA, des caméras de surveillance assez perfectionnées peuvent être installées pour signaler les actes illicites, alerter le braconnage et protéger les espèces menacées d'extinction.

Par ailleurs, le rôle de l'IA peut être saillant en matière de gestion durable des ressources naturelles. Suite à l'application des algorithmes d'apprentissage automatique, l'IA peut porter l'utilisation des terres agricoles à son optimum, gérer les ressources hydrauliques de la meilleure manière qui soit, anticiper sur une éventuelle fluctuation des prix des matières premières et favoriser le passage à des sources d'énergie renouvelables.

Cependant, il est vrai que l'IA est porteuse d'avantages virtuels dans la gestion des ressources naturelles en Afrique, mais il est évident aussi qu'il y ait des embûches à aplanir. De celles-ci, il faut certes avouer qu'il faut garantir pour tout un chacun l'accès aux technologies de l'IA, renforcer les capacités à l'échelle nationale en matière d'IA et protéger la confidentialité des données collectées.

L'application de l'IA à la gestion des ressources naturelles en Afrique est un domaine passionnant et plein de promesses qui offre des chances d'amélioration uniques pour un

environnement plus durable et le bien-être des communautés africaines

L'application de l'intelligence artificielle à la gestion des ressources naturelles en Afrique sera-t-elle chose facile ou est-elle semée d'embûches ?

Il faut tenir compte également des défis qui se mettent au travers de l'application de l'intelligence artificielle (IA) en matière de gestion des ressources naturelles en Afrique, dont, en premier, la question de l'accès pour tous aux technologies de l'IA. La cherté des infrastructures et du matériel nécessaire à l'application de l'IA risque de rendre restreinte l'accessibilité des pays africains à ces innovations dans toute leur plénitude.

Il faut ensuite renforcer les opportunités d'accessibilité locales en matière d'IA, d'autant plus en organisant la formation des experts tout en perfectionnant les compétences techniques spécifiques. Un autre défi majeur : la protection des données, car l'IA veut qu'un grand bagage important de données à risque soit recueillie et analysée

Ce serait urgent d'établir des règles et des mesures de sécurité qui conviennent pour protéger la confidentialité des informations collectées.

Il faut, toutefois, reconnaître que l'application de l'intelligence artificielle en Afrique bute sur des défis. Tout d'abord, les capacités techniques et les infrastructures adéquates s'imposent pour que ces technologies soient

rendues disponibles. Nombre de pays africains endurent des problèmes empêchant l'électricité et l'internet d'être mis à la portée de tous, ce qui leur enlève toute opportunité d'adopter au maximum l'intelligence artificielle.

Et encore ! L'application de l'intelligence artificielle à la gestion des ressources naturelles suscitent des inquiétudes d'ordre éthique et social. Partant, il est essentiel de s'assurer que l'usage de ces technologies est effectué avec un sens de responsabilité, et dans des intentions de transparence et de respect des droits des populations locales et des communautés autochtones. Ce pourquoi, il importe de prévoir les impacts socio-culturels et environnementaux imminents de l'application de l'intelligence artificielle à la gestion des ressources naturelles.

Bien qu'il y ait des difficultés, il est primordial d'explorer et d'assurer sans discontinuer l'expansion de l'application de l'intelligence artificielle à la gestion des ressources naturelles en Afrique. Cette technologie aura probablement l'apport de faire perdurer davantage l'utilisation des ressources naturelles, de conserver au mieux la biodiversité et de gérer plus activement des écosystèmes.

Partant, Il serait utile d'investir de plus en plus dans les infrastructures et les savoir-faire, tout en sécurisant l'intelligence artificielle dans la gestion des ressources naturelles en Afrique sur le plan éthique et en la dotant d'une approche inclusive. **IB**



Exploration des modes possibles de paiement par code QR.

De quoi l'avenir est-il fait ?

La numérisation de notre monde s'accompagne d'une évolution rapide des méthodes de paiement pour répondre aux besoins et aux souhaits des consommateurs.

De ces nouvelles méthodes, les paiements par code QR connaissent toujours davantage de succès qu'il faut à chambarder les transactions financières.

S'il faut s'inspirer d'exemples concrets, on constatera que les paiements par code QR sont déjà courants dans les différents coins du monde, et pourraient prendre de l'ampleur dans un avenir immédiat. Il convient à la fois de braquer la lumière sur le mode de fonctionnement, les avantages et les limites de cette technologie et d'en

citer les défis potentiels, tels que la sécurité, la confidentialité et la capacité des différentes plateformes d'opérer ensemble.

Le Code QR : la solution de vos Paiements Instantanés

Les paiements par code QR fonctionnent au moyen d'une

combinaison de technologie de numérisation de code et de transfert de fonds électronique. Le processus se déroule généralement comme suit :

- Par voie de génération du code QR : le commerçant ou le prestataire de services se crée un code QR unique représentatif du montant payable et des détails de la transaction. Ce code QR est soit imprimé et affiché physiquement, soit conçu sous une forme codée.
- Par voie de numérisation du code QR : le consommateur peut numériser le code affiché au moyen de son smartphone ou tout autre appareil capable de déchiffrer les codes QR. Cela est faisable en fonction d'une application de paiement défini ou d'une fonction adjointe à une application de banque mobile.
- Par voie de vérification des détails de la transaction : aussitôt le code QR prend une forme numérique, les détails de la transaction s'affichent grâce à l'application de paiement, tels que le montant à payer et celui à qui les fonds sont destinés. Avant de confirmer la transaction, l'auteur de celle-ci peut s'assurer de l'exactitude de ces informations
- Par voie d'autorisation et de virement de fonds : une fois la transaction confirmée telle que prévue plus haut, l'application de paiement entre en contact avec le système de paiement du prestataire de services et donne le feu vert au virement de fonds. Ceux-ci sont retirés sur le compte du consommateur et portés au crédit du compte du commerçant ou du prestataire de services.
- Confirmation de paiement : la transaction terminée, la confirmation de paiement est signifiée au consommateur et au commerçant, soit sous forme d'un reçu électronique ou d'un avis dans l'application de paiement.

Il convient de noter que les détails spécifiques du fonctionnement des



paiements par code QR dépendent de la plateforme de paiement adoptée et des systèmes de paiement disponibles sur le plan local.

Par contre, l'idée générale ne change pas : il s'agit d'utiliser un code QR pour accorder aux transactions financières plus d'aisance et de sûreté.

Avantages et désavantages des paiements par code QR

Les paiements par code QR présentent de nombreux avantages aux transactions financières du monde moderne d'aujourd'hui car, premièrement, ils sont tellement pratiques qu'ils permettent aux usagers d'effectuer un paiement rapide et facile en scannant simplement un code sur leur smartphone.

Deuxièmement, ils ont l'avantage d'être sécurisés puisque des techniques de cryptage avancées sont adoptées pour protéger les informations confidentielles et, troisièmement, ils sont économiques, en ce sens que les frais des transactions en espèces ou par carte de crédit seront réduits.

Il faut faire, toutefois, la part des limites : les paiements par code QR sont parfois rejetés par des commerçants, ce qui pourrait en limiter l'usage dans certains endroits, ce à quoi il faut ajouter les problèmes de compatibilité dans les différentes applications de paiement, et les difficultés qui découlent parfois de l'usage du code QR. Ce pourquoi, il

convient de peser le pour et le contre avant d'opter une fois pour tous les paiements par code QR.

Les Difficultés des Paiements par Code QR : sécurité, Confidentialité et Interopérabilité

Les paiements par code QR sont porteurs d'avantages certains en ce qu'ils sont commodes et rapides. A ces avantages s'opposent, toutefois, des difficultés imminentes à prendre en compte dont le principal : la sécurité

Les paiements par code QR faisant l'objet de transmission d'informations sensibles et que des fraudes et des attaques peuvent s'ensuivre, il serait urgent d'établir des mesures de sécurité rigides.

Un autre défi : la confidentialité des données personnelles.

L'essentiel serait de garantir la protection des informations des usagers et leur usage de manière responsable. De plus, l'interopérabilité entre les différentes plateformes de paiement par code QR peut être problématique, ce pourquoi, il importe de s'assurer que les utilisateurs puissent payer librement sans faire face à des restrictions, quel que soit le prestataire de services qu'ils ont choisi. Ces difficultés ne peuvent être aplanis qu'au moyen de normes de sécurité supérieures, en renforçant la protection des données et en permettant aux différentes plateformes de coopérer entre elles pour réussir une expérience de paiement soutenue et sûre. **TR**

Algérie Télécom en partenariat avec CATEL FIBROPTIC pour renforcer la connectivité fibre optique



Une étape majeure a été franchie dans le domaine de la connectivité en Algérie avec la signature d'une convention de partenariat entre *Algérie Télécom* et *CATEL FIBROPTIC*. Cette alliance stratégique vise à dynamiser le développement des réseaux de communication du pays en fournissant des câbles à fibre optique de qualité supérieure.

La cérémonie de signature s'est déroulée dans un esprit de coopération et de vision commune, reflétant la volonté de ces deux entités publiques de favoriser la production nationale et d'accélérer le processus de digitalisation en Algérie en présence de Adel Bentoumi, Président Directeur Général d'*Algérie Télécom*, de Saleh

Aliane, représentant de *CATEL FIBROPTIC*.

Le principal objectif de cette collaboration est d'élargir les capacités des réseaux d'*Algérie Télécom*, en mettant l'accent sur les deux composantes essentielles : le réseau de transport et le réseau d'accès. En répondant de manière proactive à la demande croissante de connectivité des clients, cette initiative vise à améliorer l'expérience numérique de la population algérienne.

Cette entente stratégique témoigne de l'engagement des deux partenaires à travailler de concert pour accélérer la digitalisation du pays. Elle s'inscrit dans la vision à long terme visant à offrir des infrastructures de communication modernes, fiables et à haut débit, essentielles pour soutenir la croissance économique et sociale de l'Algérie.

Le gouvernement camerounais ajuste les tarifs des opérateurs télécoms



Les opérateurs de téléphonie mobile camerounais ont deux mois pour ajuster leurs tarifs d'abonnements, sous peine de sanctions, suite à un ordre émanant de la ministre des

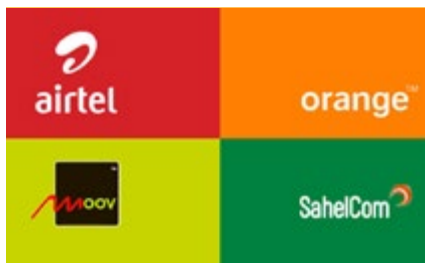
Postes et Télécommunications, Minette Libom Li Likeng.

Cette mesure fait suite à une campagne de protestation menée par les consommateurs télécoms camerounais en avril dernier pour dénoncer l'écart entre la qualité des services fournis par les opérateurs télécoms et le coût excessivement élevé de ces services. Suite à cela, le gouvernement avait convoqué une réunion au cours de laquelle les opérateurs télécoms avaient annoncé des mesures visant à

répondre aux préoccupations des consommateurs.

En mai dernier, l'Agence de régulation des télécommunications du Cameroun (ART) avait déjà infligé des sanctions pécuniaires d'un montant total de six milliards de francs CFA (10,04 millions USD) aux opérateurs de téléphonie mobile *Camtel*, *MTN*, *Orange* et *Viettel*. Le régulateur reproche à ces sociétés des « manquements récurrents » aux obligations de couverture et qualité des services de communication électronique contenue dans leurs cahiers des charges respectifs.

Le Niger impose des amendes aux opérateurs pour mauvaise qualité de service



L'Autorité de régulation des communications électroniques et de la poste du Niger (ARCEP) a annoncé avoir infligé une amende de 4,32 milliards de francs CFA (7,3 millions \$) aux opérateurs de télécommunications opérant dans le pays. Le régulateur reproche à Celtel (Airtel Niger), Moov Africa, Niger Telecoms et Zamani de ne pas respecter leurs engagements en

matière de qualité de service envers les consommateurs.

Selon l'ARCEP, Zamani doit verser 1,36 milliard FCFA au Trésor public ; Airtel 1,35 milliard FCFA ; Niger Telecoms 1,19 milliard FCFA et Moov Africa 402,5 millions FCFA.

En août 2022, l'ARCEP avait mis en demeure les quatre opérateurs télécoms à la suite d'une campagne de contrôle de la qualité des services offerts par les réseaux mobiles dans une douzaine de localités du pays. Ils avaient eu quatre mois, à partir du 31 août 2022, pour corriger les défauts constatés.

Du 9 janvier au 20 mars dernier, le régulateur des télécoms a mené une nouvelle campagne de mesure dans

les mêmes localités pour vérifier si les manquements relevés lors de la première campagne avaient été corrigés ou non. Niger Telecoms, Zamani, Airtel et Moov Africa ont affiché des taux de correction de 20,68 % ; 22,5 % ; 55,68 % et 62,2 %, respectivement.

Avec cette sanction financière, l'ARCEP souhaite amener les opérateurs télécoms à respecter les normes établies dans leurs cahiers des charges respectives en matière de qualité et de couverture des services télécoms. L'amélioration de la qualité et de la couverture des services télécoms devrait profiter non seulement aux consommateurs, mais également aux sociétés télécoms et à l'État.

Une nouvelle exceptionnelle : arrivée du Câble SousMarin '2Africa' au Congo



Le câble sous-marin à fibre optique 2Africa, mené par la société américaine Meta, a atterri sur les côtes congolaises. Cette étape cruciale a été confirmée par Airtel Congo, qui a conçu la nouvelle station modulaire de débarquement

abritant cette infrastructure à Pointe-Noire.

La mise en place de 2Africa marque le deuxième câble sous-marin international auquel la République du Congo se connecte, ce qui renforce

considérablement son infrastructure haut débit. Cette réalisation vient compléter le câble WACS (West Africa Cable System), auquel le pays s'était connecté en 2011 et dont il dépend principalement pour les services Internet haut débit. Toutefois, les pannes fréquentes sur le câble WACS provoquent régulièrement des perturbations dans les services Internet.

Une fois en service, le câble 2Africa devrait non seulement réduire les coûts des services Internet en République du Congo, mais aussi étendre l'accès à ces services à des millions de personnes supplémentaires. Selon les dernières données du régulateur, le pays compte actuellement 3,05 millions d'internautes, ce qui équivaut à un taux de pénétration de 54 %.



Quelles sont les modalités appliquées par les câbles sous-marins pour renforcer notre monde d'aujourd'hui ?

De nos jours, l'Internet fait partie intégrante de notre quotidien, vu qu'il nous permet de nous mettre en connexion avec des personnes et de recueillir des informations du monde entier. Cette connexion mondiale est rendue faisable grâce au vaste réseau de câbles sous-marins qui passe de part en part du fond de l'océan et véhicule des données se déplaçant à la vitesse de la lumière à travers de minces fibres de verre. Ayant la minceur d'un tuyau d'arrosage, ces câbles sont des merveilles technologiques qui sont à même de véhiculer des tas de données, et constituent un élément de base de notre quotidien en ligne.

La pierre angulaire des interactions mondiales

Bien que les câbles relèvent de la haute technologie, leur installation est un processus curieusement peu technologique. Enveloppés de goudron et mis en place par des navires, le processus tire son origine des années 1850, date de la toute première pose du premier câble télégraphique transatlantique. Les câbles se sont distingués, depuis lors, par leur long parcours, et constituent aujourd'hui la pierre angulaire du commerce et de la communication mondiale, le trafic intercontinental étant de plus de 99 %

Le 'cerveau' d'Internet est non seulement fourni par de gigantesques firmes de la technologie, tels que *Meta*, *Microsoft*, *Amazon* et *Google*, grâce à leurs centres de données, mais le système nerveux d'Internet est placé toujours davantage sous leur contrôle au moyen de ces mêmes câbles sous-marins. Leurs besoins en termes de données sont surprenants, le trafic de données étant passé de 45 % à 60 % par an par le biais des câbles sous-marins des prestataires de services dénommés « *hyperscalers* ». Tant que le monde éprouve de plus en plus la soif croissante de contenu et de connexion, l'infrastructure ira à la même allure

L'adaptabilité du réseau de câbles sous-marins

Il est primordial d'installer un réseau de câbles sous-marins résilient. Les principales routes de communication étaient, bien entendu, interconnectées grâce aux premiers câbles sous-marins, mais maintenant de nouvelles routes rendent le réseau accessible à des zones lointaines et reculées. Les câbles sous-marins couvrent aujourd'hui le monde entier et acquièrent en fiabilité comme en performance, et se révèlent être un stimulus pour un nombre croissant de pays désireux de rejoindre le réseau Internet mondial.

Les câbles sous-marins sont porteurs non seulement de nombreux avantages, mais bel et bien des risques. Les câbles sont en proie aux nuisances causées

par les chalutiers, les ancres et même les tensions géopolitiques. En cas de sectionnement des câbles, leur remise en état est tellement compliquée que l'interruption peut entraîner des semaines voire des mois, causant ainsi la perturbation des communications et des services Internet.

La demande croissante des données

Pour pouvoir assimiler la quantité croissante des demandes en données, de nouveaux câbles sous-marins dispensant une célérité plus élevée sont sous construction. Les prestataires de services, les hyperscalers, tels que *Microsoft*, placent leurs capitaux, en guise d'investissement, dans de nouvelles technologies, telles que les fibres creuses, pour réduire le retard et rendre le réseau plus performant. D'ailleurs, l'utilisation d'une multitude de supports de transmission de données sont en pleine exploration à l'intérieur des fibres pour renforcer davantage le rendement des câbles.

Les câbles sous-marins sont tout autant affectés par les tensions géopolitiques du fait que certains pays exercent leur contrôle sur l'installation et l'entretien des câbles dans leurs eaux territoriales. Toutefois, les exigences économiques invitant à la mise en place de ces câbles viennent, en général, s'y mêler, puisque les pays souhaitent rejoindre le monde interconnecté.

La création des communications sous-marines

De nos jours, la capacité de transmission de données des câbles sous-marins est de 250 téraoctets par seconde, mais leur technologie date des années 1800. Cette époque est fatidique dans la mesure où des précurseurs tels que Werner Siemens, célèbre scientifique et ingénieur, ont réalisé d'importants progrès puisqu'ils étaient les premiers à poser des câbles télégraphiques au fond des fleuves, de la Manche et de la mer Méditerranée. Les premières expériences étaient, par contre, hérissées d'échecs, vu que les câbles posés au fond de l'océan, et la surpression aidant, étaient coupés en morceaux.

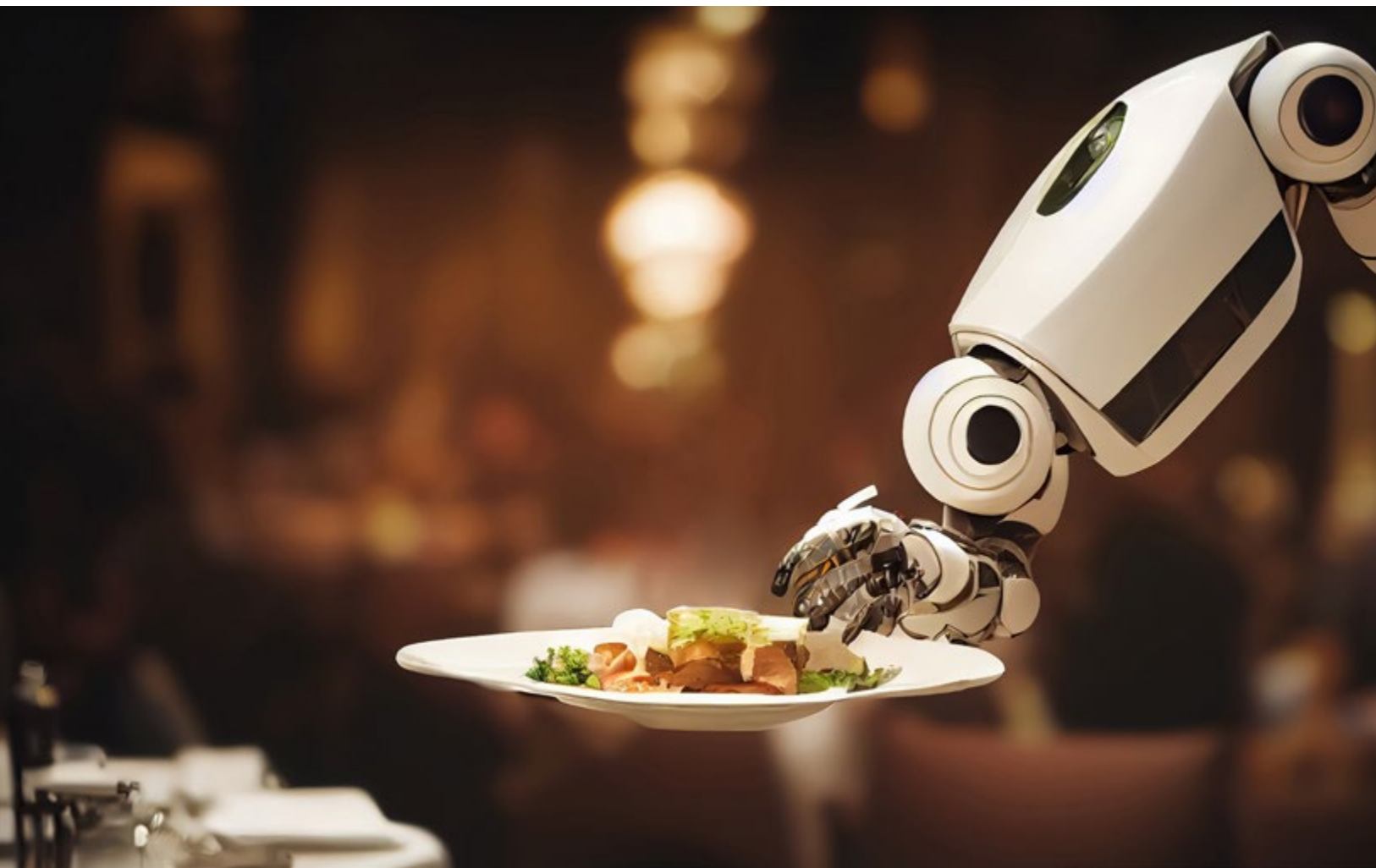
Loin de baisser les bras et s'étant aperçus de l'immense potentiel des communications rapides, les

investisseurs se sont résolus à investir dans le développement de technologies améliorées. Ce soutien a contribué à la réalisation continue des progrès, de même que l'amélioration de la transmission des signaux doit beaucoup à la pureté accrue du cuivre, que les cassures de câble se sont amoindries grâce à un blindage protecteur plus solide, que des répéteurs postés à des endroits stratégiques ont amplifié la puissance du signal, et que l'isolant en polyéthylène a cédé la place à l'ancien matériau en caoutchouc obtenu à partir des arbres de gutta-percha.

Les communications sous-marines ont sans cesse évolué avec le passage des messages télégraphiques aux appels téléphoniques. En 1858, notamment, le premier projet de câble transatlantique réussi a fonctionné le temps de trois mois sans plus, avec une capacité de transmission d'à peine plus d'un mot par minute.

La progression de la technologie constatée au fil des années était au fur et à mesure accompagnée d'une progression des capacités des câbles sous-marins. En 1973, un câble transatlantique pouvait mener une gestion de 1 800 conversations simultanées. Il fallait attendre l'année 1988 pour que de nouveaux progrès soient réalisés, lorsqu'*AT&T* a posé le premier câble transatlantique à l'aide de brins de fibre optique en verre, ce qui constitue une révolution novatrice ayant porté sa capacité de gestion jusqu'à 40 000 appels téléphoniques simultanés. Aujourd'hui, nous sommes témoins d'une expansion jamais vue, tant au niveau de l'infrastructure elle-même que des données qu'elles transmettent.

Malgré les embûches rencontrées au fil de l'histoire, le réseau de câbles sous-marins se renforce toujours davantage et continue sur sa lancée à un rythme apparemment sans retenue. Avec les nouveaux sites d'atterrissage qui se diversifient sur le plan géographique et la technologie de branchement qui s'améliore, le réseau gagne en fiabilité et devient moins susceptible aux perturbations. Au moment où nos vies s'enrichissent grâce à l'Internet, les câbles sous-marins restent le sang vital qui coule dans l'économie mondiale et garantissent une connexion soutenue. **TR**



L'évolution du travail : confrontations humains / robots, qui embaucher ?

Dans un monde en pleine mutation, les progrès technologiques ont bouleversé notre mode de vie et de travail. De nos jours, il est fréquent de voir dans des restaurants des robots servir des repas ou de constater que l'intelligence artificielle (IA) peut aller jusqu'à produire des questionnaires en ligne. Le déploiement de ChatGPT, un outil d'IA capable de produire un texte sur la base des incitations écrites, a été le déclencheur d'une révolution qui se poursuit depuis des décennies. Un nouvel âge s'annonce et les entreprises se trouvent en face d'une question fondamentale : pour les recrutements à l'avenir, faut-il opter pour des humains ou des robots ?

Dans le présent article, nous passerons en détail le pour et le contre du projet d'intégrer des robots et de l'IA sur le lieu de travail, et l'étape où les capacités humaines risquent de primer celles des machines.

Le pour ou les Avantages de l'IA et des Robots au Travail

La progression spectaculaire des robots et de l'IA sur le lieu de travail est porteuse de bien d'avantages fort évidents :

• Labeur intense et productif :

Les robots d'une entreprise peuvent prendre plus de temps qu'ils en ont besoin et dépenser plus d'énergie que tout autre employé humain, et exercent leurs fonctions sans le moindre mécontentement et en permanence

• Économies Financières :

Le recrutement des robots a l'avantage certain, entre autres, de faire travailler ceux-ci à titre bénévole, en l'occurrence, sans aucun salaire, de même qu'il n'engage pas de coûts ni aux salaires, ni à l'inflation.

• Constance et Discipline :

Les robots disposent d'une concentration constante et remplissent les ordres sans se déconcentrer. A l'opposé de l'homme, ils ne connaissent pas de congés et tiennent leurs engagements personnels éloignés de leur travail.

• Sécurité et Environnements Dangereux :

Les robots sont à même d'être utilisés dans des milieux à risque pour les humains et dont ils peuvent sortir avec des blessures moins graves.

• Précision et efficacité :

Les robots sont bien loin de commettre les erreurs dont l'homme est familier. Leur capacité à remplir les mêmes tâches porte l'efficacité du travail au maximum.

Le contre ou les Inconvénients de l'IA et du recrutement des Robots au Travail

A part les avantages, il existe également d'importants inconvénients à l'intégration des robots et de l'IA :

• Coûts de Personnalisation :

Les solutions toutes faites toutes prêtes à l'emploi ne sont pas toujours avantageuses à toutes les entreprises. S'il faut personnaliser les robots et l'IA, il faut tenir compte des frais de développement élevés.

• Dépenses fréquentes :

En plus des salaires, l'accès aux logiciels prêts à l'emploi engage aussi des frais mensuels tributaires du nombre d'utilisateurs humains et des fonctionnalités.

• L'IA suivant des Scripts :

Les robots se différencient de leurs instructions au niveau de la qualité. Des résultats négatifs peuvent découler d'une directive mal formulée.

• Erreurs de l'IA :

Bien que des instructions puissent être précises, les résultats de l'IA peuvent parfois être erronés ou fantaisistes. La fiabilité de cette dernière est remise en doute lorsqu'elle s'inspire des informations de l'Internet.

• Non-créativité :

L'IA est peu originale. Bien que son contenu offre une apparence créative, elle se limite à allier des concepts existants les uns aux autres.

L'Équilibre entre l'Humain et la Machine

Lorsqu'il est question de décider de l'embauche soit d'un humain soit d'un robot, il serait primordial d'instaurer l'équilibre entre les deux. Les humains portent en eux de rares avantages qui font défaut aux robots :

• La Créativité de l'homme :

Les humains sont à même de faire preuve de créativité authentique, ce que les machines n'ont pas. Ils peuvent fournir des solutions innovantes aux problèmes difficiles

• L'Empathie et l'Interaction Humaine:

De nombreux domaines allant des soins de santé jusqu'au service

clientèle font appel à l'interaction humaine et à l'empathie

• Adaptabilité et Apprentissage :

Les humains ont la qualité d'apprendre facilement et disposent d'une aisance d'adaptabilité aux nouvelles situations, et peuvent résoudre des problèmes imprévus non familiers aux algorithmes préalablement programmés.

Il est malaisé de résoudre la question d'embaucher des humains ou des robots qui reste difficile et à dimensions multiples. On ne peut pas nier les bienfaits de productivité et de précision des robots et de l'IA, mais il faut avouer également que la créativité et l'empathie de l'homme sont des qualités tout aussi précieuses. Pour les entreprises, il est fort probable que le travail soit à l'avenir fait d'un mélange équilibré d'hommes / machines qui profitent mutuellement des forces l'un de l'autre. Reste à savoir dans quelle mesure un surplus de valeur irremplaçable peut être le fruit des compétences de l'homme et où l'efficacité peut s'accroître grâce à l'automatisation. Au moment où le progrès marque l'ère de technologie avancée que nous connaissons aujourd'hui, c'est maintenant ou jamais qu'il faut trouver cet équilibre en question. **TR**



Les robots sont bien loin de commettre les erreurs dont l'homme est familier



5G: Deployment in North Africa

Dive into 5G Deployment in North Africa and this timely update, where industry experts unveil why the North Africa region delayed this technology despite its importance and possibilities.

Place: Virtual



Déploiement de la 5G en Afrique du Nord

Découvrez le déploiement de la 5G en Afrique du Nord dans cette mise à jour opportune, où des experts de l'industrie dévoilent pourquoi la région de l'Afrique du Nord a retardé cette technologie en raison de son importance et des possibilités qu'elle offre.

Lieu : Virtuel

GITEX Global

GITEX GLOBAL features every major technology player, trend and vertical, and it covers sectors including smart cities, cybersecurity, metaverse, the data economy, mobility, healthcare and telecoms.

Place: Dubai World Trade Center, UAE



GITEX Global

GITEX GLOBAL présente tous les acteurs, tendances et secteurs de la technologie, et couvre des domaines tels que les villes intelligentes, la cybersécurité, les métavers, l'économie des données, la mobilité, les soins de santé et les télécommunications.

Lieu : Dubai World Trade Center, EAU

Telecom Review Leaders' Summit 2023

The 17th edition of the leading ICT gathering will be held in a hybrid mode where the latest industry trends will be tackled.

Place: Le Meridien Dubai Hotel & Conference Centre, Great Ballroom, UAE



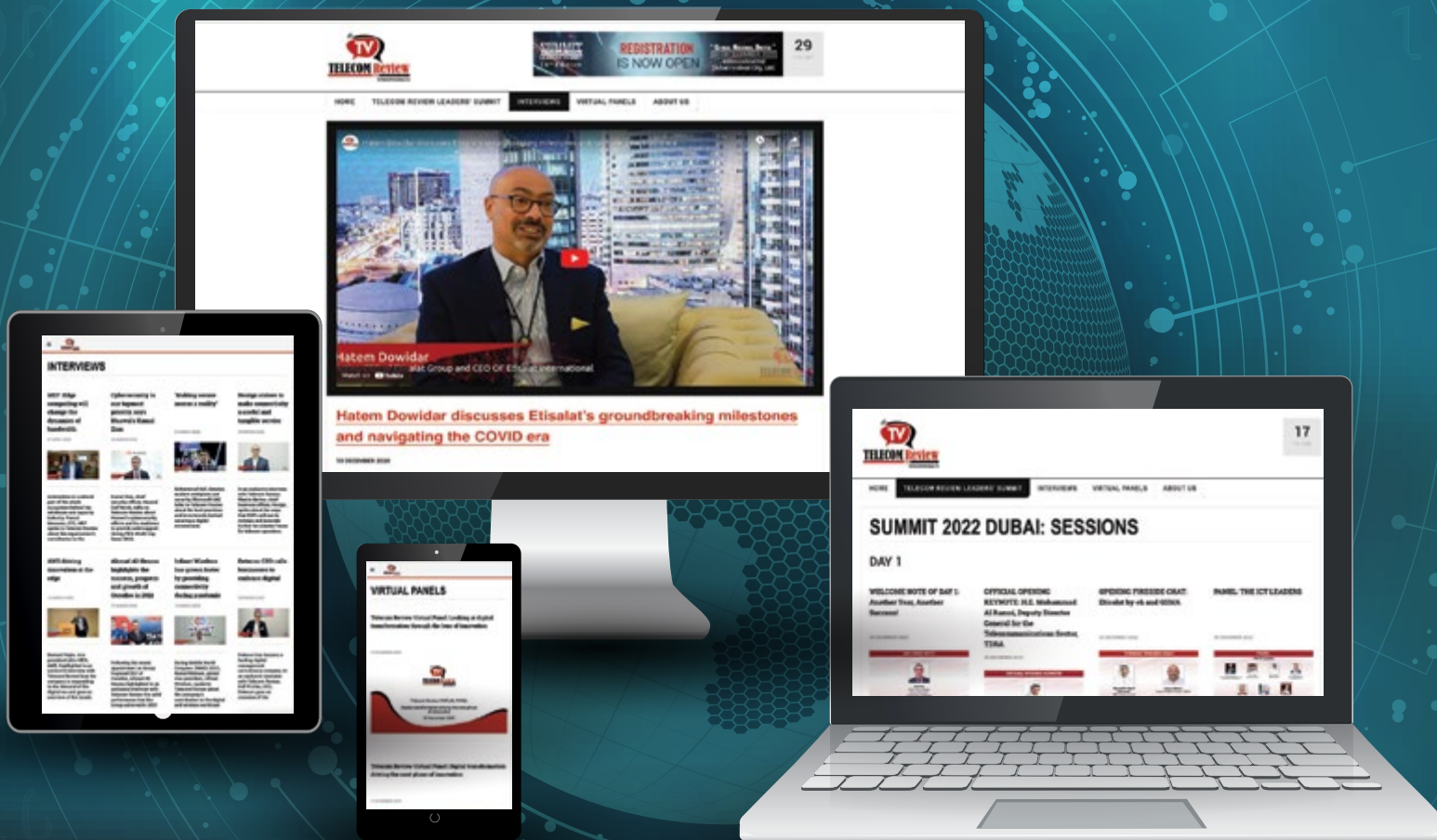
Telecom Review Leaders' Summit 2023

La 17^e édition du principal rassemblement sur les TIC se déroulera en mode hybride et abordera les dernières tendances du secteur.

Lieu : Le Meridien Dubai Hotel & Conference Centre, Great Ballroom, EAU

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