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ON ITS WAY TO LEADING
THE WORLD
ON TECH KNOWLEDGE & SKILLS

- Mike Cannon-Brookes
Co-founder and Co-CEO, Atlassian

GEN AI—
ONE THING WE NEED TO ASK OURSELVES IS:
HOW DO WE EVOLVE?

- Sanjay Poonen
CEO and President of Cohesity

Tech illuminating the path to a sustainable 2024

As we step into the threshold of 2024, technology emerges not just as a facilitator but as the vanguard in sculpting a future where sustainability is not an aspiration but a reality. In this epoch of innovation, the synergy between cutting-edge technology and ecological consciousness paints a compelling narrative—a narrative where every line of code, every algorithm, becomes an instrumental brushstroke in the masterpiece of a sustainable world.

By Minu Sirsalewala

Picture this: A world where businesses seamlessly balance digital expansion with a fervent commitment to climate neutrality. Imagine a landscape where every watt of energy is not just consumed but optimized through the discerning eyes of Artificial Intelligence. Industry leaders, visionaries, and innovators are not merely forecasting; they are actively shaping a narrative where technology becomes the cornerstone of environmental stewardship.

SUSTAINABILITY IN THE MODERN WORLD: A BUSINESS IMPERATIVE

In the pursuit of a sustainable future, businesses are increasingly recognizing the pivotal role that technology plays. As Moiz Vaswadawala, Vice President of Risk Management and Sustainability at NTT Global Data Centers and Cloud Infrastructure, India, emphasizes, sustainability is not just about combating climate change; it is essential for ensuring a high quality of life and equal opportunities for all.

With ambitious targets set for achieving net-zero emissions, NTT has already made significant strides by leveraging innovative technologies and cutting-edge solutions. In the last fiscal year, the company cut down its emissions by 21% (a saving of more than 1.6 million tonnes of carbon).

RENEWABLE ENERGY AND EFFICIENT OPERATIONS
One of the key areas where technology is driving sustainability is in the realm of renewable energy. Investments in solar and wind power generation, coupled with the integration of advanced technologies, have enabled a substantial reduction in emissions from data center operations. Looking ahead to 2024, the focus will shift towards developing new tech tools that facilitate the design of highly efficient systems and buildings, minimizing their life cycle impact on the environment.

AI'S TRANSFORMATIVE ROLE IN ENERGY EFFICIENCY
AI emerges as a major enabler in spearheading investments in disruptive energy supplies and transforming energy efficiency in data centers. Through smart metering, IoT devices, and data analysis, businesses will have the capability to track and optimize building performance. As we move forward, AI is expected to play a central role in waste management strategies, promoting a circular economy through improved recycling technologies and waste-to-energy solutions.

EQUINIX'S COMMITMENT TO CLIMATE NEUTRALITY
Equinix, a player in the tech and sustainability landscape, highlights its commitment to achieving climate neutrality by 2030. By adopting AI for enhanced energy efficiency, leveraging renewable energy sources, and focusing on temperature controls, Equinix is actively reducing its environmental impact. The pace of adopting Hybrid Multicloud is set to increase, reflecting a nuanced approach by enterprises in balancing digital expansion with sustainability goals.

EFFICIENCY AS A CRITICAL METRIC FOR INNOVATION
Efficiency remains a critical metric in the intersection of technology and sustainability,

AI is going to be a major enabler, spearheading investments in disruptive energy supplies and transforming energy efficiency in data centers. As we move into 2024, the vision of a greener future should also focus on innovative waste management strategies. It will support a vision of circular economy, such as improved recycling technologies, waste-to-energy solutions, and better materials design for recyclability.

- Moiz Vaswadawala, Vice President, Risk Management and Sustainability, NTT Global Data Centers and Cloud Infrastructure, India.

according to Manoj Paul, Managing Director of Equinix India. As businesses transition to multi-cloud environments, the strategic deployment of technologies such as AI becomes paramount. The year 2024 is anticipated to be marked by collaboration and innovation, driving progress towards a sustainable and interconnected

Equinix is uniquely positioned to support this dynamic phase of enterprise digital transformation, by enabling dedicated and secured multicloud access along with cloud adjacent on-premise colocation. Our steadfast commitment to balancing growth with environmental responsibility positions us to navigate the evolving landscape with resilience and purpose.

- Manoj Paul, Managing Director, Equinix India

world. Many continue their migration journey, transitioning from single clouds to multi-cloud environments. Simultaneously, those with established cloud experience are discerning which applications to prioritize on the cloud and which benefit from remaining on-premises, adapting their cloud deployment as their business matures and predictability increases.

REGTECH AND CLEAN TECH INTEGRATION

In the anticipated landscape of 2024, a prominent shift is on the horizon—a heightened adoption of Regulatory Technology (RegTech) poised to simplify adherence to environmental regulations, a critical aspect in meeting ESG commitments. Simultaneously, the sustainability sector witnesses a burgeoning emphasis on Clean Technology, endowing enterprises with inventive tools to streamline energy management and reduce carbon footprints.

Anticipates a notable trend in 2024— the integration of RegTech to simplify compliance with environmental regulations.

- Jaya Vaidhyanathan, CEO, BCT Digital

The imperative move towards sustainable energy sources relies heavily on technological interventions to realize net-zero goals. From the application of AI-driven predictive analytics for optimizing renewable energy production to the establishment of smart grids facilitating efficient energy distribution, technology assumes a central role. The integration of Artificial Intelligence and Machine Learning (AIML)-powered RegTech emerges as a cornerstone, empowering businesses to seamlessly navigate the complexities of environmental regulations. These technologies meticulously process extensive regulatory data, identify compliance requirements, and furnish real-time insights, facilitating proactive adherence to evolving standards.

Furthermore, the advent of digital platforms and advanced analytics serves to simplify comprehensive reporting, enabling companies to showcase their unwavering commitment to sustainability through precise and verifiable data. Consequently, the nexus of progress and synergy within AI, ML applications, and advanced analytics emerges as a pivotal force in transforming decision-making processes. These technologies not only provide data-driven insights conducive to regulatory compliance but also optimize resource utilization, fortify energy efficiency, and reduce environmental footprints.

DIGITAL TRANSFORMATION FOR A SUSTAINABLE FUTURE

Nikhil Pathak, VP - Central Offer Marketing and Business Development, Schneider Electric Greater India, emphasizes the three main vectors for a sustainable future: Decarbonization, electrification, and digitalization. Digital transformation emerges as a key enabler for driving more efficient operations, connecting various digital infrastructures for seamless communication and collaboration.

Emphasizes the three main vectors for a sustainable future: decarbonization, electrification, and digitalization.

- Nikhil Pathak, VP, Schneider Electric Greater India

Companies worldwide are increasingly committed to achieving a more sustainable future, with multinationals and Indian corporates voluntarily setting net-zero and carbon neutrality goals. The Securities and Exchange Board of India mandates certain listed companies to disclose their efforts through Business Responsibility and Sustainability Reporting (BRSR).

However, renewable energy alone cannot achieve ambitious sustainability goals. Digital transformation emerges as a crucial facilitator,

> THE INTEGRATION OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING (AIML)-POWERED REGTECH EMERGES AS A CORNERSTONE, EMPOWERING BUSINESSES TO SEAMLESSLY NAVIGATE THE COMPLEXITIES OF ENVIRONMENTAL REGULATIONS. THESE TECHNOLOGIES METICULOUSLY PROCESS EXTENSIVE REGULATORY DATA, IDENTIFY COMPLIANCE REQUIREMENTS, AND FURNISH REAL-TIME INSIGHTS, FACILITATING PROACTIVE ADHERENCE TO EVOLVING STANDARDS.

connecting diverse digital infrastructures for seamless collaboration across IT and OT domains.

AI and ML emerge as transformative forces in addressing climate change. AI leverages large-scale databases to model potential consequences, enabling proactive measures. ML predicts wind energy, enhancing efficiency in wind management. Integrated smart grids, powered by big data and ML, enable real-time data intelligence, improving demand response mechanisms.

The adoption of Digital Twin as a unified platform revolutionizes infrastructure modeling, enhancing resource efficiency and safety. AI and ML redefine predictive maintenance, detecting early signs of potential failures, improving equipment reliability, reducing downtime, and enhancing workforce productivity.

Smart homes integrate diverse energy sources, employing real-time energy monitoring and home automation for efficient electricity usage. The shift towards software-centric operations, utilizing open process automation and data analysis, drives decarbonization and operational efficiency across smart grids, buildings, industries, and homes, heralding a better and more sustainable future.

AI and ML become game-changers, predicting wind energy, revolutionizing predictive maintenance, and enabling real-time data intelligence through fully integrated smart grids.

CONCLUSION: A SUSTAINABLE FUTURE POWERED BY TECHNOLOGY

In the journey towards a sustainable future, the intertwined narratives from industry leaders highlight the transformative power of technology. From renewable energy to efficient operations, AI-driven solutions, and digital transformations, technology is the driving force behind meaningful progress. As we approach 2024, the collective efforts of businesses and innovators are set to pave the way for a brighter, more sustainable, and interconnected world. Cheers to a transformative year where technology leads the charge towards a greener future. 🅓🅠

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