

IT INDUSTRY INSIGHTS

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UAE

When it comes to the widespread implementation of AI and cutting-edge technologies, Dubai has been at the forefront.

Examples include the use of AI for assessing imports and speeding up cargo transportation by the Dubai Municipality, and the use of VR for food safety training. The city has also installed AI-powered pedestrian crossings to further improve road safety. Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai, also established the Dubai Centre for Artificial Intelligence (DCAI) to aid government agencies in integrating AI and other emerging technologies across essential sectors.



<https://www.khaleejtimes.com/uae/dubai-authority-sees-90-customer-satisfaction-using-chatgpt>

The Dubai Electricity and Water Authority (Dewa) has used ChatGPT's virtual employee Rammas with great success to improve customer satisfaction.

Rammas's ability to comprehend and effectively answer to consumer inquiries has been enhanced, according to Saeed Mohammed Al Tayer, CEO of Dewa. Over 32,000 questions have been resolved by Rammas since April, with a 90% success rate. To further its digital development, Dewa wants to integrate AI into an increasing number of its offerings.





UK

As the company prepares to meet the new legal standards that go into effect on October 8,

PayPal has decided to temporarily block cryptocurrency purchases for its UK clients.

Among these guidelines is the abolition of "refer a friend" benefits and the implementation of a "cooling-off period" for first-time crypto buyers.



PayPal announced the creation of its own stablecoin pegged to USD.

After October 1st, PayPal will no longer allow users to buy cryptocurrencies with their account until early 2024. The organization is serious about following the rules and is helping the authorities out. In a recent announcement, PayPal announced the creation of its own stablecoin pegged to USD. Despite the delay in the UK, it seems determined to expand its crypto company, particularly in the US. Although adapting to new regulations may be difficult in the near term, doing so is generally considered essential for the crypto business in the long run.



<https://www.uktech.news/crypto/paypal-crypto-uk-20230817>

USA



American semiconductor companies could suffer a "permanent loss" in one of the world's major marketplaces, according to Nvidia.

Which has issued a warning about prospective U.S. export limits on its chips to China. Nvidia is worried about the long-term effects of such regulations despite the fact that it thinks the existing rules are working as intended and won't have any immediate effect on the company's finances. In the past, Nvidia has released updated chips that are in line with U.S. export regulations.

Around 20% to 25% of Nvidia's data center business income comes from China, making it a crucial market for the company.

Nvidia's continued opposition to more limits in this sector reflects the company's reliance on it, despite persistent geopolitical tensions between the United States and China over technological superiority and worries about the military application of technology. Nvidia, despite these setbacks, has announced good financial results, with its stock rising over 220% in the year and projecting significant sales growth in the current quarter.

**Business
Income comes
from China**

20% - 25%



**Data Centre
Total Income**



China's Quantum Technology Push: A Race for Leadership

Chinese President Xi Jinping has ordered a massive increase in funding for quantum technologies like sensing, communication, and computing. Potential quantum applications include highly secure communication and robust computational skills.

In order to strengthen its national economy and compete on a global scale, China has included quantum technology into its overall strategy.





China may be ahead of the rest of the world in quantum communication, but the United States is well ahead of it in quantum computing.

Although private sector contributions are fewer in China, the government plays a crucial role in driving R&D with large investment. Patent applications and academic papers also point to development, but obstacles like export controls and U.S. limitations on specific technology could slow things down.



<https://chinapower.csis.org/china-quantum-technology/>



Google's Quantum Supremacy


Google's quantum computing research has made tremendous strides, with the company's 70-qubit quantum computer completing a work in seconds that would take Frontier 47 years to complete.

In order to minimize mistakes brought on by quantum noise, the experiment maximized the speed of essential operations while randomly sampling the circuit. Google says this proves quantum supremacy, the idea that qubits can do things classical computers can't. While the usefulness of these simulations is up for discussion, this study is a major step forward in the field of quantum computing.



<https://www.sciencealert.com/google-quantum-computer-is-47-years-faster-than-1-supercomputer>

Securing CI: A New Approach for a Quantum World



There are special cybersecurity challenges for individuals in charge of running critical infrastructure (CI), such as oil pipelines or power plants.

The conventional separation of operational technology (OT) and information technology (IT) is becoming less effective due to digitization and the threat of quantum computing. IT security protocols should be modified to suit the requirements of OT in order to help CI operators deal with these issues. Micro-segmentation, detailed risk assessments, and a zero-trust authentication policy all fit into this category. These safeguards assist ensure the security and integrity of CI in the face of evolving cyber threats and vulnerabilities.



<https://www.c4isrnet.com/it-networks/2023/08/21/how-to-protect-critical-infrastructure-in-the-quantum-computing-era/>



Key Takeaways:

- Dubai has been a leader in implementing AI and cutting-edge technologies in various sectors, including transportation, food safety, and road safety.
- PayPal is temporarily blocking cryptocurrency purchases for its UK clients in response to new legal standards effective from October 8, 2023.
- Nvidia warns of potential "permanent loss" for American semiconductor companies due to U.S. export limits on chips to China.
- Chinese President Xi Jinping has increased funding for quantum technologies, including sensing, communication, and computing, to strengthen China's national economy and global competitiveness.
- Google's quantum computing research achieves a significant milestone with a 70-qubit quantum computer completing tasks in seconds that would take a supercomputer 47 years to accomplish.
- Adapting IT security protocols to OT needs is crucial for safeguarding CI in the quantum computing era





Thankyou!

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