WORLD GOVERNMENT SUMMIT

OP-ED

CREATING PROGRESS AT SCALE:

How Trusted Tech is Transforming Government

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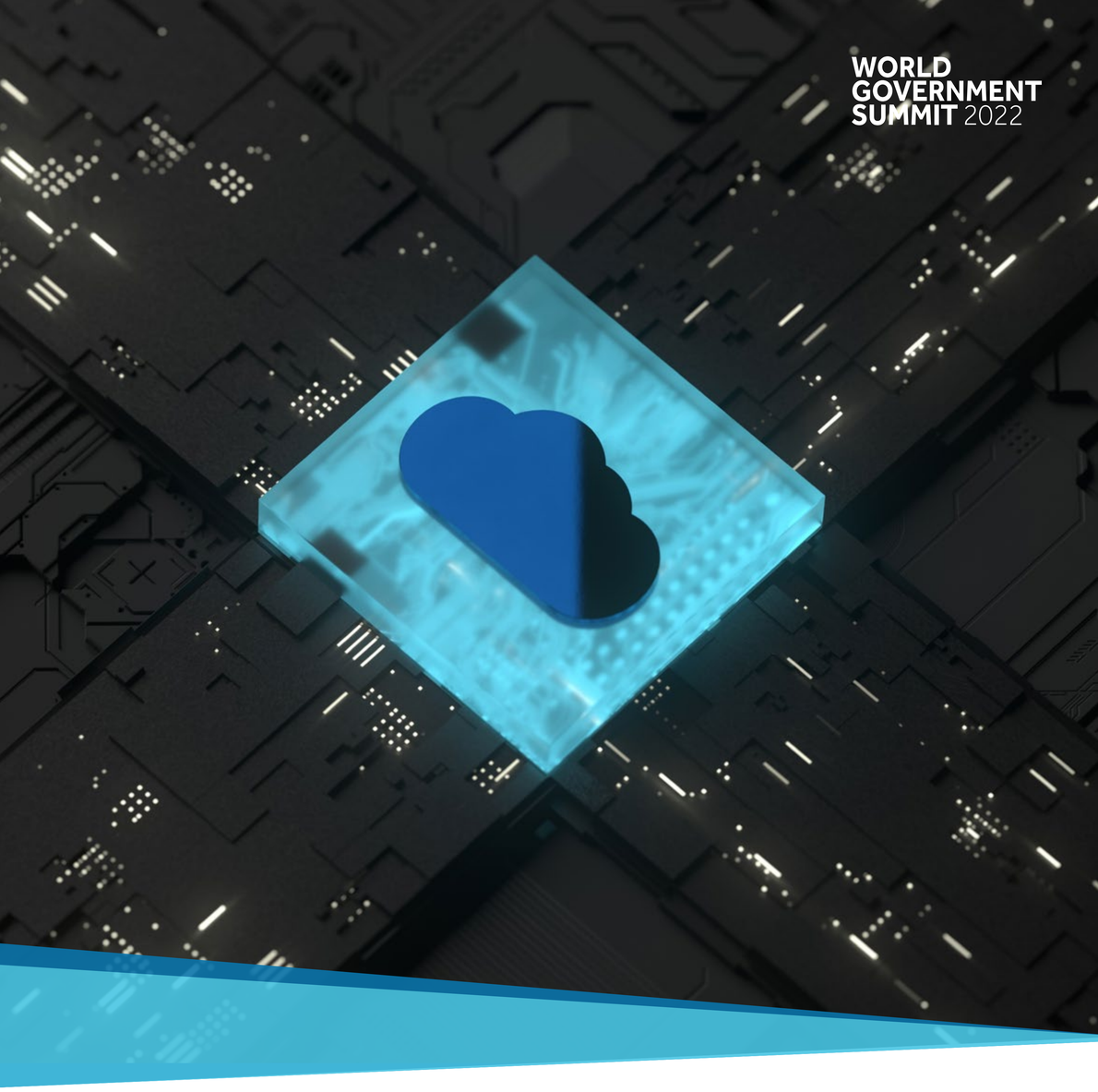
WORLD GOVERNMENT SUMMIT 2022

The **private sector** has witnessed a dramatic acceleration in the pace of **digital transformation** over the last two years, driven in large part by the pandemic.

Businesses everywhere are using new technologies to become more resilient and adaptable and to scale innovation. Governments are also embracing digital transformation to proactively meet the enormous challenges they face,

- Contending with changes in population demographics
- Massive Cyberattacks
- Climate change
- Threats to economic growth



To speed the pace of their efforts, governments must not only embrace the right technologies, but also **partner effectively with the private sector to accelerate scientific discovery, strengthen cybersecurity, and enhance digital trust.**

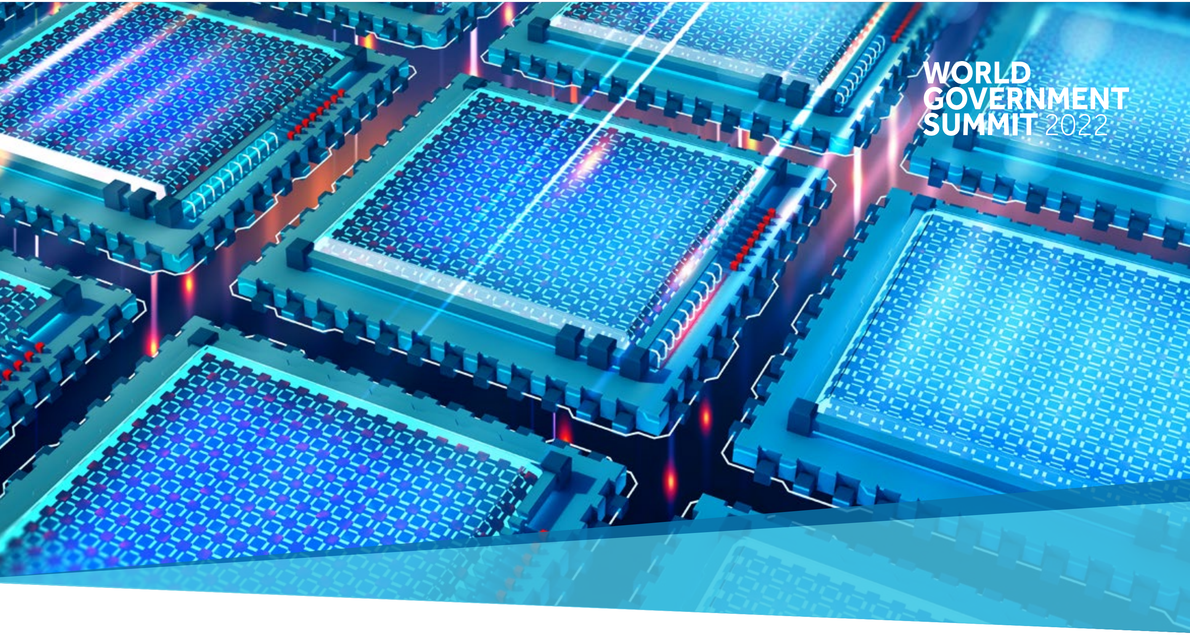
Only in this way can we generate viable solutions to the most difficult problems that threaten global progress. Fortunately, we are at a unique moment when the convergence of three computing revolutions – hybrid cloud, artificial intelligence, and quantum – is putting these solutions within reach.

3 Computing Revolutions

HYBRID CLOUD

ARTIFICIAL INTELLIGENCE

QUANTUM COMPUTING



Hybrid cloud allows businesses and governments to leverage the full power of cloud computing by operating safely wherever they compute: on premise, at the ‘edge’ of the network, on any cloud, from any vendor.

It is also key to scaling their **use of AI**, which can be used to unlock the value of their data and automate tasks so that their people can shift to higher-value work.

For example, the Egyptian Ministry of Finance is working with IBM to automate its tax system with hybrid cloud and AI, improving customer experience and revenue governance.

With **quantum computing**, we will be able to simulate the behavior of matter down to the atomic level, rather than relying on mere guesswork.

These include developing more accurate climate models, accelerating drug discovery, and creating vastly more efficient batteries. Significant engineering advances are being made today to make quantum more practical tomorrow.

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At IBM, we are promoting new models of public-private partnership to harness the combined capabilities ofhybrid cloud, AI and quantum. These **‘Discovery Accelerators’** are hubs for advancing scientific breakthroughs in specific fields of research, supported by academic, government, and industry partners.

IBM | Cleveland Clinic

We opened the first Discovery Accelerator last year with The Cleveland Clinic, one of the premier health care institutions in the United States. As part of this collaboration, we’ll install our **first private-sector quantum system in the U.S.** on Cleveland Clinic’s campus. We’re doing the same with the government of Québec in Canada as well as placing quantum computers in Japan, Germany and South Korea.

Through this collaborative model, we anticipate accelerating discoveries up to ten times faster and at ten times less the cost than in the past.

Governments are also leveraging the power of these revolutionary technologies to strengthen cybersecurity. **Cybercrime is the issue of this decade, costing billions of dollars and rising each year.** Organizations are using hybrid cloud to integrate the many different security tools they use to defend themselves today. They are combining this with AI's proven ability to analyze threat information at scale to stay safer.

THE PORT OF LOS ANGELES LA

For example, the Port of Los Angeles, which is responsible for twenty percent of the cargo that comes into the United States, is working with IBM to build a **Port Cyber Resilience Center that will utilize hybrid cloud and AI to automate intelligence from multiple sources, assess threats, and share data securely with the port's many stakeholders.**

Another emerging area of **security concern for governments** is the potential for quantum computing to crack complex encryption through its superior capacity to factor large numbers.

While this threat is still several decades away, it's vital that governments prepare for it now. Collectively, we can only become secure if new quantum-safe algorithms are part of common security standards. That is why IBM is contributing to a number of open source projects that are working toward this goal and partnering with the public sector to develop

QUANTUM-SAFE CRYPTOGRAPHY.

Such work is essential because the backbone of digital infrastructure is trust. **Governments today must support innovation while delivering the highest standards of security, privacy, data protection and compliance.**

Open, hybrid cloud platforms help organizations achieve these standards by integrating their private, public, and managed cloud services without being restricted by a single provider.

Hybrid cloud makes it possible to scalethe application of AI -- and soon, quantum computing -- across entire organizations.

This, in turn, will lead to more secure and trusted service and performance in areas such as digital citizenship services.

دائرة عجمان الرقمية
Department of Digital Ajman

In the United Arab Emirates, the Emirate of Ajman is using IBM cloud solutions to simplify and enhance citizen experiences through a paperless strategy known as Digital Ajman, which has generated significant cost savings while reducing environmnental impact.

I have never been more optimistic about the ability of technology to help solve the world's hardest problems. IBM stands ready to partner with the attendees of the World Government Summit to create progress for decades to come.

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