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Creating a secure, trusted foundation for businesses and society

Addressing societal challenges with Hybrid IT infrastructure

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Balancing sustainability and growth to drive positive change

To be successful, public and private sector organizations must contribute to a more sustainable world, whilst simultaneously pursuing business growth. Sustainability transformation delivers lasting positive change for the environment, economies, and society.

This includes reducing carbon footprints, ensuring the welfare and security of citizens, employees, and communities, and promoting responsible growth for a sustainable planet today and tomorrow.

Global concerns such as climate change and natural disasters necessitate new technologies, regulations, and approaches for businesses and public administration. The need for speed and flexibility drives organizations to explore cloud-enabled hybrid IT solutions. After years of focusing on digital transformation, we see sustainability transformation as the next and logical step.

Research in 2022 highlighted that the 6% of organizations that are leaders in both sustainability and technology, are achieving positive financial results by being strategic, innovative, and investing in upskilling. Successful sustainability transformation requires organizations to be both sustainable and tech-savvy. Organizations that want to succeed in their sustainability plans need to follow leading organizations in this area and focus on how technology can power positive sustainability outcomes for their business, and for society.

While many organizations prioritize sustainability transformation, the reality is that most are still in the early stages of their journey. Further research with Longitude, a Financial Times company, showed this sustainability gap and highlights that only a small percentage of organizations have achieved net-zero status, developed sustainable supply chains, or prepared for environmental emergencies. Furthermore, while technology is essential to underpin many sustainability initiatives, almost half of organizations admit that their technology is still not advanced enough to power meaningful sustainability efforts, and that they need to make good progress in the business systems, reporting and compliance to match the requirements and expectations of various stakeholders.

Embracing the power of Hybrid IT

Hybrid IT merges on-premises infrastructure with cloud services, delivering a flexible and scalable environment for effective operations and workload efficiency. It also fosters trust with customers, employees, and users by implementing robust security and compliance controls that protect privacy and secure data within remote and hybrid work settings.

Hybrid cloud strategies also enable organizations to excel in organizational alignment, proactivity, talent retention, and technology adoption. Longitude research reveals that IT leaders adopting hybrid IT are nearly three times more likely to align technology and strategy than those who have not.

Embracing hybrid IT is now a necessity for organizations seeking to remain competitive while meeting sustainability expectations.
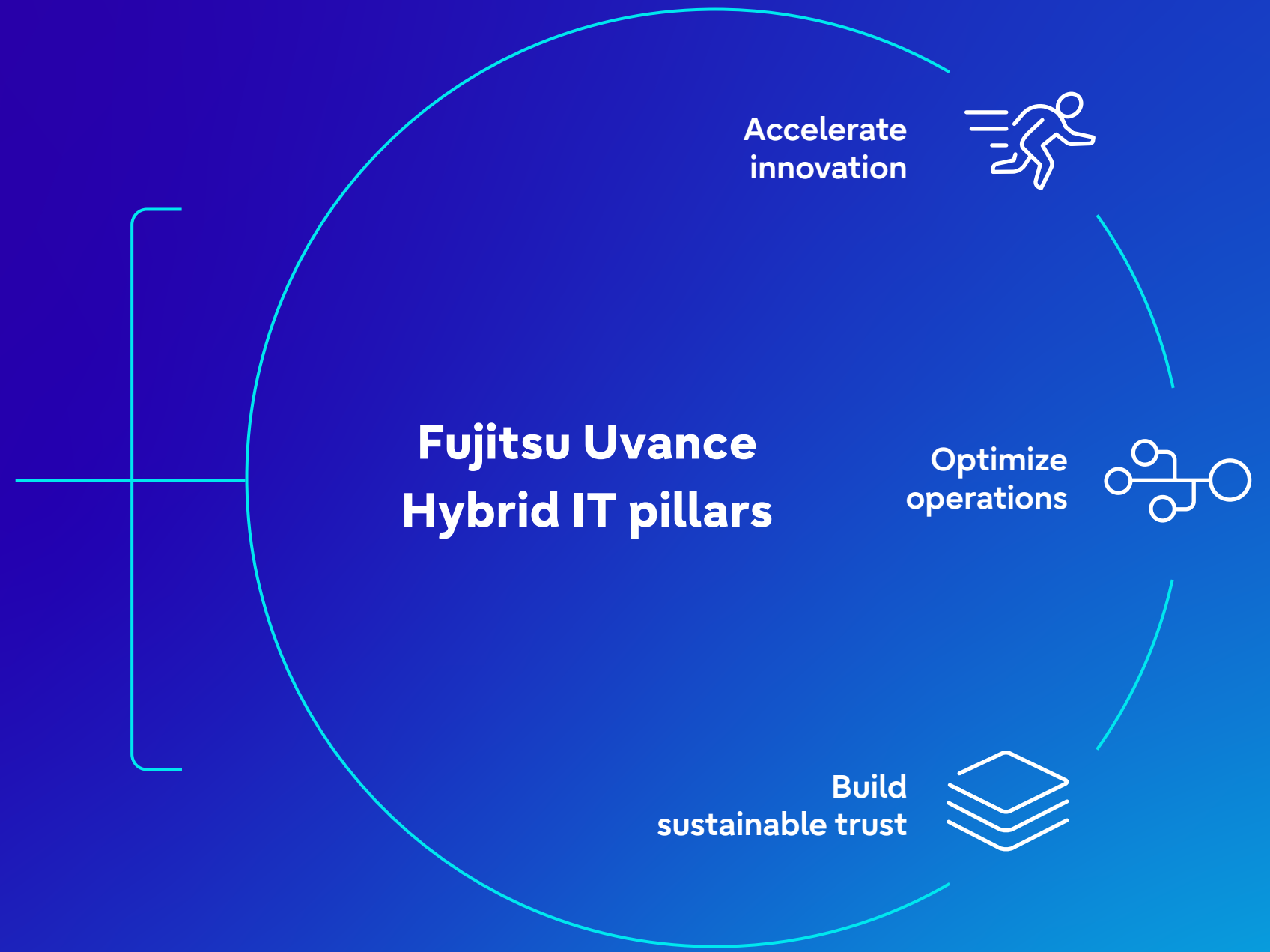
Hybrid IT digital platforms provide a process for managing individual workloads in optimal environments and support in orchestrating operations across on-premises and cloud-based infrastructure. These platforms combine applications, services, IT security, advanced networking, and innovative technologies to offer organizations a secure and sustainable infrastructure for the applications and processes to grow their business, reduce carbon footprints, and enhance customer and employee experiences. The infrastructure provides the means and tools to address the three dimensions of sustainability transformation (environment, economies, and society) while providing agility, flexibility, and resilience by connecting all business-critical applications across on-premises, cloud, mobile, and IoT infrastructure.

Bringing together sustainability goals and technology benefits

Fujitsu Uvance Hybrid IT contributes to the sustainability goals of organizations.
Our approach to Hybrid IT is built on three core pillars.

Fujitsu Uvance Hybrid IT pillars

Accelerate innovation

Optimize operations
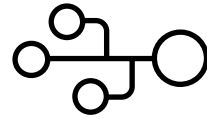
Build sustainable trust

Accelerate innovation

Unique Fujitsu advanced technologies and broader cloud services drive organizational transformation and sustainable development. Our Hybrid IT gives you flexible, scalable, and automated services to accelerate your time-to-market while reducing IT costs. This includes our quantum-inspired Digital Annealer, AI, High Performance Computing (HPC), and more.
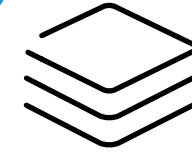
Fujitsu's Computing-as-a-Service (CaaS) provides affordable access to world-leading technologies, empowering businesses to safely and securely harness their data, as well as maximize their IT ecosystem's potential. It's supported by the supercomputer Fugaku, developed with RIKEN, which can be used as an R&D platform for pursuing research into AI, big data analysis and other fields that will contribute to societal goals.

Optimize operations

Optimizing operations is vital in today's digital world, where connectivity and efficiency are key. Fujitsu Uvance offers automated solutions and expertise for performance-optimized, cost-effective IT infrastructure. Working with Fujitsu enables superior business performance through best-of-breed technologies.

Our sustainability transformation and monitoring services continuously monitor environmental impact and idle resources across IT systems. Embracing Web 3.0 technologies, automation, and orchestration allows the skilled workforce to free up time so they can focus on business challenges. Fujitsu Cloud Managed Service (FCMS) provides automation and orchestration and uses Springboard™ to support work models like DevSecOps, enhancing staff wellbeing by eliminating mundane tasks and promoting valuable employee engagement.

Build sustainable trust

Successful organizations earn and maintain trust through strong IT security and a zero-trust approach. Secure by design, our optimized IT and OT infrastructure protects data and systems, while cloud-based automation reduces errors and enhances safety. This allows businesses to focus on growth, directing skilled staff towards key issues.

Trust is also vital for sustainability reporting, protecting against reputational damage. Due to non-standard and often misleading sustainability measurements, immutability and data trust are essential. Combining cloud providers' sustainability offerings with Fujitsu solutions like Data e-TRUST, organizations can build trusted platforms for evidence-based sustainability reporting and insights.

Helping customers contribute to a sustainable and productive world

Sustainability goals are key factors that organizations must consider when developing and evolving their strategy. Fujitsu Uvance Hybrid IT can play a significant role in helping companies meet these goals.

Sustainable environment

Sustainable economic growth

Sustainable wellbeing

Sustainable environment

The increasing reliance on computing services, whether cloud-based, on-premises or hybrid, presents a significant challenge for environmental sustainability. Growing technology usage contributes to the exacerbation of global climate change. It is of utmost importance to prioritize the management of carbon emissions, and Fujitsu Uvance is leading the way by supporting customers to install well governed cloud management practices.

With most organizations becoming increasingly data-driven, there is need for diverse and advanced computing technologies that can address increasingly complex challenges. This creates an enormous demand for computational heavy ML/AI workloads, which in turn increases the organization's data and carbon footprints. To address this challenge, Fujitsu CaaS provides customers access to the fastest computer and industry standard processing power to help IT drive sustainability in the business.

Cloud services and migration to cloud, which enable access to shared resources, and a circular economic model, which involves resources being used where they are needed and any unused capacity then being recycled by cloud providers for other customers, all help to drive energy efficiency for IT services. Economies of scale give cloud providers a more efficient carbon footprint. We support organizations to select workload placements on carbon-neutral cloud services or use our own carbon-neutral cloud services. Fujitsu Uvance services empower businesses to optimize their digital footprint through thoughtfully designed governance. Enhanced observability ensures optimal system architecture, resulting in efficient resource utilization. Scaling resources up and down and adapting resource consumption to actual processing requirements helps to improve environmental performance. Additionally, our forthcoming FinOps solutions enable clients to minimize their computing footprint, ultimately reducing cost of delivery and their carbon consumption, promoting a more sustainable future.

Continuous cloud optimization, integral to cloud management, monitors resource usage and energy consumption across clouds. Automation strategies support workflows, implementing recommendations for maximizing energy budgets. By initially measuring carbon footprints, organizations can start planning how to reduce carbon-related metrics. Adjusting computing resources and consumption according to processing requirements enhances environmental performance.

Sustainable economic growth

Our cloud management services open pathways for rapid and secure resource deployment and simplify management. We support optimizing infrastructure through integration, automation, and orchestration to help organizations achieve their sustainability objectives and maximize their business potential. Our solutions provide a more reliable and consistent approach to governance, compliance, while minimizing the environmental impact of operations in supporting your sustainable environment goals.

As organizations accelerate their digital growth and rapidly expand their cloud operations, fundamental safeguards can often be overlooked. This neglect can result in non-compliance with established policies, compromised quality, and the emergence of security vulnerabilities, ultimately rendering growth unsustainable.

Fujitsu's cloud management and security solutions equip clients with the tools to establish compliance and security from the outset, ensuring a smooth and confident scaling of operations without compromising quality control or leaving them vulnerable to security breaches.

The manufacturing industry, for example, is the [most targeted sector for cyber attacks](#) worldwide. It is crucial that growth in manufacturing capabilities does not expose businesses to the risk of a data breach, as this is not a sustainable approach. Securing both traditional IT and operational technology is vital.

Sustainable wellbeing

Organizations must prioritize building trust in their products and services, necessitating scalable, agile, and sustainable infrastructure that minimizes risk, bolsters resilience, and fosters innovation and operational efficiency. Robust IT security, including emerging models such as zero-trust, is crucial for securing infrastructure and data. Fujitsu helps customers work confidently, enhancing customer experience and trust, while navigating complex end-to-end security challenges across traditional IT systems and operational technologies.

Our Data e-TRUST services facilitate secure information exchange across organizational boundaries, enabling innovative business models and inter-industry collaboration. Fujitsu Uvance Hybrid IT supports compliance programs, critical incident and systemic risk management, and proactive, predictive management of security incidents through effective IT security. Increasingly, AI and machine learning engines will be employed to analyze vast data lakes, necessitating strict governance to ensure data quality, availability, and authorized access. This underscores the importance of Hybrid IT's infrastructure and governance capabilities in fostering trust and security.

Supporting safety is another concern. Technological advancements, including IoT and Private 5G, promote worker safety in various industries by facilitating autonomous environments and reducing manual interactions. In manufacturing, wearables paired with 5G connectivity enhance safety by providing real-time data on operations, such as temperature and machine performance.

Also, companies can use the deployment of drone fleets to monitor remote sites more effectively than cameras, reducing worker exposure to hard-to-reach locations. Additionally, High Performance Computing (HPC) technology enables flood damage prediction and efficient relief and logistics plans, safeguarding rescue staff and those needing assistance.

Bringing Hybrid IT to life: real-world examples

Aichi Cancer Center accelerates selection of cancer genomic medicine with Fujitsu AI

愛知県がんセンター
Aichi Cancer Center

Aichi Cancer Center Research Institute, based in the Tokai region of Japan, partnered with Fujitsu to develop a system that quickly narrows down candidate drugs for use in targeted cancer genomic therapies. The system uses Fujitsu's AI technology for information extraction and data integration to match candidate drugs with genetic mutations in cancer tissue, reducing the burden on clinicians who previously had to search through vast libraries of medical literature and clinical test results to develop effective therapies. The system provides centralized access to drug information and clinical test data, accelerates the selection of candidate drugs, and improves therapeutic outcomes.

By using Fujitsu's AI technology for information extraction and data integration, available as part of Fujitsu Hybrid IT solution, Aichi Cancer Center Research Institute has been able to accelerate the process of selecting candidate drugs. The system significantly reduces the burden on clinicians, resulting in improved patient outcomes and avoidance of unnecessary treatments.

→ Read customer story

Fujitsu proactively moves England's Environment Agency's flood warning system to the cloud

England's Environment Agency partnered with Fujitsu to modernize its critical Flood Warning System (FWS). The agency needed to migrate the FWS to the cloud to keep up with the latest technology.

Fujitsu, the long-time partner of the agency, proposed and successfully delivered the migration of the FWS to Amazon Web Services (AWS) using Fujitsu Cloud Transformation Services. The move to the cloud had several positive outcomes, including improved service scalability and reliability, reduced time to deploy new changes, enabled innovation and access to cloud-native tools, and enhanced reporting capabilities and data visibility.

Fujitsu's proactive approach to modernizing the FWS has brought added value to the Environment Agency, allowing the organization to better serve its customers.

[Read customer story](#)

Whitbread transitions to Azure Cloud

WHITBREAD

Whitbread, a leading hospitality company in the UK, partnered with Fujitsu to transition from its traditional data center to the cloud. The company engaged Fujitsu to manage the cloud migration, using Fujitsu Springboard™ for Azure as part of the Fujitsu Cloud Managed Service (FCMS).

The cloud migration has several positive outcomes for Whitbread, including better decision making and efficiency through transparent governance, accelerated time to market, and a more environmentally sustainable platform. By partnering with Fujitsu and using Springboard™ for Azure, Whitbread has been able to improve its technology infrastructure and continue to innovate its services to better serve its customers.

→ Read customer story

Co-create with Fujitsu Uvance to build a more connected society

A strong and versatile digital platform is essential to enable organizations to capitalize on new opportunities and stay relevant to the customers and citizens they serve. We believe that our experience in delivering mission critical, enterprise class services to our customers uniquely positions us to help organisations innovate and manage the increasing complexity of delivering business services using Hybrid technologies.

Our Hybrid IT co-creation strategy allows customers to face the future with confidence, offering specialized cloud management, fast networking, and robust computing capabilities, all based on trusted IT security and resilience measures. With Fujitsu Uvance Hybrid IT and our strong end-to-end services we allow organizations to build an ecosystem of innovative services and platforms that serves their bespoke needs, improving efficiency and providing the foundation for sustainable growth.

Our approach is designed to support organizations' innovation, optimized operations and sustainable transformation while ensuring sustainable economic growth, building trust, and wellbeing. By working with Fujitsu, organizations can navigate the complexities of digital transformation, achieve their goals, and contribute to a sustainable society.

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Learn more about how Fujitsu Uvance can address business and societal challenges on <u>our website.</u>

> Or email us at <u>askfujitsu@fujitsu.com</u>
> to be put in touch with one of our experts.