

# Sustainability Transformation for prosperity

What is a digital society, and why do we need it?

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In today's era of digitalization there are more than just economic gains to be had. As businesses use data and digital technologies to upgrade their products and services, they will, of course, unlock new opportunities and revenue streams. But these digital innovations also bring benefits that can greatly improve quality of life for people and their wider communities across the globe.





**Embracing digital transformation is essential for our societal well-being—to foster global prosperity, resilience, and individual happiness.**



Thanks to digital advancements, in just a few clicks we can conveniently manage finances, take control of healthcare plans, contribute to social causes or connect with loved ones, regardless of geographical boundaries. On a broader level, technologies can address global climate challenges and empower marginalized groups to access better career opportunities than ever before. Embracing digital transformation is essential for our societal well-being—to foster global prosperity, resilience, and individual happiness.

As the shift towards a more progressive digital society continues, it is important that we guide its trajectory with a collective sense of purpose. When technology is set on the right course, it can bring benefits to all, rather than widening the divide between winners and losers. It can help us align global prosperity and stability, balance our personal and professional lives, and steer us towards a thriving, resilient future.

So, how can we shape a digital society for generations to come?





# Prosperity with purpose

Fujitsu's definition of a digital society is one that harnesses technology to drive economic growth and personal prosperity, in a way that is equitable and balanced.

The concept of personal prosperity means different things to different people, but all will agree on the importance of a healthy work-life balance. This should be a key feature of a digital society, with technology used to strike a balance between our professional and personal lives. Fujitsu believes that communities based on this principle will enjoy greater resilience, with the strength to adapt and thrive in the face of change.

However, we recognize there are global concerns standing in the way of this ambition. Establishing a digital society requires a concerted effort to bridge the digital divide, maintain security of information, address labor shortages, ensure a positive work environment, assure responsible supply chains, and support ethical artificial intelligence (AI) and information technology (IT).

Beginning this transformative process today will bring tangible benefits in the short term, while paving the way for new innovations that can help steer society towards a more prosperous future. Here, we explore just a few of the opportunities.



# Building sustainable digital supply chains

Supply chain management has changed drastically over the last decade. The everchanging market needs are manufacturers and suppliers to operate at faster speeds than ever before, driving increasingly tight profit margins as they do so. To keep pace with consumer demand they must be able to respond in real time to global shifts, from natural disasters to resource shortages and political conflicts, and the widespread disruption that ensues. Efficiency and flexibility are paramount.

The need for sustainability poses another challenge as companies face intense scrutiny of the environmental impact of supply chains. Consumers and legislators alike are demanding greater accountability from businesses, who are under pressure to be more transparent in their operational processes.







Digital technologies can play a major role in building responsible supply chains that serve the needs of businesses alongside the environment. Blockchain, for example, can enhance traceability by helping businesses to track products and their CO<sub>2</sub> emissions through the supply chain, from the raw material all the way to the consumer.

This transparency significantly improves resource efficiency and supports more sustainable practices.

The visibility that blockchain provides can also guarantee the integrity of products and processes. This tamper-proof technology makes a single, unchangeable record of operational data that is accurate and reliable. This verifies product authenticity which prevents counterfeiting, while also exposing illegal or unethical business practices.



## Shrinking our own carbon footprint

Fujitsu is ensuring we practice what we preach — starting with our own emissions. In partnership with the World Business Council for Sustainable Development, we helped create a [blockchain-based program](#) that enables data capture between multiple businesses in a single supply chain. This pioneering program allowed us to visualize Fujitsu's carbon footprint and identify solutions to real supply chain issues. Going forward, the project will contribute to the standardization of supply chain data-sharing methodologies, making it easier for other companies to follow our example.



# Strengthening resilience to environmental disasters

Digital technology can be a lifeline for businesses preparing for natural disasters, such as hurricanes, floods and wildfires. Sensors connected to the internet of things (IoT) can monitor environmental conditions in real time. When this data is combined with AI, it can be used to create a “digital twin,” which can model different

crisis scenarios and predict their impact, as well as help prepare emergency responses. Civil authorities can use this digital twin to anticipate risks and prepare their emergency response ahead of time, strategically mitigating the danger to populations in areas of impact.





Industrial IoT platforms are also enabling smarter inventory management to streamline relief efforts. Sensors in IoT-connected devices can provide detailed data on factors such as location, temperature, humidity, movement, and handling speed, which enhances resource planning and improves supply chain resilience during and in the aftermath of natural disasters. By keeping people, information and assets connected through periods of disruption, we can maintain critical flows of supplies, even with a reduced workforce.

As the climate crisis escalates, the ability to forecast the timing, scale and impact of natural disasters accurately will become increasingly important to societal well-being. This facility, combined with an intuitive network of resources, will help communities build resilience and save lives in the process.



## Enhancing urban living

IoT technology is also improving the way we interact with urban environments. Fujitsu partnered with Hexagon to develop [Stuttgart's Urban Digital Twin project](#), a framework to analyze IoT sensor data throughout the German city. This digital platform combines Hexagon's visualization tools and IoT framework with Fujitsu's cloud infrastructure to monitor air and water quality, flood level, and parking availability. It allows city leaders to address sustainability, and more specifically urban challenges such as safety and mobility, optimizing their operations for the future.

# Creating safer, happier work environments



Technological advances are also creating value in the professional sphere, both from corporate and individual perspectives. The importance of digitalization came to the fore during the COVID-19 pandemic, when many industries were forced to rely on remote working to a greater degree than ever before. This global disruption prompted an acceleration in adoption of technologies such as cloud computing, data security, video conferencing, and communications tools.



As well as enabling more people to benefit from flexible working arrangements, many companies have since reported increased productivity alongside an uplift in staff mental health. As a bonus, these more positive work environments have allowed people more time to focus on family or community volunteering, creating a healthier work-life balance known as “a virtuous cycle of motivation.”

The evolving role of AI and robotics is also driving a transformative shift in the workplace. Many organizations are harnessing this technology as a tool for business growth, automating mundane or dangerous tasks while leaving safer, higher-skilled and more fulfilling tasks to human workers. This can boost quality of life and job satisfaction for staff, while

optimizing overall productivity, driving cost-saving efficiencies, and supporting workforces that are struggling with labor shortages.

However, despite the positive potential of AI and robotics, a human-led approach is essential. If AI models are opaque or untrustworthy, we risk introducing bias or errors into critical processes. Before deploying these technologies, businesses must establish ethically sound frameworks to guide their use, ensuring that humans maintain stewardship and make all non-routine judgements.



## Advancing an era of automation

As more industries move towards automation, it is important that businesses establish a strong foundation to reduce its risk. However, many may lack the expertise. Fujitsu is helping organizations take the first steps towards robotic processing automation (RPA) with our [Industrialized RPA Operating Model](#). This provides all the services businesses need to launch and scale RPA, including a dedicated operations center offering end-to-end support. We also established the Fujitsu Automation Academy to upskill human workforces and equip businesses with the talent they need to extract full value from automation.

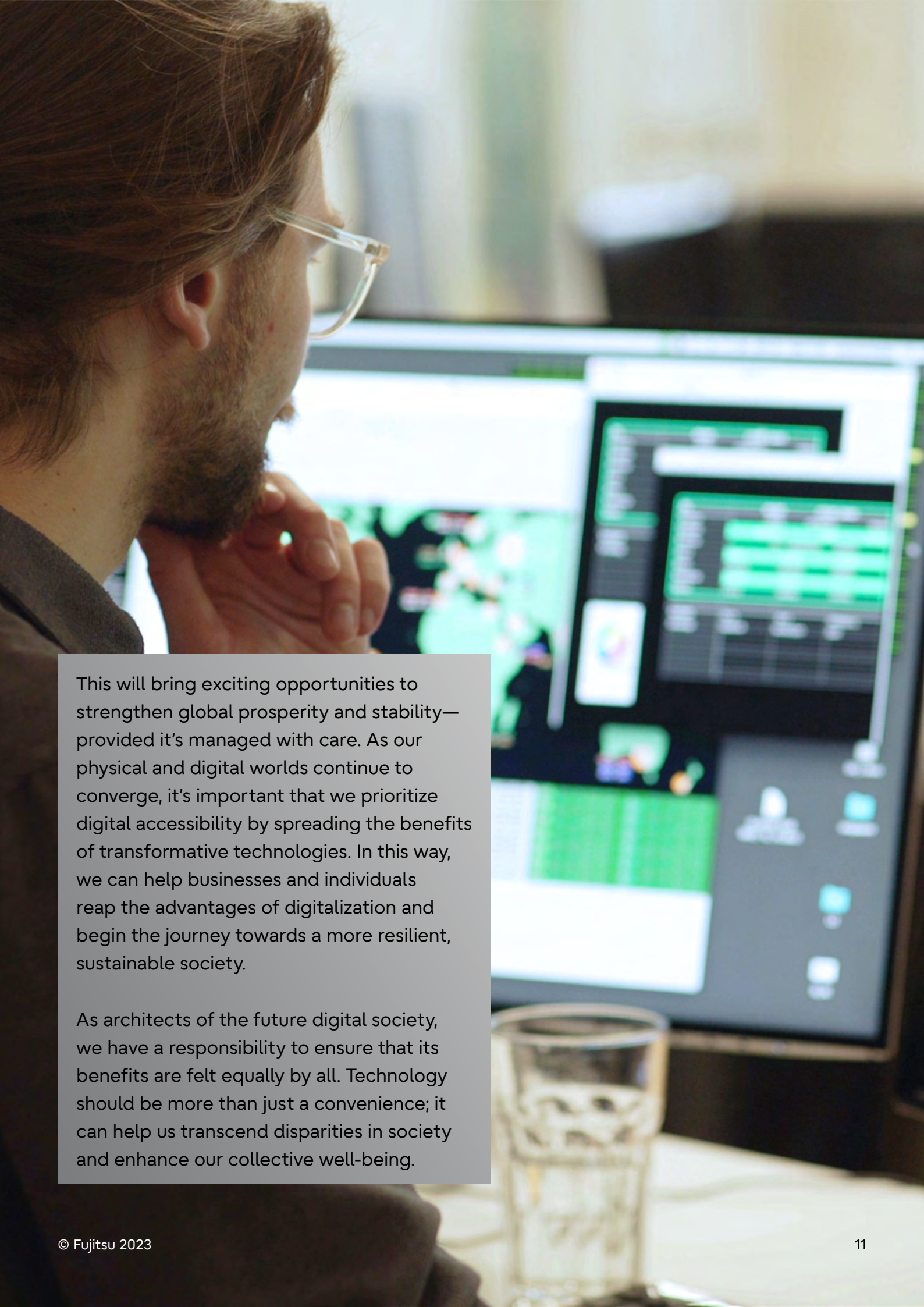
# Mapping the future

The coming decade will be defined by a number of transformative digital trends. In particular, we expect data use to intensify as isolated data sets are integrated into wider networks. As this happens, technologies such as the metaverse, Web3, 6G and digital twins will take center-stage.



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This will bring exciting opportunities to strengthen global prosperity and stability—provided it's managed with care. As our physical and digital worlds continue to converge, it's important that we prioritize digital accessibility by spreading the benefits of transformative technologies. In this way, we can help businesses and individuals reap the advantages of digitalization and begin the journey towards a more resilient, sustainable society.

As architects of the future digital society, we have a responsibility to ensure that its benefits are felt equally by all. Technology should be more than just a convenience; it can help us transcend disparities in society and enhance our collective well-being.





# Key takeaways

1. To support global prosperity through your organization's Sustainability Transformation, start by reviewing your IT assets. Build a plan for how you can integrate robust, explainable AI into your processes and business model. Machine learning takes many forms—explore the tools that best fit your organization, and take advantage of the insights they can provide.
2. Next, consider how you can use technology to improve quality of life for your own staff. Evaluate how you can use technologies such as robotics and automation to enhance the skills of your workforce and improve their job satisfaction. Your technology investments should bring benefits to your people, not just your profits.
3. Finally, audit your current supply chain for inefficiencies, and explore technological solutions, such as blockchain, to increase transparency and sustainability. Your corporate responsibility doesn't start and end with your own company—you must consider your broader impact across the full value chain.





**Find out more about how your organization can leverage digital technologies that bring global prosperity.**



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Shunichi Ko began his journey with Fujitsu Limited in 1991. Within the Electronic Device Division, he played a pivotal role in the global standardization of automotive networks, including CAN, LIN, FlexRay, and the automotive OS (AUTOSAR). He also contributed significantly to functional safety. From 2012 onwards, Ko has been at the forefront of Mobility PF/Digital Transportation and Trusted Society initiatives, addressing the market's pivot towards IoT and connected vehicles. He assumed his present role in April 2023.

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