Fujitsu uvance

Introduction to Sustainable Manufacturing:

Navigating a transforming landscape

Preface

"With the forces of rapid technological advancements and significant generational changes well in motion, the manufacturing sector is at the forefront of a remarkable transformation. These changes are not just reshaping the way we manufacture, but also redefining the essence of efficiency and innovation in the industry.

At Fujitsu, we are actively engaged in this exciting evolution, driving forward with a focus on making manufacturing processes smarter and more efficient. Our approach, reflected in the Fujitsu Uvance ethos, is about pioneering new ways of working that enhance efficiency and offer a competitive edge. We're aligning with the broader goals and frameworks driving sustainability, such as those set by the United Nations, to not just comply with future regulations but to lead the way in redefining them.

Our vision is clear – to transform manufacturing into a place where efficiency is synonymous with responsible and sustainable practices.

We're not just adhering to the sustainability trend; we're integrating it with a focus on operational excellence. This intersection is where true innovation lies – in creating manufacturing systems that benefit both the planet and business growth.

In this guide, we'll take you through the pillars of Sustainable Manufacturing as envisioned by Fujitsu Uvance. You'll discover cutting-edge technologies and strategic approaches that are reshaping manufacturing. Our goal is to offer insights that go beyond addressing current challenges and extend to anticipating the expectations of tomorrow."

Johan Carstens

Head of Smart Manufacturing, Fujitsu North America

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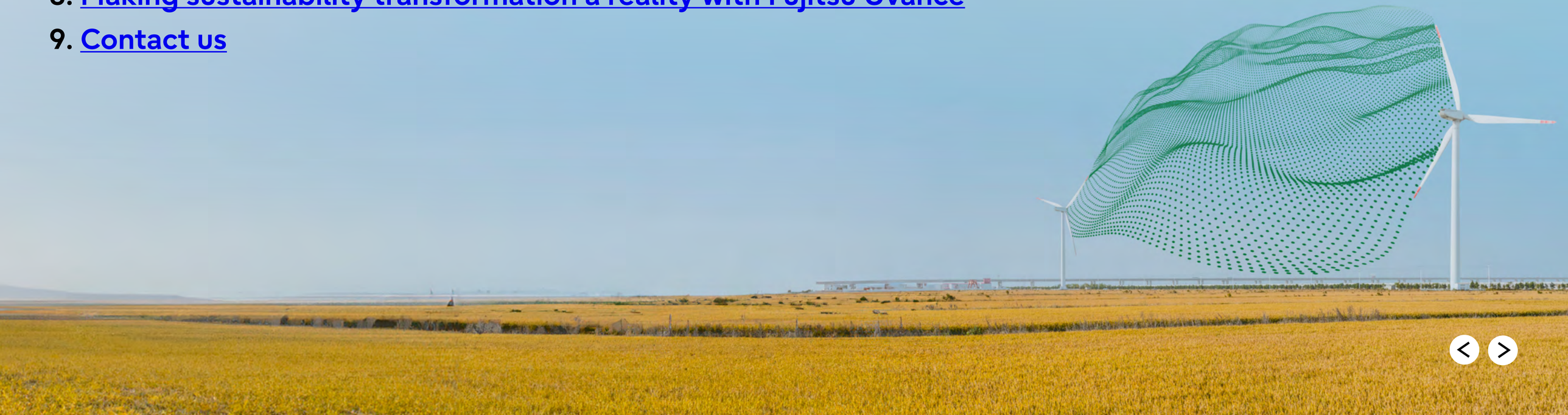

1. The evolution of Sustainable Manufacturing

1972 • Club of Rome Report

1987 • Brundtland Report

1992 • Earth Summit

2000 • Millennium Development Goals (MDGs)

2012 • Rio+20

2015 • Paris Agreement & UN Sustainable Development Goals (SDGs)

2020s • Circular Economy and Industry 4.0

1972 • **Club of Rome Report**

The Club of Rome, a group of global thinkers, published “The Limits to Growth,” a report that warned against the unsustainable use of resources.

This report was seminal in raising awareness about the environmental limits to industrial growth.

1987 • **B**

Rio+20

2015 • **Paris Agreement & UN Sustainable Development Goals (SDGs)**

2020s • **Circular Economy and Industry 4.0**

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2020s • Circular Economy and Industry 4.0

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The World Commission on Environment and Development, led by Gro Harlem Brundtland, released the report “Our Common Future.” It popularized the term “sustainable development” and emphasized that economic development should meet the needs of the present without compromising the ability of future generations to meet their own needs.

1972 • Club of Rome Report

1987 • Brundtland Report

1992 • Earth Summit

2000 •

Circular Economy and Industry 4.0

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The United Nations Conference on Environment and Development, also known as the Earth Summit, was held in Rio de Janeiro. It led to key documents like Agenda 21, a comprehensive plan of action for global sustainability, and conventions on biodiversity and climate change of future generations to meet their own needs.

1972 • Club of Rome Report

1987 • Brundtland Report

1992 • Earth Summit

2000 • **Millennium Development Goals (MDGs)**

2012 • R

The United Nations Millennium Summit introduced the MDGs, aiming to address various global challenges, including environmental sustainability, by 2015.

1972 • Club
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ls (MDGs)

2012 • Rio+20

The United Nations Conference on Sustainable Development, known as Rio+20, marked the 20th anniversary of the first Earth Summit. It focused on green economy and institutional frameworks for sustainable development.

2015 • Paris Agreement & UN Sustainable Development Goals (SDGs)

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Paris Agreement: A landmark agreement within the United Nations Framework Convention on Climate Change (UNFCCC), addressing climate change by setting global goals to limit global warming. It has significant implications for manufacturing industries in terms of reducing carbon emissions.

UN Sustainable Development Goals (SDGs): The United Nations adopted the 2030 Agenda for Sustainable Development, introducing 17 SDGs. These goals offer a blueprint for peace and prosperity for people and the planet, now and into the future, with several directly impacting manufacturing practices.

1972 • Club of Rome Report

1987 • Brundtland Report

1992 • Earth

2020s • Circular Economy and Industry 4.0

Recent years have seen a growing emphasis on the circular economy, focusing on recycling and reusing materials to minimize waste. Additionally, the rise of Industry 4.0, with its focus on smart technologies and efficiency, is increasingly aligned with sustainable manufacturing practices.

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ls (SDGs)

2. Key challenges facing modern manufacturers

Evolving customer expectations

Disparate systems

Aligning business strategy with workforce and technology

Global economic and geopolitical uncertainty

Evolving customer expectations

Demand for speed, visibility, and flexibility

A report by FICTIV indicates that **97% of respondents observe evolving customer demands**, emphasizing the need for manufacturers to understand and adapt to these changing wants and needs.

Source: https://qxglobalgroup.com/10-manufacturing-statistics-that-you-cannot-ignore-in-2023-beyond/#:~:text=A%20%E3%80%9065%E2%80%A0report%E2%80%A0www,their%20changing%20wants%20and%20needs

Evolving customer expectations

Disparate systems

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Global economic and geopolitical uncertainty

Disparate systems

Lack of alignment between IT and the business

A prevalent issue in many companies is the disconnect between IT and business operations. This misalignment results in diverging priorities and unclear expectations, ultimately leading to stagnant information flow between departments. Such a disconnect hinders internal collaboration and impairs the ability to make clear, data-driven decisions. This is a critical challenge as it can affect the business's capacity to stay competitive and profitable in a rapidly changing market environment.

Lack of visibility

The need for accurate and real-time visibility is critical for businesses to function effectively and make informed decisions. **However, 76% of respondents in an industry study acknowledge that data silos impede cross-departmental exchanges, affecting this visibility**. **Moreover, 74% view this as a competitive disadvantage**, highlighting that uncertainty around responsibility for maintaining visibility leads to points of failure and vulnerabilities within the organization. This lack of clarity impedes the ability of businesses to respond dynamically to market changes and challenges.

Corporate culture and technical challenges

Two out of three respondents state that corporate culture favors the emergence of data silos, and **71% identify the lack of interfaces as a barrier to connecting data silos.**

Source: https://www.xplm.com/news/press/industry-study-2023-companies-cannot-control-their-data-silos/

Evolving customer expectations

Disparate systems

Aligning business strategy with workforce and technology

Global economic and geopolitical uncertainty

Aligning business strategy with workforce and technological evolution

Inability to take cost out of the business

The unclear expectations and priorities between IT and business departments lead to uncertainty regarding which costs add value and which do not. This misalignment results in expenditures that may not meet the essential needs of the business. In the context of manufacturing, this can lead to inefficient resource allocation and hinder the ability to optimize operations, ultimately affecting the bottom line and reducing competitiveness in a market where lean and cost-effective practices are increasingly vital.

Labor shortage and skills gap

The manufacturing sector lost about 1.4 million jobs during the COVID-19 pandemic and faces a potential labor crisis with a projected 2.1 million unfulfilled jobs by 2030 due to a lack of skilled labor.

Diversity, equity, and inclusion initiatives

DEI initiatives are increasingly influencing workforce trends and can help manufacturers fill job vacancies.

Workforce diversity trends

The number of workers in each race category in manufacturing steadily increased from 2014 until 2020, indicating a diversifying workforce.

An inability to transition to new business models

Disjointed systems often stifle the ability to be agile and responsive. With new technology developments made daily, a business that can't act on or foresee change can no longer meet customer expectations or stay competitive.

Source: https://www.census.gov/library/stories/2023/09/manufacturing-faces-labor-shortage.html#:~:text=About%201,MI

Evolving customer expectations

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Global economic and geopolitical uncertainty

Global economic and geopolitical uncertainty

Fragile supply chains

Supply chains are impacted on a daily basis, particularly in times of instability. The ability of a business to quickly untangle each new complication and respond to emerging opportunities is increasingly a key factor in its survival. Today, supply chains are being affected by a range of factors including geopolitical conflicts, inflation, economic recession, and climate change events. These factors influence the flow of goods, leading to port holdups, reduced container and ocean freight availability, and surging prices.

Geopolitical tensions

More than **6 out of 10** global organizations expect that geopolitical instability may detrimentally impact their supply chains in the next three years.

Cybersecurity

Almost half of global organizations consider cybersecurity as a significant operational challenge for their supply chains over the next three years.

Raw material costs

71% of global companies highlight raw material costs as their number one supply chain threat for 2023.

Source: https://kpmg.com/xx/en/home/insights/2022/12/the-supply-chain-trends-shaking-up-2023.html

Evolving customer expectations

Disparate systems

Aligning business strategy with workforce and technology

Global economic and geopolitical uncertainty

3. The urgency of sustainability transformation

We're witnessing a pivotal shift in global consciousness, where the demand for environmentally responsible practices is not just a preference but an expectation. This shift is echoed across various sectors of society – from customers and regulators to workers and communities. They all seek a future where operations are not just efficient but also mindful of their ecological impact.

The need for such transformation is driven by the understanding that the resources we depend on are finite. As industries expand and populations grow, the strain on these resources intensifies. Thus, the push for greater efficiency isn't just about cutting costs – it's about optimizing the use of what we have in a way that preserves our planet for future generations. It's about being smart and sustainable in every step of our operations.

Yet, as we navigate this journey towards sustainable practices, the evolving regulatory landscape presents its own set of challenges. Governments worldwide are waking up to the urgency of environmental protection, setting out stricter regulations and guidelines. Non-compliance is no longer a minor hiccup but a serious risk that can lead to hefty fines and, perhaps more damagingly, a tarnished reputation. The ripple effect of such a scenario can be far-reaching, affecting customer loyalty, investor confidence, and the overall brand image.

4. The role of digital transformation

Digital transformation offers a pathway to overcome these issues and transition toward more autonomous, AI-driven operations, including the emerging concept of the industrial metaverse.

By embracing DX, manufacturers can:

- Move towards a more sustainable, efficient, and future-ready manufacturing model.
- Alleviate risks associated with operational inefficiencies and data silos.
- Gain the visibility and transparency necessary to take a proactive stance on carbon usage and keep all stakeholders – including regulators – informed on compliance and improvement.
- Adapt to changing market demands and workforce dynamics.

5. Fujitsu vision for Sustainable Manufacturing

Fujitsu approach to Sustainable Manufacturing links innovation, sustainability, and human-centricity, creating a path towards a future where manufacturing is not only productive but also fundamentally viable for long-term growth.

Envisioning a new era of productivity and sustainable operations

- We view sustainable manufacturing as an opportunity to boost productivity while simultaneously nurturing the planet, and offering new unforeseen business value. Our vision encompasses leveraging advanced technologies to optimize resource usage and reduce environmental impact.
- We focus on adding strategic agility to manufacturing processes, enabling organizations to navigate uncertainties and adapt to rapidly changing market and environmental conditions.

Placing people at the heart of manufacturing

- Central to our vision is the emphasis on people enablement. We believe in empowering the workforce with the skills and tools needed to thrive in this new era, creating an environment where innovation flourishes.
- By emphasizing human-centric practices, we aim to create a more engaging, fulfilling, and sustainable work culture within the manufacturing sector.

Aligning with the United Nations' Sustainable Development Goals (SDGs)

- Fujitsu Uvance approach is closely aligned with the UN's SDGs. Our strategies and solutions in sustainable manufacturing actively contribute to achieving these global goals, focusing on responsible consumption, meaningful work, innovation, economic growth and industry infrastructure.
- We underscore the importance of aligning manufacturing practices with broader global initiatives for sustainable development.

The role of collaborative ecosystems

- In our pursuit of sustainable manufacturing, we recognize the crucial role of collaborative ecosystems. This involves bringing together governments, businesses, and individuals to create a synergistic approach to sustainability.
- We advocate for cross-industry collaboration and public-private partnerships to drive high-impact improvements across the manufacturing sector.

6. Aligning with the United Nations' Sustainable Development Goals (SDGs)

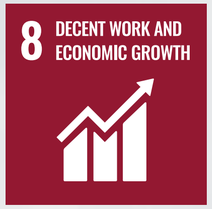
Since their introduction in 2015, the SDGs have offered a set of principles to guide how industries such as manufacturing can balance business goals with a positive societal impact. The SDGs most relevant to the manufacturing industry are:

- SDG 9: Industry, innovation, and infrastructure
- SDG 8: Decent work and economic growth
- SDG 12: Responsible consumption and production

SDG 9: Industry, innovation, and infrastructure

Focuses on building resilient infrastructure, promoting inclusive and sustainable industrialization, and fostering innovation.

Encourages retrofitting industries and upgrading infrastructure to be sustainable, with increased resource-use efficiency and adoption of clean technologies.



SDG 8: Decent work and economic growth

Emphasizes promoting sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.

It underlines the importance of preserving the environment to support sustainable economic growth. The natural environment plays a crucial role in providing resources and raw materials necessary for the production of goods and services.

Sustainable economic growth is vital for creating new and improved employment opportunities, offering greater economic security, and reducing wage gaps, especially in least developed and developing countries.

SDG 12: Responsible consumption and production

Aims to ensure sustainable consumption and production patterns.

Advocates for a circular economy approach, emphasizing the design of products and materials for reuse, remanufacturing, recycling, or recovery to minimize waste and greenhouse gas emissions.

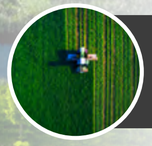
7. A journey through Fujitsu Sustainable Manufacturing pillars

1. Enterprise Visualization

2. People Enablement

3. Resilient Supply Chain

4. Value Chain Optimization



5. Carbon Neutrality

Revealing the digital fabric of manufacturing

Enterprise Visualization highlights the intricate pathways of data and decision-making processes in the manufacturing landscape. At its core, this pillar is about transforming raw, complex data into clear, actionable insights, enabling manufacturers to navigate the ever-evolving challenges of the industry with precision and foresight.

Holistic data analysis

Utilizing advanced technologies like AI and machine learning to interpret vast streams of data, Enterprise Visualization provides a comprehensive view of manufacturing operations. From real-time metrics on the shop floor to long-term strategic planning data, this pillar ensures that every piece of information is captured, analyzed, and made accessible for strategic decision-making.

Real-time decision making

In a sector where every second counts, Enterprise Visualization enables manufacturers to make swift, informed decisions. This agility is crucial in responding to dynamic market demands, managing supply chain fluctuations, and optimizing production schedules.

Integration of legacy and digital systems

Bridging the gap between traditional manufacturing systems and digital innovations, this pillar facilitates the seamless integration of legacy equipment with modern IoT devices and platforms. This integration ensures that manufacturers can leverage their existing infrastructure while embracing new technologies.

Visualization tools and dashboards

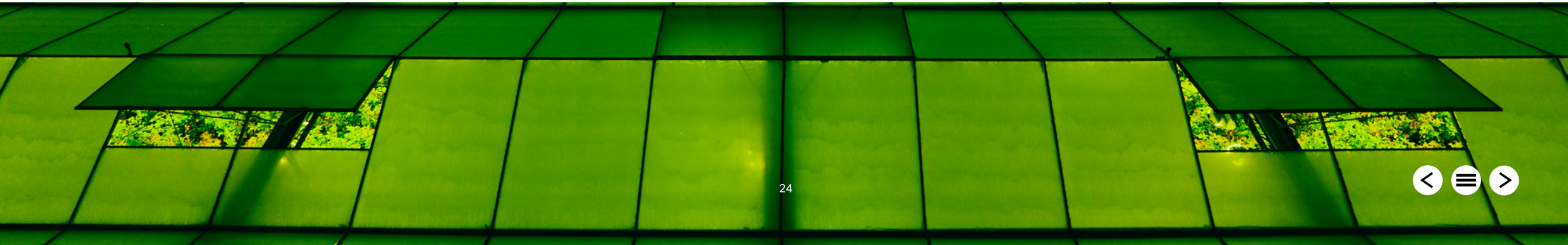
Through user-friendly interfaces, Enterprise Visualization presents complex data in an easily digestible format. These intuitive dashboards are designed to cater to varying levels of technical expertise, ensuring that insights are accessible to all stakeholders within the organization.

Predictive insights and proactive management

Beyond mere data presentation, this pillar empowers manufacturers with predictive analytics. These insights enable proactive management of potential issues, minimizing downtimes and enhancing overall operational efficiency.

Sustainability and efficiency

By providing clear insights into operations, Enterprise Visualization aids in identifying areas of waste and inefficiency. This not only drives operational excellence but also supports manufacturers in their journey towards sustainability and reduced environmental impact.



Case studies

Quantum-inspired computing optimizes Bayer supply chain

Bayer tested Fujitsu quantum-inspired Digital Annealer to optimize complex seed production planning and materials campaign scheduling. The Digital Annealer quickly solved previously unsolvable problems, enabling Bayer to create more robust supply chains and boost crop yields for farmers.

Hunter Douglas leads the Industry 4.0 transformation

Hunter Douglas urgently needed a new partner with the expertise to rapidly deploy SAP Manufacturing Execution and SAP MII at its Mexico plant and roll out to its other North American facilities. On SAP's recommendation, it chose our solutions to drive plant stabilization as it was affecting the plant's capabilities for order fulfillment. The results yielded complete visibility of inventory across various businesses, enhanced on-time delivery, and increased stability, ensuring better availability. Additionally, there was access to precise, real-time data and reports.

US Steel Manufacturer leapfrogs the competition with digital transformation

Our consulting-led approach and methodologies aligned and focused our stakeholders with a clear digital transformation vision and strategy. The strategy focused on operational efficiencies, cost savings, reduced technical debt, and accelerated deployment of new capabilities. **Using a data-driven approach, we accelerated our planning and execution by more than 30% and generated over $20M in IT savings.** This result led to accelerated value realization aligned with our corporate goals.

Empowering the heart of manufacturing

People Enablement focuses on harnessing the full potential of human capital within the manufacturing sector. It recognizes that the true power of manufacturing lies not just in machines and technology, but in the people who drive these processes. This pillar is dedicated to equipping manufacturing professionals with the skills, tools, and environment they need to excel in an increasingly digital landscape.

Workforce upskilling and reskilling

Understanding that the digital transformation in manufacturing requires new skills, People Enablement emphasizes continuous learning and development. This involves providing training and resources for existing employees to adapt to new technologies and processes.

Human-Centric Design (HXD) in solutions

Fujitsu approaches manufacturing solutions with a focus on the end-user experience. By employing Human-Centric Design principles, solutions are tailored to enhance user interaction, making technology more intuitive and accessible.

Collaborative work environments

Encouraging a culture of collaboration, this pillar fosters environments where ideas can be shared and innovation thrives. It values diverse perspectives and collective problem-solving, crucial for driving sustainable manufacturing practices.

Employee wellbeing and engagement

Recognizing that employee satisfaction is key to productivity and innovation, People Enablement prioritizes creating a safe, engaging, and fulfilling work environment. This involves addressing ergonomic needs, providing opportunities for career growth, and ensuring a healthy work-life balance.

Leveraging technology for human benefit

While automation and AI are integral to modern manufacturing, People Enablement ensures that these technologies augment human capabilities rather than replace them. It's about using technology to make jobs easier, safer, and more productive.

Cultural transformation

Beyond technological changes, this pillar also involves a shift in organizational culture. It advocates for a mindset that values continuous improvement, openness to change, and active participation in the digital transformation journey.

Case study

Aerospace leader utilizes AI-powered defect recognition to boost quality control productivity

A leading global aerospace engineering group sought to improve the efficiency and consistency of its aircraft wing inspections while retaining its rigorous quality standards. The company deployed an artificial intelligence-enabled defect recognition system to support its team of certified inspectors performing non-destructive evaluations on aircraft wings.

The AI system processes complex multi-dimensional data captured from ultrasound sensors to identify anomalies and defects. Working in tandem with inspectors, **the solution delivers a 50% increase in throughput as more parts are inspected concurrently.** The AI system also brings greater uniformity to the inspection process compared to reliance purely on human judgement.

Additionally, the digitized report culminating from the new quality control process allows for root cause analysis of recurring issues. This provides the potential to optimize manufacturing processes and drive further quality gains. The aerospace firm is also developing new service offerings around its digital inspection data to bring further value to customers.

Bringing greater stability in a dynamic world

The Resilient Supply Chain pillar is dedicated to creating supply chains that are not only efficient and agile but also robust enough to withstand the unpredictable nature of today's global market. It emphasizes the need for supply chains to be prepared for and quickly recover from various disruptions, be they environmental, geopolitical, or technological.

Risk assessment and management

Understanding that the digital transformation in manufacturing requires new skills, People Enablement emphasizes continuous learning and development. This involves providing training and resources for existing employees to adapt to new technologies and processes.

Real-time data and predictive analytics

Fujitsu approaches manufacturing solutions with a focus on the end-user experience. By employing Human-Centric Design principles, solutions are tailored to enhance user interaction, making technology more intuitive and accessible.

Flexible and adaptive networks

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Global and local resilience

Ensuring supply chain strategies are robust both on a global scale and at a local level, addressing regional specificities and compliance requirements.

Collaborative ecosystems

Recognizing that employee satisfaction is key to productivity and innovation, People Enablement prioritizes creating a safe, engaging, and fulfilling work environment. This involves addressing ergonomic needs, providing opportunities for career growth, and ensuring a healthy work-life balance.

Sustainability integration

While automation and AI are integral to modern manufacturing, People Enablement ensures that these technologies augment human capabilities rather than replace them. It's about using technology to make jobs easier, safer, and more productive.

Technology-driven solutions

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Case studies

Toll Group improves reporting capabilities with modern data platform

Toll Group needed to modernize its legacy data platforms which were difficult to access and lacked reporting capabilities. They partnered with us to migrate their data to Microsoft Azure cloud, build a new self-serve data platform, and create bespoke reporting solutions.

Hamburg Port addresses sustainability challenges with quantum-inspired computing

The Hamburg Port Authority and Fujitsu demonstrated how quantum-inspired algorithms optimized traffic flows, **reducing congestion and CO_2 emissions up to 9%.** Our Digital Annealer accelerated logistics, enabling faster ship turnarounds and truck movements within the port's confined footprint. This world-first solution increased supply chain capacity and sustainability.

Maximizing efficiency and innovation

Value Chain Optimization focuses on enhancing the entire value chain of manufacturing processes. This approach aims to refine and streamline operations from raw material sourcing to final product delivery, ensuring optimal use of resources, minimizing waste, and generating greater value for all stakeholders involved.

Efficient resource management

Efficient utilization and management of resources throughout the manufacturing process to reduce waste and increase productivity.

Integrated process improvement

Connecting disparate stages of the manufacturing cycle, from design and production to logistics and customer delivery, for cohesive and streamlined operations.

Data-driven decision making

Employing advanced analytics to provide deep insights into every aspect of the value chain, enabling strategic, data-backed decisions.

Collaborative partnerships

Building strong relationships with suppliers, distributors, and other partners to optimize each stage of the value chain and enhance overall efficiency.

Innovative practices

Encouraging innovation in product development, manufacturing techniques, and material usage to stay ahead in a competitive market.

Sustainability and ethical practices

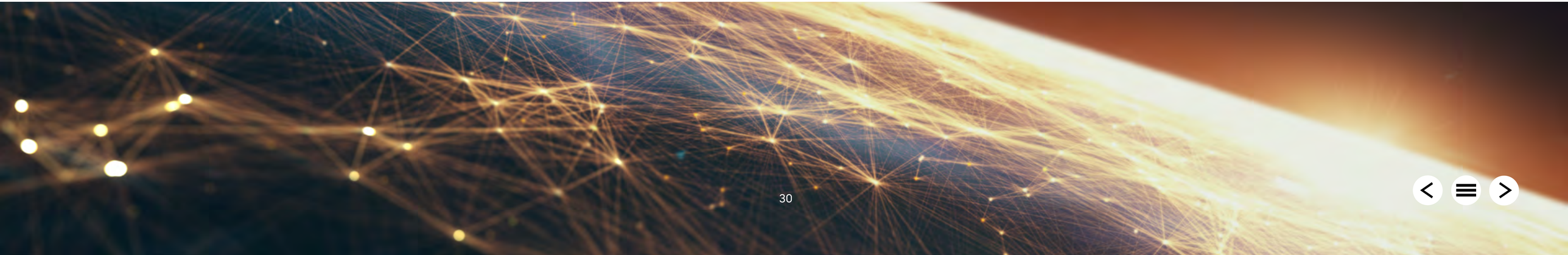
Incorporating sustainable and ethical practices into the value chain, from sourcing environmentally friendly materials to ensuring fair labor practices.

Technological integration

Leveraging cutting-edge technology like AI, IoT, and blockchain to automate processes, improve tracking, and enhance quality control.

Circular economy

Promoting the concept of a circular economy by focusing on recycling, remanufacturing, and reusing materials to minimize environmental impact and create sustainable business models.



Case study

Beam Suntory optimizes bourbon aging with IoT

Beam Suntory leveraged GlobeRanger iMotion™ IoT platform to monitor the aging process of bourbon within each barrel. Beyond streamlining paperwork, this advanced technology empowers Beam Suntory to detect and intervene in real-time evaporation occurrences. This proactive approach drastically reduces bourbon waste, ensures optimal aging, and enhances overall output. As an added advantage, consumers can gain insight into individual barrel histories, reinforcing transparency and engagement.

Committing to a sustainable future

Carbon Neutrality reflects a deep commitment to significantly reducing the environmental impact of manufacturing processes. This pillar emphasizes the importance of reducing carbon emissions across all manufacturing activities, aligning with global efforts to combat climate change and fostering a sustainable, greener manufacturing future.

Emission reduction initiatives

Implementing strategies and technologies to significantly cut down carbon emissions in manufacturing processes, from energy use to logistics.

Sustainable energy utilization

Transitioning to renewable energy sources and enhancing energy efficiency in manufacturing facilities to lower carbon footprints.

Resource optimization

Minimizing waste and maximizing the use of sustainable materials to reduce the overall environmental impact of manufacturing operations.

Environmental impact analysis

Continuously monitoring and analyzing the environmental impact of manufacturing activities to identify areas for improvement and implement effective carbon reduction strategies.

Collaborative efforts for sustainability

Partnering with suppliers, customers, and other stakeholders to ensure a unified approach towards carbon neutrality across the value chain.

Awareness and education

Promoting a culture of sustainability within the organization, educating employees about carbon neutrality, and engaging them in environmental initiatives.

Innovative carbon reduction technologies

Exploring and integrating cutting-edge technologies and practices, such as carbon capture and storage, to actively reduce carbon emissions.

Compliance with environmental regulations

Adhering to and exceeding the requirements of environmental regulations and standards, proactively addressing the demands of a regulatory landscape increasingly focused on sustainability.

Case studies

Cleaning London air: Proventia harnesses IoT platform to reduce bus emissions

Proventia is a Finnish company that develops exhaust after-treatment systems to reduce emissions from diesel engines. We have worked with Proventia to implement a real-time cloud analytics platform to monitor the performance of their NOxBUSTER emission reduction systems installed on London buses. By using Fujitsu Event Processing IoT Platform, Proventia gained insights into real-world emissions reductions. This enabled Proventia to verify their technology is decreasing NOx as promised. With our help, Proventia is able to meet tighter air quality standards and develop better retrofit solutions to fight climate change.

Teijin pioneers sustainability with blockchain for material traceability

Teijin and Fujitsu collaboratively launched a blockchain platform to elevate the environmental value and traceability of recycled materials for manufacturers. This platform promises transparent, reliable data on the environmental impact and origin of materials, promoting sustainable, environmentally conscious designs, and contributing to a carbon-neutral future and a circular economy in manufacturing.

8. Making sustainability transformation a reality with Fujitsu Uvance

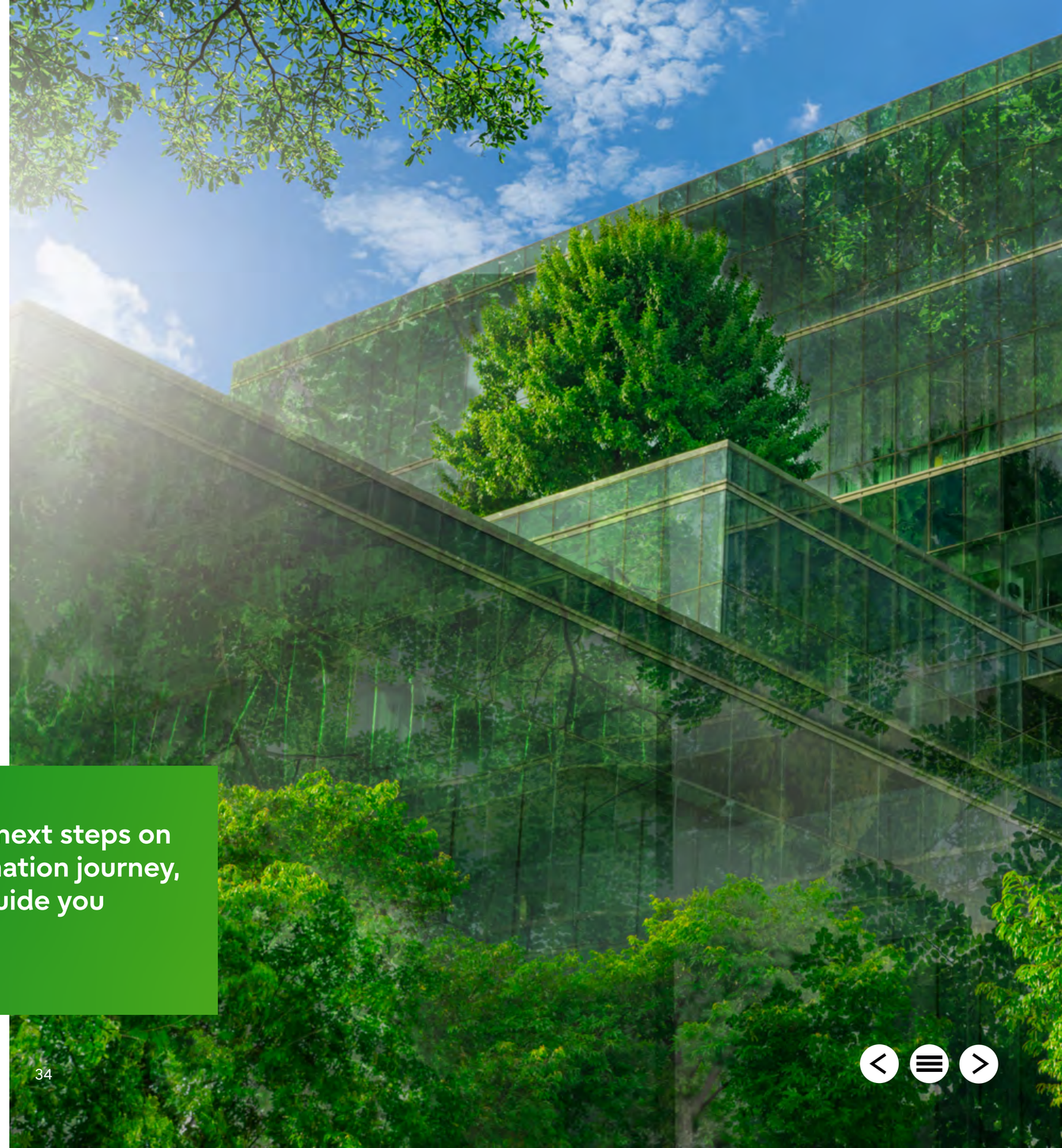
Fujitsu Uvance is more than just a set of solutions; it's a comprehensive approach to Sustainable Manufacturing. Our focus on the five pillars – Enterprise Visualization, People Enablement, Resilient Supply Chain, Value Chain Optimization, and Carbon Neutrality – is designed to support manufacturers in embracing a future where efficiency, innovation, and sustainability are inextricably linked.

The world is at a critical point where the choices we make today will shape our tomorrow. The urgency to act for the planet's future cannot be overstated. This is not just about meeting regulations or adhering to standards – it's about taking proactive steps towards creating a sustainable world where business growth and environmental responsibility coexist harmoniously.

We invite you to join us in this movement towards a sustainable future.

Fill out our contact form

If you're ready to take the next steps on your sustainable transformation journey, Fujitsu Uvance is here to guide you every step of the way.



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Connect with us

At Fujitsu, we believe in co-creating a future that is not only technologically advanced but also sustainable and inclusive. Let’s work together to make this vision a reality.

Fill out our contact form

A Fujitsu expert will reach out to discuss how we can work together to address your unique manufacturing challenges.