





Empowering your most valuable asset: Unlock manufacturing excellence with People Enablement

Putting people at the center

Modern manufacturing is a fusion of technology and human expertise. Workers are transitioning from task executors to informed decision-makers, powered by data and digital solutions. Industry 4.0 – and future iterations – will revolve around people enablement as much as technological advancements.

Manufacturers are rapidly embracing digital solutions, yet it's crucial to remember that their most valuable resource remains the workforce. The manufacturing sector has evolved from a manual labor and repetitive task-based environment into one where human potential and expertise are of paramount importance.

After all, human capital is the lifeblood of any organization, especially in manufacturing. It encompasses knowledge, skills, attributes, and experience, shaping the business's overall health. It is this synergy of technology and human skills that are helping tackle labor shortages and enhancing safety as manufacturers can now leverage the benefits of automation in collaboration with human expertise.

Fujitsu champions business growth that has People Enablement at the center. We are pioneering an approach that celebrates human potential amidst technological revolutions and recognizes that technology enhances efficiency and precision. Yet it's the unique skills, creativity, and adaptability of the workforce that drives prolonged innovation and fosters collaboration.

In this transformative era where technology and human potential converge, Fujitsu's People Enablement is reshaping the role of the person in a manufacturing setting. It's an exciting opportunity where human potential takes center stage in the manufacturing sector's quest for technological excellence, all of which will be covered in this brochure.

The evolving shape of manufacturing

Over recent decades, remarkable technological advancements have reshaped manufacturing. Automation, robotics, data analytics, and the Internet of Things have become indispensable, and ushered in the era of Industry 4.0.

This surge in technology has necessitated a profound transformation in the roles of manufacturing employees. They've evolved from task executors to problem solvers, engaging with complex machinery and data analysis rather than rudimentary and repetitive tasks. This shift towards a more adaptable and skill-focused workforce offers both a challenge and an opportunity.

However, there's a growing disparity between the skills required in this evolving landscape and the expertise of the current workforce. Bridging this gap mandates significant investments in workforce development, including training programs and upskilling initiatives.

Skilled workers adapt, troubleshoot, and optimize processes, while their creativity and problem-solving abilities tackle challenges predicated by accurate and up-to-date analytics. This interplay between people and technology not only boosts efficiency but also promotes sustainability and responsible practices.

Productivity is no longer merely output-driven; it's also measured by innovation and sustainability. Here, collaboration between people and technology is crucial. Embracing new technologies, investing in workforce development, and recognizing the value of human expertise are vital steps towards shaping a future where manufacturing is not only more productive, but also more innovative and sustainable. People enablement is therefore the key to unlocking the full potential of the modern manufacturing sector.



Fujitsu's people-centric approach

Fujitsu's vision for the manufacturing industry is one that puts people at the center of workplace decision-making. We believe the future of manufacturing will be defined by the harmonious integration of people and technology.

Therefore, the focus needs to be on designing technology that empowers rather than replaces individuals. That's why our solutions embrace a human-centric approach, ensuring that teams are equipped with the skills required to excel in modern manufacturing.

The three pillars of Fujitsu's Human-Centric Design



Process

We employ processes that have been systematized as a result of numerous engagements with customers.
Considerations are made based on specific challenges and demands to create processes that lead to more reliable business outcomes and services by gate-checking every time you move on to the next process.



Tools

Fujitsu is making use of our experience in workshops and co-creation activities with customers to develop not only general design thinking tools, but tools that enable us to troubleshoot, think, and collaboratively find better answers.



To ensure smooth communication with our customers, we offer two types of environments for dialogue, discussion, and workshops – the face-to-face and the digital. If preferred, you can use a combination of both environments.

By encouraging a culture that actively engages top talent in decision-making at all organizational levels fosters ownership and responsibility. This human-centric design not only taps into expertise but also nurtures a more agile and responsive organization poised to tackle today's ever-changing business landscape.

We recognize this balance's significance and are dedicated to helping customers prioritize their employees' holistic well-being. Going beyond functional roles to acknowledge and cultivate each employee's value can create a more harmonious and productive work environment, empowering individuals to showcase their creativity and expertise.

This approach not only drives organizational success, but enhances employee satisfaction and overall well-being, ensuring that human ingenuity is complemented, not replaced, and manufacturing remains a career option, rather than a short-term job.

Promoting People Enablement

From leveraging the latest training methodologies to creating platforms for innovation, Fujitsu strategies are designed to help customers ensure that every team member can make impactful contributions to their workplace.

Modern manufacturers face a myriad of challenges, including climate change, workforce dynamics, and geopolitical shifts. However, the integration of cutting-edge technology and innovative solutions provides a pathway to sustainability and enhanced efficiency. Our extensive range of solutions and expertise empowers manufacturers – and their workforce – to thrive.



Al has the power to illuminate invaluable insights. By amalgamating vast datasets and swiftly analyzing them, Al simplifies decision-making while reducing the scope for human error. This technology helps separate signals from noise, guiding manufacturers towards well-informed choices.



IoT offers a synergy between humans and machines that can transform manufacturing. Staff now interact with a variety of wearable devices or machines sensors which visualize industrial processes and facilitate on-the-job accuracy and visibility.



VR and AR pave the way for better hazard perception and accuracy in operations by providing workers with viewable 3D work instructions and information specific to the product and processes, while tailored to the workers' skill level. Through VR-supported layout planning and accurate 3D human models, manufacturers can balance workforce safety and productivity by virtually simulating operations, understanding a decision's impact, and then advising on the best, safest course of action.



Cobots alleviate the cumbersome or physically demanding roles. Augmentation advancements such as the use of exoskeletons or cobots aim to protect employees' health, allowing them to perform tasks safely and enable them to do so with greater confidence.



The Industrial Metaverse is a revolutionary concept whereby through digitally replicating physical assets in real-time, manufacturers can swiftly adapt operations, revolutionizing facility coordination and ensuring seamless production processes. This innovation allows organizations to simulate products, machines, and entire factories, utilizing AI, digital twins, sensors, and more to inform proactive decision-making.

The convergence of AI with the industrial metaverse and other next-gen technologies is creating a new frontier in manufacturing and industrial operations. Companies embracing these transformative technologies will likely find themselves at the forefront of the next industrial revolution, complete with the tools that promote innovation, efficiency, flexibility, and sustainability.

The visible impact of a successful People Enablement strategy

Fujitsu's commitment to People Enablement isn't just a conceptual strategy; it brings measurable and impactful benefits. Here are just some of the many positive outcomes, both for individuals and the broader manufacturing ecosystem, which

arise from putting people at the heart of our manufacturing solutions:

Improved output

By equipping teams with digital tools and skills, there's a marked increase in output and efficiency. Empowered employees contribute fresh ideas, leading to groundbreaking solutions and innovations in manufacturing processes.

Employee job satisfaction

A strong focus on employee growth, development, safety, and well-being results in higher job satisfaction, reducing turnover rates and tackles the ongoing workforce shortages many manufacturers are currently facing.

Upskilling and development

Augmented technologies enable an engaging platform for lifelong learning and development. Digital twin simulations can accurately visualize industrial processes, while AR and VR supports training. Upskilling is therefore made easier due to more accurate and engaging training on digital twins.

Diversity of skills

At the same time, manufacturers will benefit from enabling immersive experiences where teams in different locations can collaborate in the same VR session for training or safety planning purposes. Teams equipped with diverse skills and insights can then tackle challenges more holistically and innovatively.

Sustainability

Prioritizing people and their welfare results in sustainable business practices that are more efficient and have long-term positive impacts on both the organization and the environment.





Supporting inspectors with AI to improve quality and efficiency in aerospace manufacturing

Aerospace leader utilizes Al-powered defect recognition to boost quality control productivity by 50% while increasing inspection consistency and traceability.

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.

The value of Fujitsu's approach

While many organizations talk about empowering people, Fujitsu offers customers a distinctive set of principles, methodologies, and tools to help them stand apart. Fujitsu's comprehensive approach interlinks technology, tools, and training to empower individuals at all levels, and always with a human-centric design.

The flexibility of our approach means these strategies are tailored to the specific needs, challenges, and dynamics of each manufacturing unit. Having the ability to connect factories with core corporate systems through secure mobile solutions, PalmSecure being an example, that can break the chains of standard desktops and improve overall workflows, will be transformative.

Our technology solutions, which include the development of the Industrial Metaverse integrating AR/VR and AI, are also meticulously designed to promote employee empowerment and skill enhancement.

At Fujitsu, our commitment extends beyond the initial implementation, as we provide ongoing support and education to ensure that teams are perpetually equipped with the latest skills and knowledge. Fujitsu's vast global presence also draws insights from various cultures and industries to enrich our People Enablement strategies, and ensure they are specific to each individual customer.



Setting up for lasting success The journey of People Enablement is an ongoing commitment, and with Fujitsu as a partner, manufacturers can confidently move forward on this journey. People Enablement in manufacturing is a strategic move that can redefine success in the modern industry landscape, but it requires the right steps to be taken to succeed.

Evaluation

It's crucial to understand the significance of conducting a thorough evaluation of your current people practices, skill sets, and the interfaces between technology and your workforce. This initial step lays the foundation for a transformation that leverages the strengths of both your human capital and cutting-edge technology.

Building a partnership

When pursuing People Enablement, consider the importance of forming a partnership with Fujitsu. We can offer invaluable resources to help you navigate the complexities of modern manufacturing. Collaborating in this way means manufacturers have a dedicated ally who can ensure this journey towards success is well-quided and supported.

Customized people strategy

A key part of this journey is the creation of a customized People Enablement strategy, tailored specifically to manufacturing needs and goals. This strategy becomes the blueprint for enhancing training and upskilling initiatives, nurturing a culture of continuous learning and adaptability among a workforce.

Integrating technology

Instilling and integrating these tools into manufacturing processes is an essential aspect of this transformation. Our tools complement and enhance the human-centric approach, leveraging the power of both automation and human ingenuity to achieve unprecedented outcomes.

Refining partner relationships

Our relationship with manufacturers is not stationary and needs regular refinement. This allows for the continual improvement of People Enablement strategies over time, ensuring that your operations remain at the forefront of innovation and efficiency. The journey towards People Enablement is not a one-time endeavor; it's a dynamic process that evolves, adapting to an organization's changing needs and the ever-advancing world of manufacturing technology.





Empowering the core of transformation

While the manufacturing landscape continues to shift, people remain at the heart of all operations. Fujitsu's People Enablement approach not only champions the latest innovations but emphasizes our dedication to promoting a culture of growth, collaboration, and sustainable manufacturing. As industries advance towards more integrated and human-centric models, the decisions you embrace today will help define your organization's tomorrow.

Take action

Fujitsu is here to support you at every step of this transformative journey, helping you unlock the full potential of your workforce and technology for a brighter, more innovative future in manufacturing. Partner with Fujitsu and steer your manufacturing enterprise towards excellence.

<u>Contact us</u> today to start your tailored journey into the world of smart, efficient, and sustainable manufacturing.