Driving trust in Artificial Intelligence (AI)

Why ethics is at the heart of our AI solutions at Fujitsu – and why that matters to your business

AI already surrounds us. It recommends TV shows. It buys and sells stocks. It helps manufacturers become more efficient.

AI is fundamental to tackling the most pressing challenges faced by us all, as individuals and organizations both: climate change, an aging population, global pandemics. But **if we are to trust AI** with so much, **it must be trustworthy**.

Discover more

Customers care about AI ethics

AI is a step-change technology for business. Decision makers agree that:

Mastering AI is critical to success in the next five years.[1]

We have a **formal plan to implement AI** in the next 12 months.[1]

However,

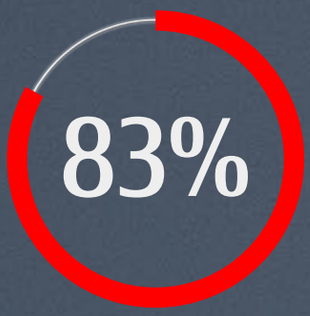
customers are concerned about algorithmic bias, 'black box' algorithms, data privacy, and humans losing control.

82% of Americans believe that robots and/or AI should be 'carefully managed.'[2]
88% of Europeans feel the same.[3]

To retain the trust of your customers, **your use of AI must be responsible.**

Business leaders agree that it is critical or important to:

Use AI systems that are **ethical, understandable and/or legally compliant**.



Create **transparent, explainable, and provable** AI models.

Boost AI security with validation, monitoring, verification.

Test for bias in data, models, and human use of algorithms.[4]

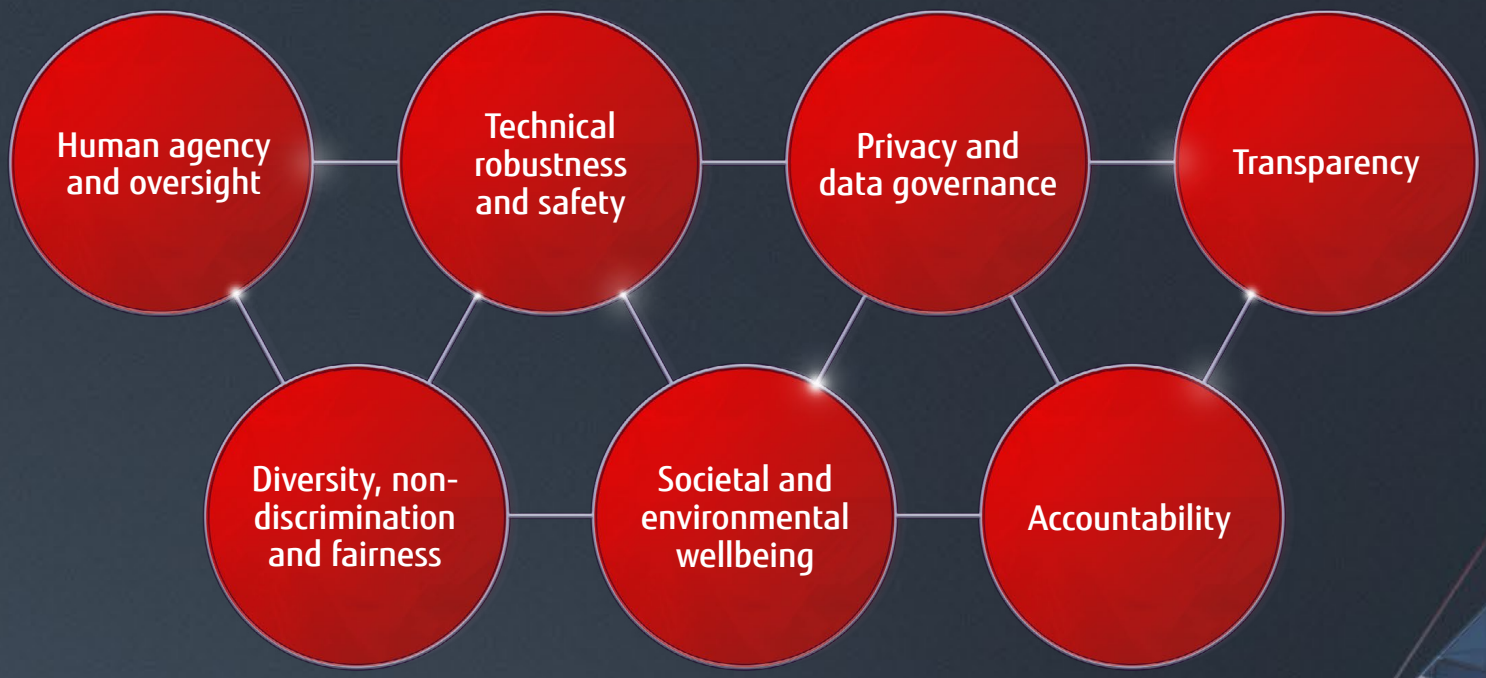
But many of these terms are ambiguous. How do you define ethical? What qualifies as explainable? How can we be sure that every developer and user of AI is operating within the same **ethical framework?**

1. Starting Today, AI Will Power Businesses Into The Future, a commissioned study conducted by Forrester Consulting on behalf of Fujitsu, May 2020.
2. https://governanceai.github.io/US-Public-Opinion-Report-Jan-2019/
3. https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/ResultDoc/download/DocumentKy/78998
4. Ibid

The ingredients of trustworthy AI

In 2018, the European Parliament launched AI4People, its first multi-stakeholder global forum on AI. Fujitsu is a founding member.

In 2019, this work became one of the foundations for the European Commission's **7 requirements for trustworthy AI**.



There are detailed guidelines for fulfilling each requirement.

Our commitment to our customers

With this guidance in mind, we have developed our own five principles for ethical AI.

In the Fujitsu Group AI Commitment we pledge to:

1. Provide value to customers

2. Strive for

3. Strive for a sustainable

4. Strive for AI that respects and supports people's decision making

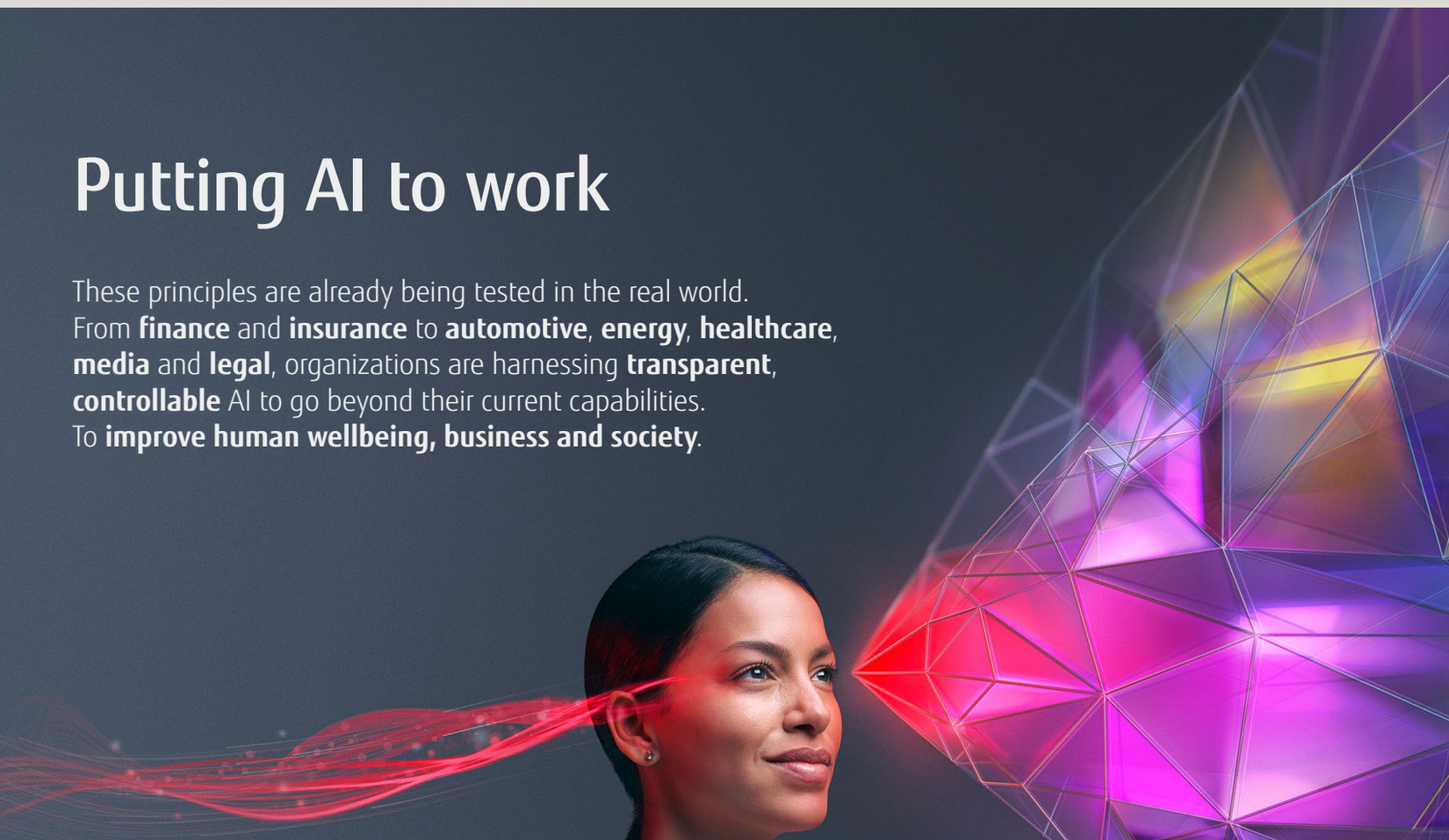
5. As a responsible business, deliver transparent and accountable AI

What do these principles mean?

- Using AI to exert a positive impact on society. Contributing to prosperity – whether obtaining a fairer loan decision, or helping to build a more sustainable future.
- Training algorithms with diverse datasets to arrive closer to the truth. Taking active steps to mitigate against algorithmic bias – by design, training, or human intervention.
- Protecting the ability to discard or override the decisions of AI. Designing decision-making processes to be transparent, auditable, and editable. Preserving human choice.

Putting AI to work

These principles are already being tested in the real world. From **finance** and **insurance** to **automotive**, **energy**, **healthcare**, **media** and **legal**, organizations are harnessing **transparent**, **controllable** AI to go beyond their current capabilities. To **improve human wellbeing, business and society**.



Safer driving
Human centric AI

1.35 million people die each year in road collisions, chiefly in low to middle-income countries.[5] 90% of road accidents are due to human error.[6]

Drivers can't always see bikes, pedestrians and other cars.

By communicating with roadside sensors and other autonomous vehicles, self-driving cars can build a complete, contextual picture of their environment. Collisions can be predicted. Preventative action can be taken. Road accidents could be eliminated.

Unbiased insurance
Fairness in AI

When accidents do happen, insurance claims rely on subjective accounts of emotionally distressed drivers.

The same combination of vehicle and roadside sensors can combine into an objective report. Human claims adjusters can use this report to make faster decisions, with absolute accuracy.

Traumatized drivers needn't experience the stress of reporting to their insurer right after an accident.

Faster loan decisions
Accountable, controllable AI

AI assistance is dramatically accelerating lending decisions, helping people get the funds they need, when they need them.

By designing the process to include an auditable account of reasoning, the final decision can still rest with a human – who may choose to take other, intangible factors into account.

Augmented Engineering
Time saving AI

Quality checks are currently performed by highly skilled inspectors who can spend up to several hours examining each part on the production line.

Rethinking their quality assurance process, GKN Aerospace turned to Fujitsu AI to develop an augmented defect recognition (ADR) solution that takes minutes rather

And the AI can be taught to recommend differently next time. With enough teaching, humans may not need to overturn its decisions – though they should always retain the option.

than hours.

By using the new AI platform, quality control throughput times are up 50%, meaning it can produce more components in the same time while the AI spots and prevents repeated flaw patterns.

5. https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries
6. https://ec.europa.eu/transport/themes/its/road_it

Co-creating a trusted future for your business

Ethics develop over time. The ethics of AI are a work in progress that will never truly be finished. Through our Centre of Excellence and Labs teams we take an active role in researching AI ethics and publicly share our findings. Fujitsu is committed to supporting and advancing the use of ethical AI.

As an AI pioneer we advise the European Commission on best practices.

We take an active role in AI ethics research and share our findings.

We have formed an External Advisory Committee in Japan on AI ethics to ensure the safe and secure deployment of AI in society.

Ethics by Design – Powering our AI

'Ethics by design' is a core component of Fujitsu AI, our human centric approach that powers all our AI solutions.

Fujitsu AI itself is a collective framework for the broad family of AI capabilities that are available to Fujitsu customers, which is summarized to the right:

Fujitsu AI is explainable.
You can examine the premises behind its conclusions.

Fujitsu AI is controllable.
You can overturn its decisions.

Fujitsu AI is built for privacy.
Compliant with data protection legislation like the EU GDPR.

Fujitsu AI is human centric.
Only deployed to augment the abilities of the people it serves.

You worked hard to earn your customers' trust.
With Fujitsu AI, you can be sure to keep it.

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Let's co-create the future and help you go beyond

Discover Fujitsu AI

shaping tomorrow with you