FUJITSU

2024 Fujitsu SX Survey

Accelerating Sustainability Transformation with AI

Practical insights for C-level executives

Preface

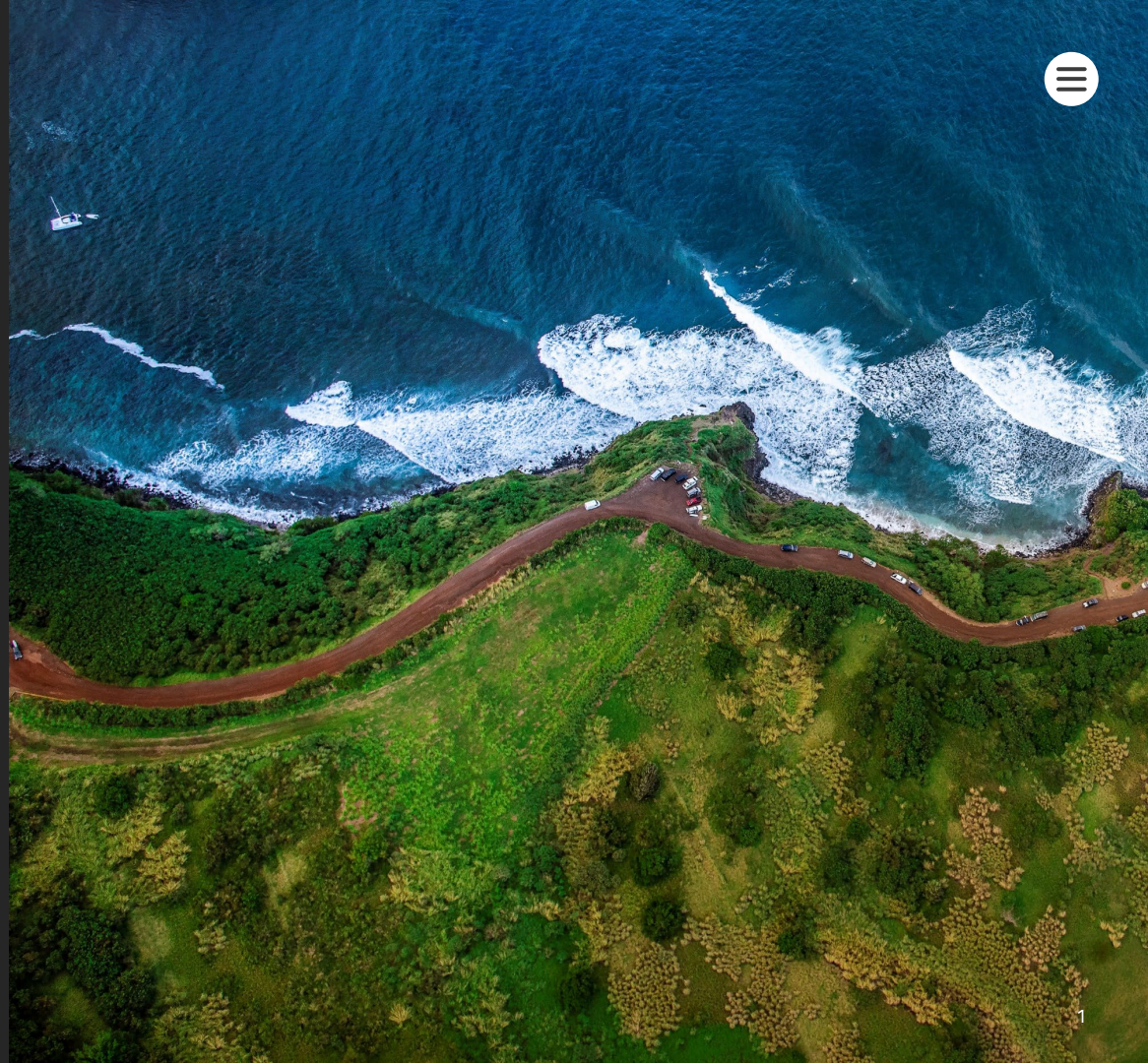
Rapid advances in technology are creating enormous changes across both business and society. At the same time, the sustainability challenges caused by geopolitical tensions and climate change have become urgent business priorities.

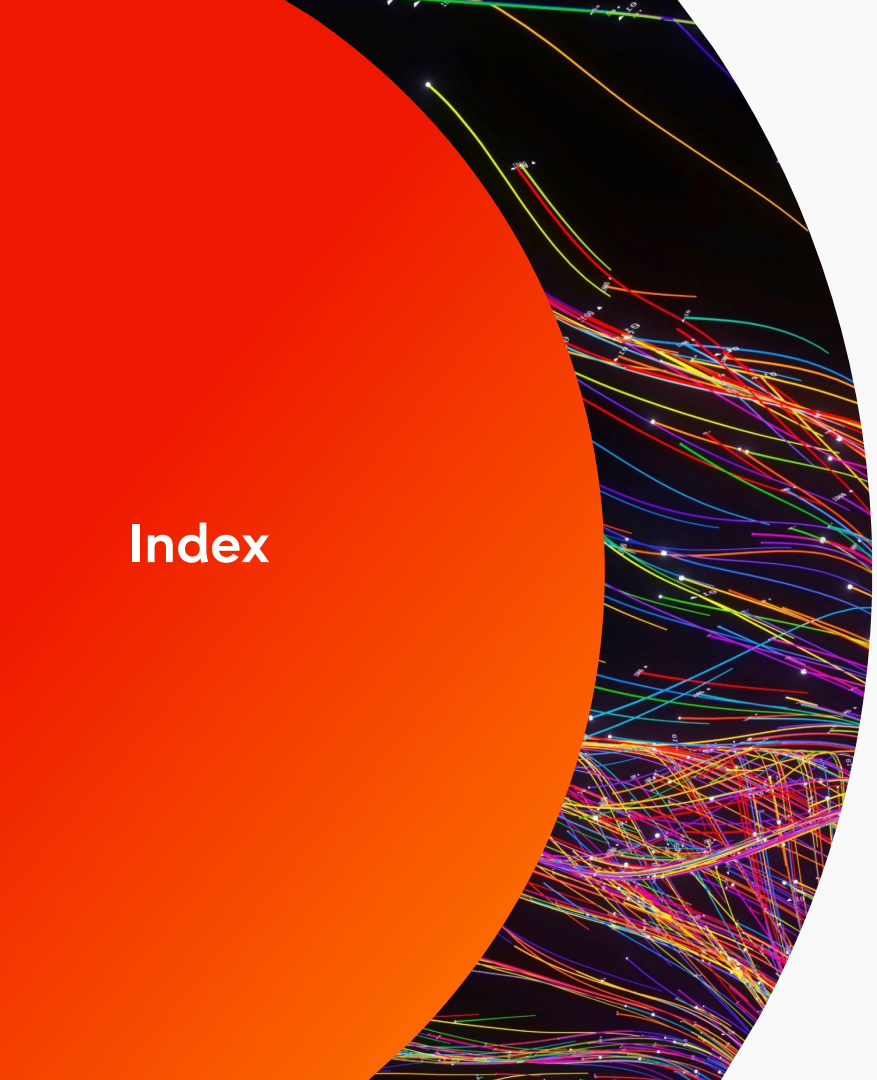
Since 2022, Fujitsu has surveyed business leaders around the world, assessing their Sustainability Transformation (SX) initiatives. Our survey[1] in November and December 2023 revealed that over half (53%) of business leaders are actively reviewing these activities.

In particular, the business environment is changing rapidly due to advances in AI. In January 2024, Fujitsu surveyed 800 CxOs across 15 countries to understand how their organizations are now using AI and how technologies such as AI are supporting their SX activities.

This report summarizes the insights gained from the survey and proposes calls to action for business leaders to successfully drive Sustainability Transformation using AI and other digital technologies.

[1] Visit page 43: '2024 Fujitsu SX Survey - Charting a course for change'





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Executive summary

Advances in AI and other technologies are creating rapid change across both business and society. In January 2024, Fujitsu commissioned Oxford Economics to conduct a survey on the business impact of rapid AI adoption, the status of Sustainability Transformation, and how this transformation can be driven by AI and other digital technologies.

Fujitsu and Oxford Economics conducted an on-line survey of 800 business leaders (CxOs) across 14 industries in 15 countries. Interviews were also conducted with CxOs at 12 organizations that are implementing Sustainability Transformation strategies. The interviews looked at the status of AI implementation, and the Sustainability Transformation outcomes being achieved using digital technology.

According to our survey, many respondents expect AI to dramatically change business and society and are therefore upscaling their AI initiatives. They predict AI will be integrated into every part of their business within the next three years.

Respondents also recognized that in the future, the rapid adoption of AI will require employees to develop new skills. However, they hold mixed views on the possible implications that AI could have on employment and overall headcount levels.

At the same time, many respondents believe that increasing AI usage will support their Sustainability Transformation plans. In fact, organizations that have successfully delivered financial and non-financial outcomes through their Sustainability Transformation have typically increased their investment in AI and are actively using AI across their organizations.

These survey results are consistent with Fujitsu's belief that greater use of AI and other digital technologies will enable successful Sustainability Transformation.

This report proposes specific calls to action to help business leaders drive successful Sustainability Transformation using AI and other digital technologies.

Key findings

Our survey explored business leaders' attitudes towards AI and its current usage across their organizations:

1. Business leaders are strengthening their AI initiatives in recognition of the huge changes that AI is creating across business and society.
2. The use of AI will rapidly expand into other areas. Business leaders predict that AI will permeate a wide range of tasks within the next three years. They also believe that people will need to develop the skills to work with AI, unlocking their own creativity and ensuring that people and AI can collaborate effectively.
3. The integration between management resources and AI is still in progress. Organizations are at various stages of AI readiness. Around 40% of organizations have yet to set an organization-wide AI strategy, while only 12% have the resources to use AI, based on a comprehensive AI strategy and usage guidelines.

Our survey also examined the impact of digital technology on Sustainability Transformation initiatives:

1. The process of converting sustainability initiatives into new business opportunities is underway. While many leaders see addressing sustainability as a business opportunity, only around 10% of organizations are generating steady revenue from these opportunities.
2. AI and Digital Transformation can drive successful Sustainability Transformation. Over 60% of leaders recognize that increased use of AI will enable Digital Transformation and help to solve societal challenges.
3. The use of AI and other technologies is key. Organizations that create a sustainability vision and strategy, strengthen their organizational capability and proactively use AI and other technologies succeed in driving greater sustainability and financial value than other organizations.

Sustainability and technology are key management priorities

The business environment is influenced by a wide range of external factors and is becoming increasingly uncertain.

Our survey clearly reveals that, in addition to political and economic factors such as inflation and geopolitical tensions, external factors relating to the environment and well-being are also having a significant impact on business. These factors are all related to sustainability.

In addition to these sustainability factors, the survey highlights the rapid advance of AI, which is now expected to be the third most impactful external factor. Business leaders are clearly now recognizing the significant impact of AI advances.

Our survey respondents were then asked to consider their response to the twin challenges of sustainability and technology.

External factors with the biggest impact over the next 12 months

1. **Inflation, interest rates, exchange rate fluctuations** — Politics and economics
2. **Geopolitical tensions and conflicts** — Politics and economics
3. **Rapid advance of AI** — Technology
4. Energy problems — Environment
5. Pandemics — Well-being
6. Intensifying cyber-attacks — Technology
7. Climate change — Environment
8. Poverty, inequality and access to education and healthcare — Well-being

Sample size: 800

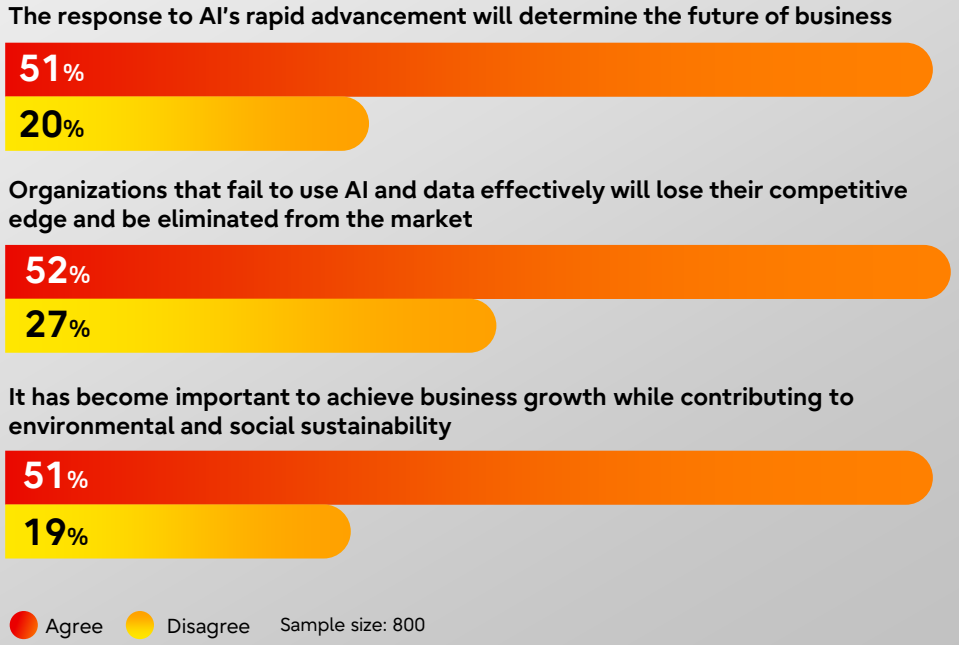
Responses to AI and sustainability will determine the future of business

Business leaders recognize the importance of responding to AI and sustainability challenges.

Indeed, more than half of business leaders surveyed believe that their response to the rapid advance of AI will determine the future of their businesses. They believe that organizations that fail to use AI and data effectively will lose competitive edge and, as a result, market share.

At the same time, more than half of business leaders now believe it's important to achieve business growth while contributing to environmental and social sustainability.

So, how can business leaders best respond to the twin challenges of advancing AI and sustainability? In this report, we share our key survey findings, including the key factors that should be considered to shape successful business strategies.



Section 1

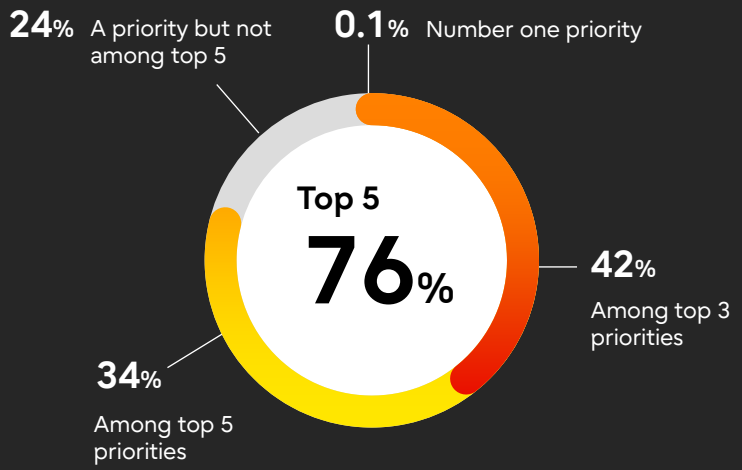
The transformational impact of AI

Organizations ramp up AI initiatives and boost investment

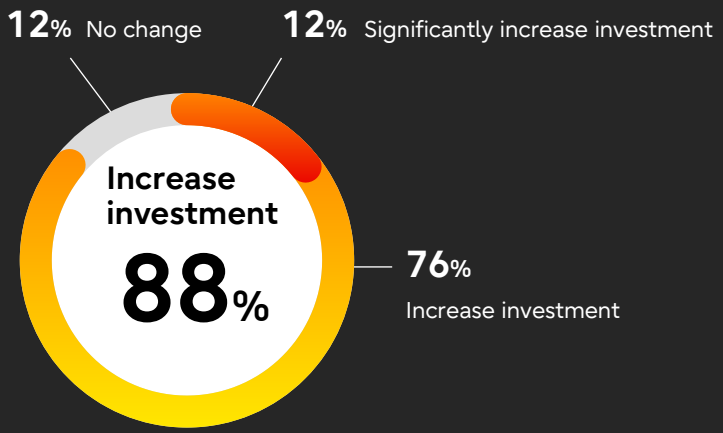
How are organizations responding to the rapid advance of AI? In our survey, 76% of organizations ranked AI among the top 5 priorities in their Digital Transformation.

Almost 90% responded that they plan to increase investment in AI compared to last year. Many organizations are now ramping up their engagement with AI and increasing their AI usage.

Priority of AI in Digital Transformation



Planned investment in AI this year



Sample size: 798 (organizations who responded that they are engaged in Digital Transformation)

Major expansion of AI use in the next three years

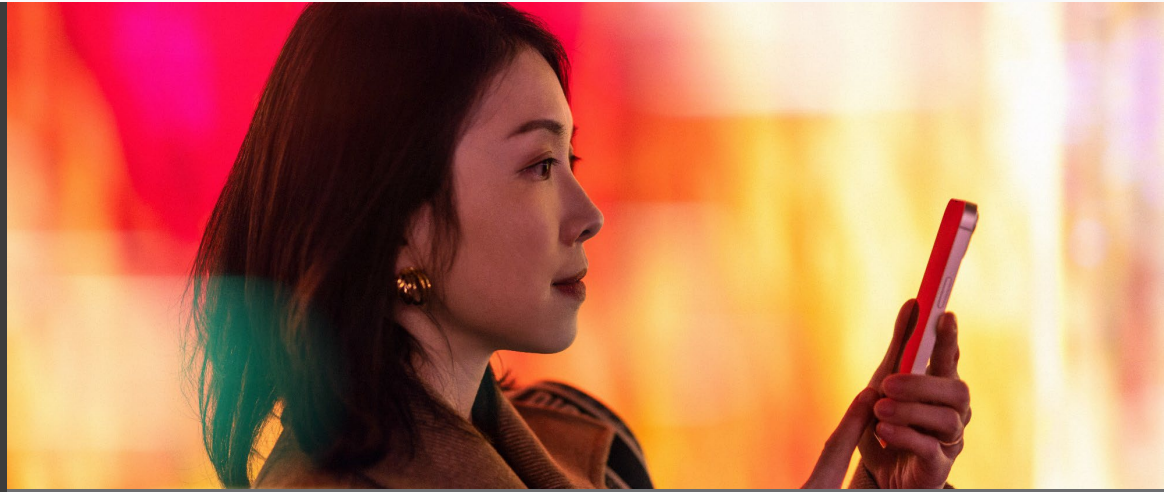
Organizations are now trying to incorporate AI in all aspects of their business as we enter the full-scale adoption phase.

The chart on the next page shows the current use of AI in organizations and the outlook for its future use.

Currently, AI is used predominantly for improving efficiency in business support, automation of customer service and handling of routine tasks. However, over the next three years, around 80% of organizations aim to use AI for complex decision-making, including the enhancement of product and service functions and management decision support, both previously difficult to achieve with AI.

Our survey results suggest that, over the next three years, AI will permeate almost every aspect of business, enabling radical transformation.

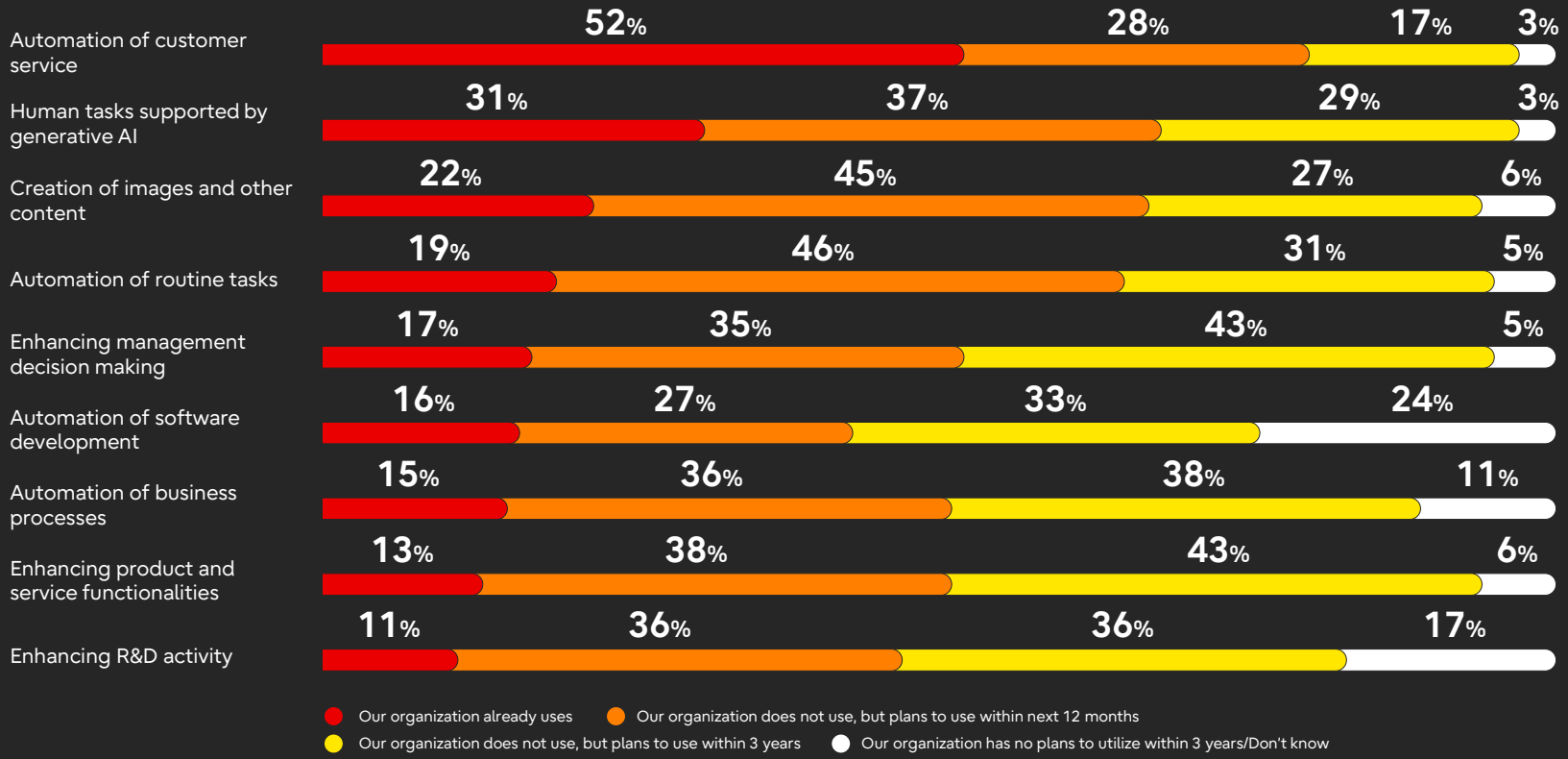
Business leaders will need to examine and implement strategies for using AI to address this drastic change.



> We're also using AI to design our own AI products, with AI probably now the number one hot topic in our industry. We have created a detailed 5 to 10 year plan for our AI initiatives, with AI now at the heart of our strategic planning.
>
> Chief Digital Officer, Manufacturing, USA

AI use expanding into areas that involve complex decision making in the next three years

Sample size: 798 (organizations who responded that they were engaged in Digital Transformation)



Organizations are starting to introduce AI across their operations

Giving good financial advice requires detailed knowledge about products, the industry, personal circumstances, regulatory matters and intuition. All that knowledge exists somewhere in the data and documentation we have within our organization... A Generative AI bot could access all this data, consider your age, pension, savings, mortgage status, salary, bonus, family circumstances and expenditures... It could also infer your risk appetite... If we can use Generative AI to put all of that together, we can transform the nature of financial advice conversations.

Chief Data Officer, Finance, UK

We use ChatGPT's algorithm to analyze our conversation and dialogue data, using it in conjunction with our traditional propensity-to-buy models to find deeper insights. This helps our sales teams to adapt their propositions and improve their targeting. As a result, we have significantly reduced the purchase cycle from around 6 months to roughly 10 weeks. This huge improvement is helping to maintain our cash flow, as it also helps our Finance team to forecast more accurately.

Chief Data Officer, Manufacturing, USA

We're looking at AI to help us do things like training. There's so much information out there and using AI to put all of that into cohesive training packs, including making videos, could save a lot of time. The challenge is that the specialist information we need, including sustainable finance information, isn't currently available in large volumes out there.

Chief Sustainability Officer, Finance, Singapore

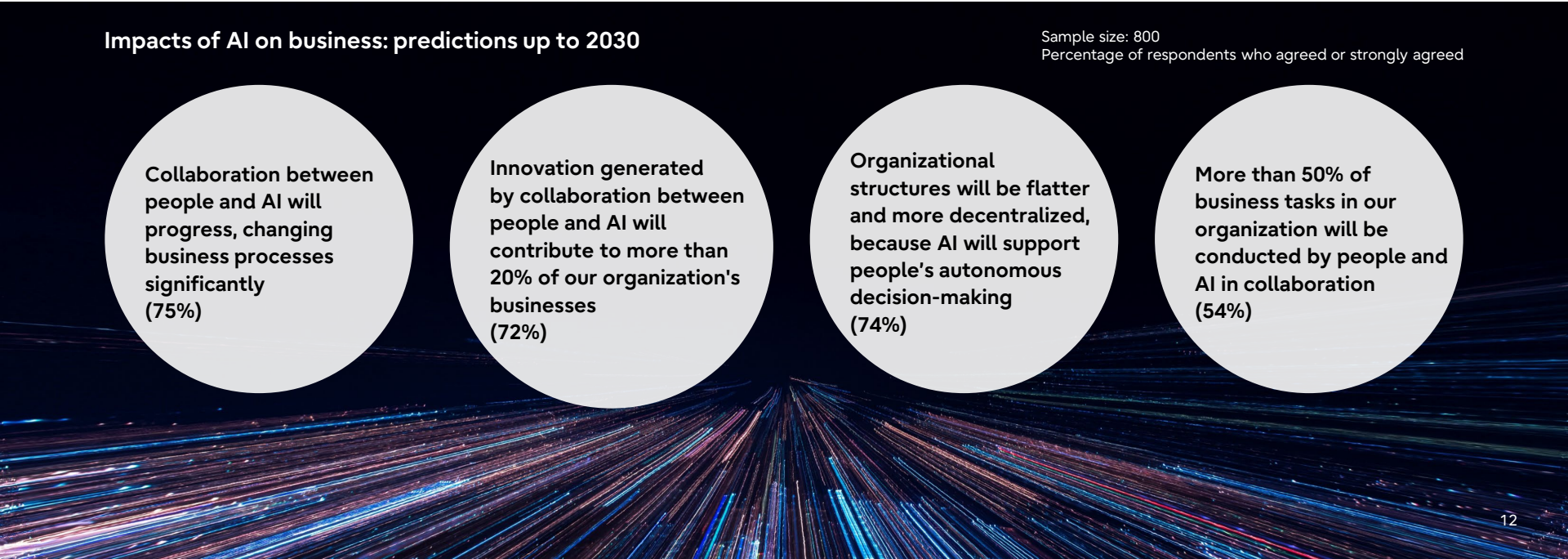
People and AI will collaborate to drive transformation

In the future, as the use of AI permeates all areas of business, the relationship between people and AI is expected to change significantly. In fact, 70% of business leaders believe that people and AI will complement and enhance each other, becoming an effective partnership.

They also strongly believe that collaboration between people and AI will continue to develop, leading to the transformation of current business processes.

Impacts of AI on business: predictions up to 2030

Sample size: 800
Percentage of respondents who agreed or strongly agreed



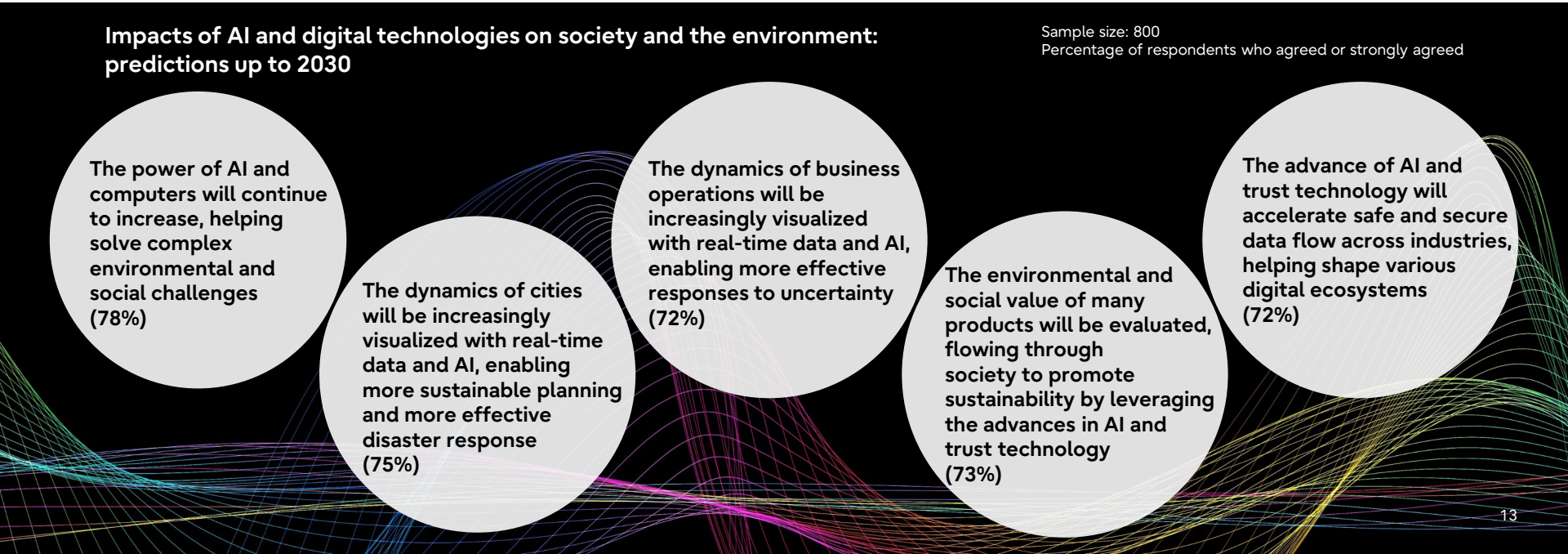
Addressing environmental and societal issues

The continuous advancement in AI is expected to have a positive impact on the environment and society. According to our survey, 78% of business leaders expect the power of AI and computing to increase, helping to solve complex environmental and societal challenges.

In collaboration with big data, computing, trust technology and various other digital technologies, AI will enable advances such as visualization based on real-time data and enhanced resilience against uncertainty. AI can help to guide both our environment and society in a better direction.

Impacts of AI and digital technologies on society and the environment: predictions up to 2030

Sample size: 800
Percentage of respondents who agreed or strongly agreed



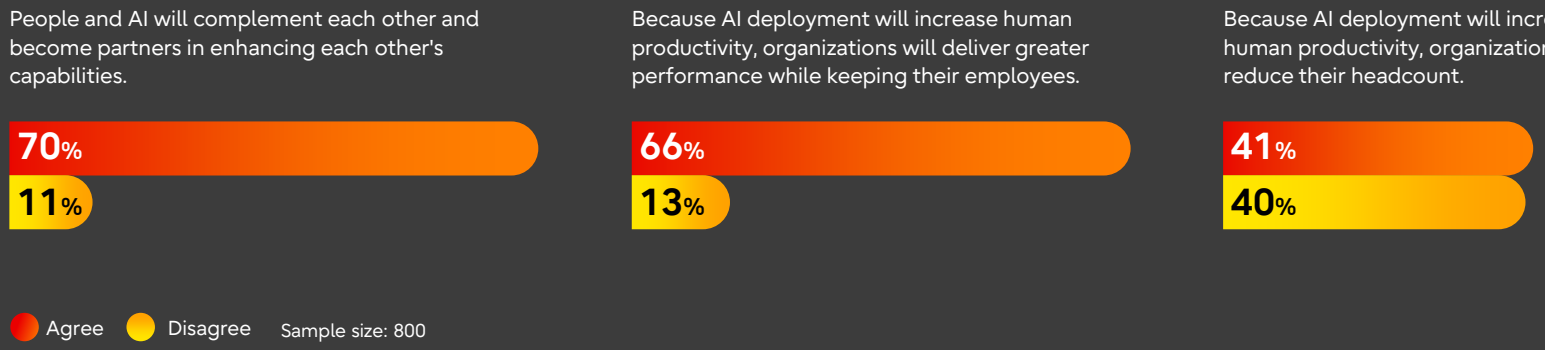
Mixed views on the headcount impact of AI

Will AI automate tasks previously done by people, increasing efficiency while maintaining output, or will it expand human productivity and creativity to increase output? Will AI replace people, or will it broaden and enhance their capability?

The responses in our survey were mixed between these two options. 70% of business leaders believe that people and AI will complement each other and become partners in enhancing each other's capabilities, with 66% expecting AI to improve performance while retaining their employees.

On the other hand, 41% of business leaders expect AI adoption to lead to headcount reductions, although roughly the same number (40%) take the opposite view. This is a critical point to consider when assessing the implications of transforming business processes and investing in the development of new skills.

Despite general agreement that AI deployment will increase productivity and enhance people's skills, there is contention over the impact on headcount reductions.



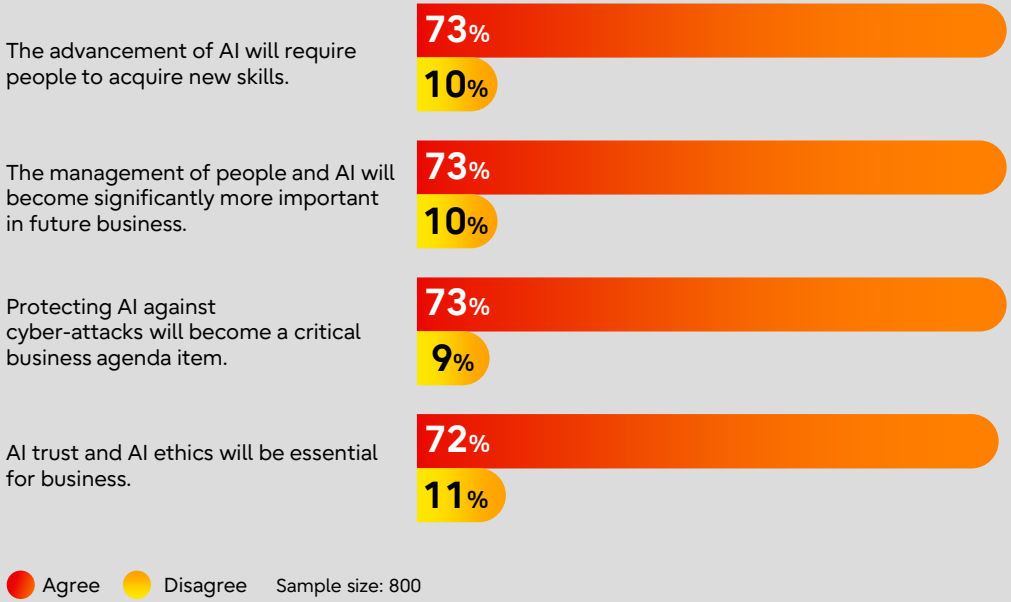
Key initiatives in the AI era

How can organizations gain the best outcomes from using AI?

The survey results show that more than 70% of business leaders recognize the need to acquire new skills, to better manage both people and AI, to protect against AI-related cyber-attacks and to enhance AI trust and ethics.

One of the most important challenges for business leaders is how they manage their existing human resources. In the future, it will be necessary for humans and AI to collaborate to perform tasks and produce higher quality outcomes. We will need to embrace transformation from a new perspective, looking at how we can take an integrated approach toward managing people and technology together.

Initiatives required in the AI era

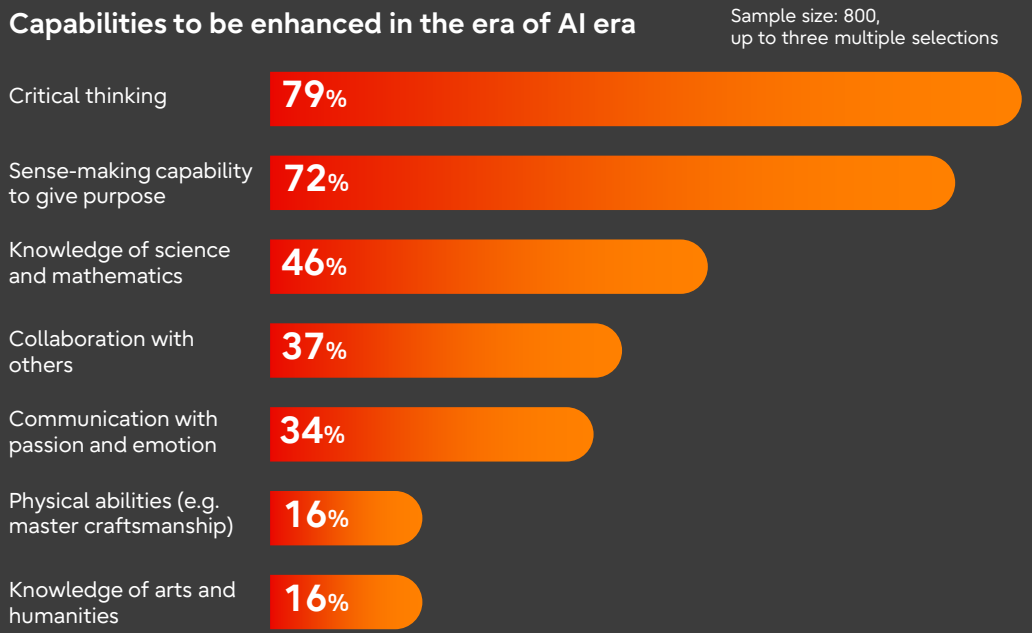


Human capabilities required in the AI era

What capabilities will we need to improve in the era of AI? In our survey, the top skills identified that employees need to improve are critical thinking, sense-making capability to give purpose and knowledge of science and mathematics.

AI can now respond to a variety of questions with instantaneous human-like output of text and images. However, people still have responsibility for AI output, including the critical thinking needed to exercise the appropriate discretion. People also need to set correct goals and apply sense-making to ensure activities serve the right purpose. Furthermore, knowledge of science and mathematics will help people to understand the mechanisms used by AI and to correctly recognize its limitations and potential.

In the AI era, employees must educate themselves to continue enhancing these capabilities. It will be important to create new value by maximizing human creativity through ongoing collaboration with AI.



Challenges in introducing AI

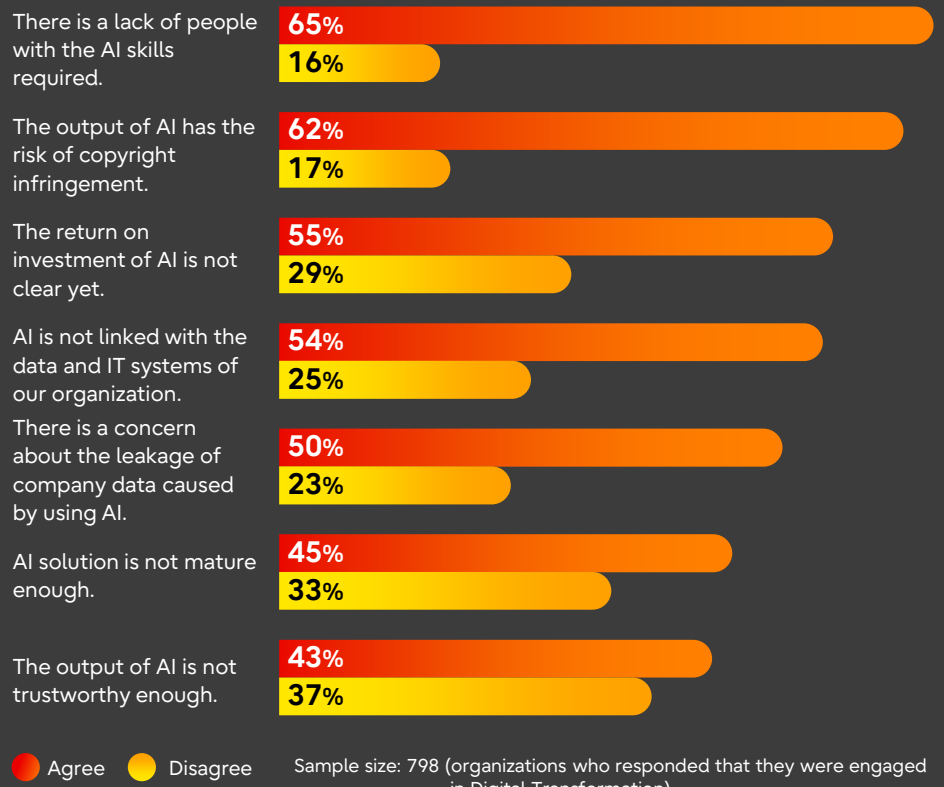
While the introduction of AI offers many benefits, including increased operational efficiency and productivity, it also comes with serious risks. Introducing AI creates a variety of challenges.

Firstly, the shortage of appropriate human resources is a major issue. The introduction and operation of AI requires a high level of expertise and skills, and organizations must actively engage in upskilling and, where necessary, recruitment.

In addition, AI carries security risks. AI can generate disinformation and misinformation ('AI hallucination') and may violate copyrights and privacy, risking an organization's credibility.

The European (EU) AI regulation Act (May 2024) has strengthened the laws and regulations around AI, meaning organizations must urgently take steps to strengthen their AI governance.

Issues confronted in AI deployment



Sample size: 798 (organizations who responded that they were engaged in Digital Transformation)

Concerns around AI introduction

I encourage my junior data scientists and junior software engineers to learn various kinds of business domain knowledge. They need to explore different methodologies to improve our predictive models, because all basic data, data operation and database operation-type coding work will be 100% replaced by AI in the next two years. And I really do not want them to lose their jobs. So, my team also provides internal training, and budget for them to attend professional schools, even for the entry-level jobs. They need an AI-related skillset including knowledge of Neural Network models.

Chief Data Officer, Manufacturing, USA

I think the ethical consideration has to be there. Business leaders have to be educated on the ethical aspects of using AI before they dive in, and before they invest in deploying AI technology as part of the running of the business.

Chief Product Officer, Transportation, Singapore

Data security is a big worry. AI and misappropriation create another risk factor when you're talking about system security. To give an example, when you're running a water treatment plant with a locked down system, it must be highly secure because if someone were to hack into that system, that's potentially the community's water supply and if someone with the wrong intent got into that system, that could be catastrophic. I think the security is probably the biggest concern.

Chief Sustainability Officer, Public Sector, Australia

There are huge potential privacy implications, in that Large Language Models will remember everything you tell them. It's interesting to think that I could type something into a Large Language Model from which it could be accidentally or inaccurately repeated to another customer.

Chief Data Officer, Finance, UK

Many organizations in the early stages of AI introduction

While business leaders recognize the importance of using AI, there are challenges when introducing it. As a result, the level of AI adoption and progress varies significantly between organizations.

According to our survey, around 40% of organizations have not yet developed a company-wide AI strategy. On the other hand, nearly half of the organizations have determined their company-wide strategy and are developing guidelines. As few as around 10% have committed resources to data, technology infrastructure and human resources based on a company-wide AI strategy and guidelines.

Many organizations are still in the initial stages of AI introduction. To achieve successful AI-driven transformation, organizations need to increase the maturity level of their AI usage.

Level of AI engagement

Sample size: 798 (organizations who responded that they were engaged in Digital Transformation)

Using technology to create a sustainable society

In this section, we looked at the impact of the rapidly advancing AI on business, the environment and society, as well as the current issues and initiatives around AI use.

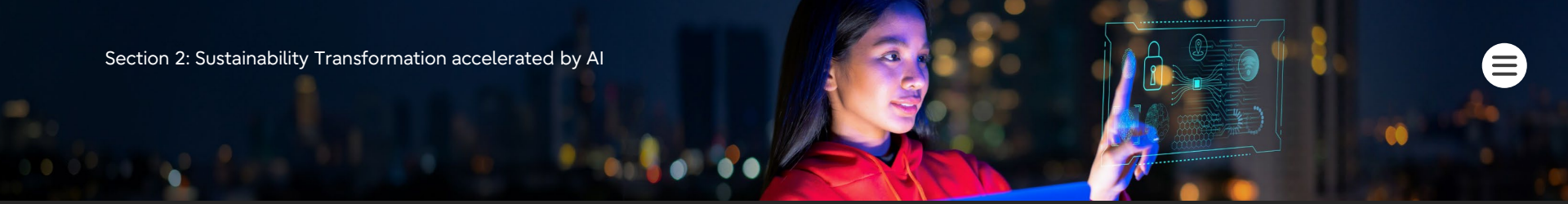
Many organizations have boosted their investment in AI and are planning to introduce AI in almost every area of their business. AI is expected to achieve greater efficiency and productivity, to drive innovation, and to address complex societal issues such as disaster response.

Even so, most organizations are still in the initial stages of AI introduction. Business leaders need to formulate an organization-wide AI strategy, develop guidelines for AI use, foster new skills for employees, and organize the necessary infrastructure and other resources. There is also an urgent need to deal with the negative aspects of AI, such as data leakages and privacy breaches.

In the next section, we analyze the current state of sustainability initiatives and how AI-centered technologies can be leveraged to drive successful Sustainability Transformation.

Section 2

Sustainability Transformation accelerated by AI

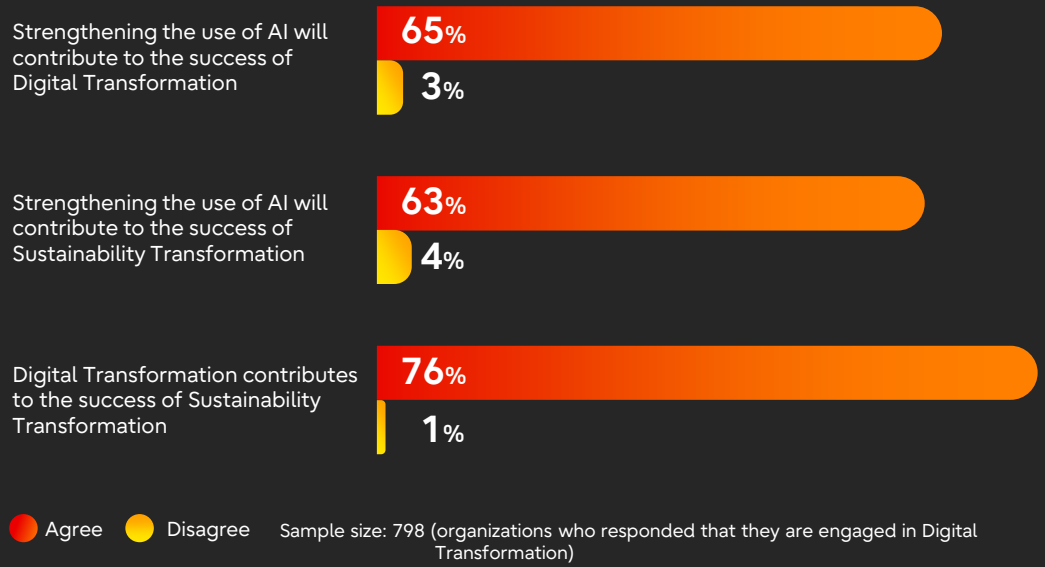


AI will contribute to successful Sustainability Transformation

Business leaders believe that sustainability and AI will influence their business in the future, with AI enabling business innovation and helping to resolve social issues.

Our survey revealed that more than 60% of business leaders think that the increased use of AI will contribute to the success of both Digital and Sustainability Transformation. 76% of business leaders think that Digital Transformation will contribute to the success of their Sustainability Transformation.

In this section, we analyze how organizations can use technologies such as AI to successfully achieve Sustainability Transformation, based on current Sustainability Transformation initiatives and challenges, and we share the characteristics of Sustainability Transformation pioneers.



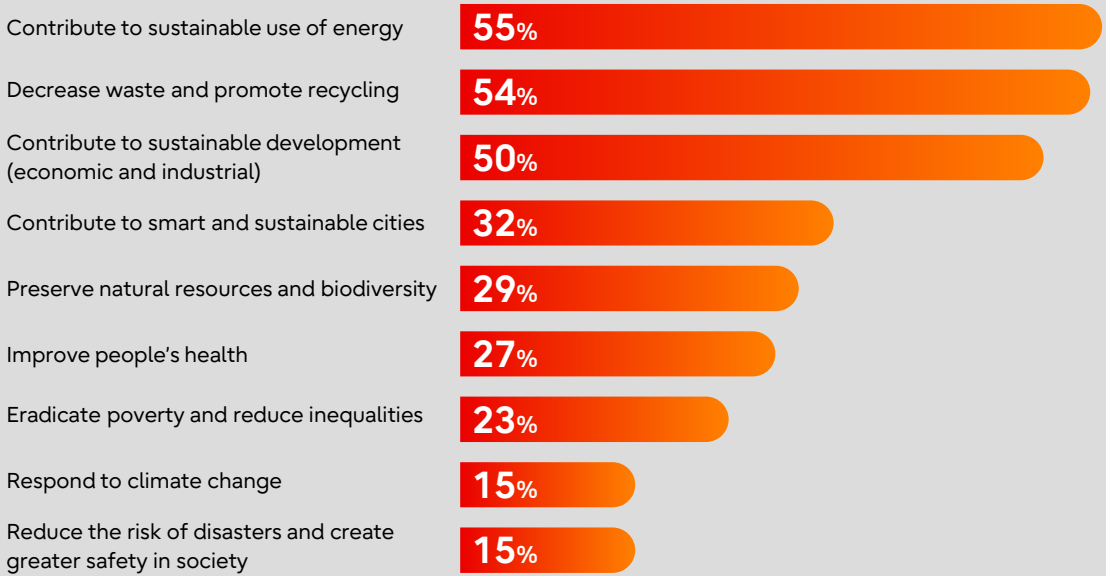
Sample size: 798 (organizations who responded that they are engaged in Digital Transformation)

Business opportunities created by Sustainability Transformation

Many organizations see business opportunities in sustainability-related initiatives.

Specifically, more than half of the business leaders surveyed recognize that contributing to sustainable energy use, reducing waste, promoting recycling, contributing to sustainable economic and industrial development are all important business opportunities. They see technology as the key to realizing these opportunities.

Key sustainability issues that generate business opportunities



Sample size: 794 (organizations who responded that they were engaged in sustainability), Up to three multiple selections

Only 10% of organizations are generating steady revenue

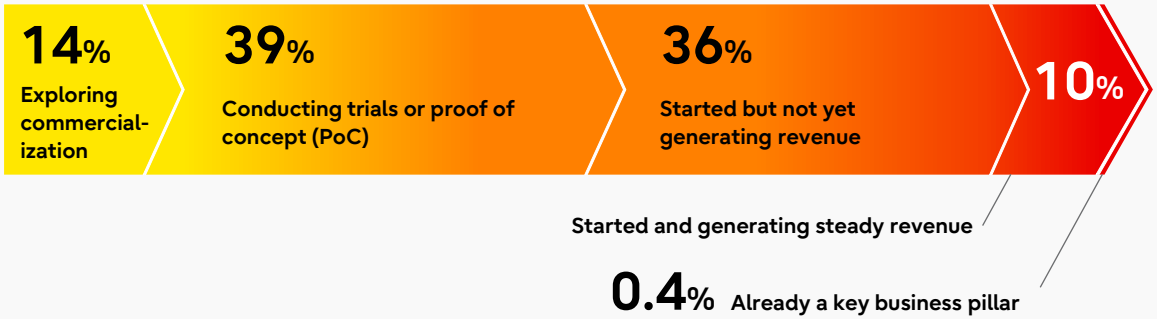
The survey revealed that almost all organizations have begun to incorporate sustainability initiatives into their businesses.

Of those, 14% are at the stage of consideration, 39% are at the stage of conducting PoC and trials while 47% have already started to create business ventures.

However, only a little over 10% of organizations are currently generating steady revenue from sustainability-related business ventures.

Clearly, we need to accelerate the speed of progress.

Progress towards turning sustainability initiatives into business ventures



Sample size: 794 (organizations who responded that they were engaged in sustainability)
Calculated based on the business development of each of the top 3 most important business opportunities selected by respondents

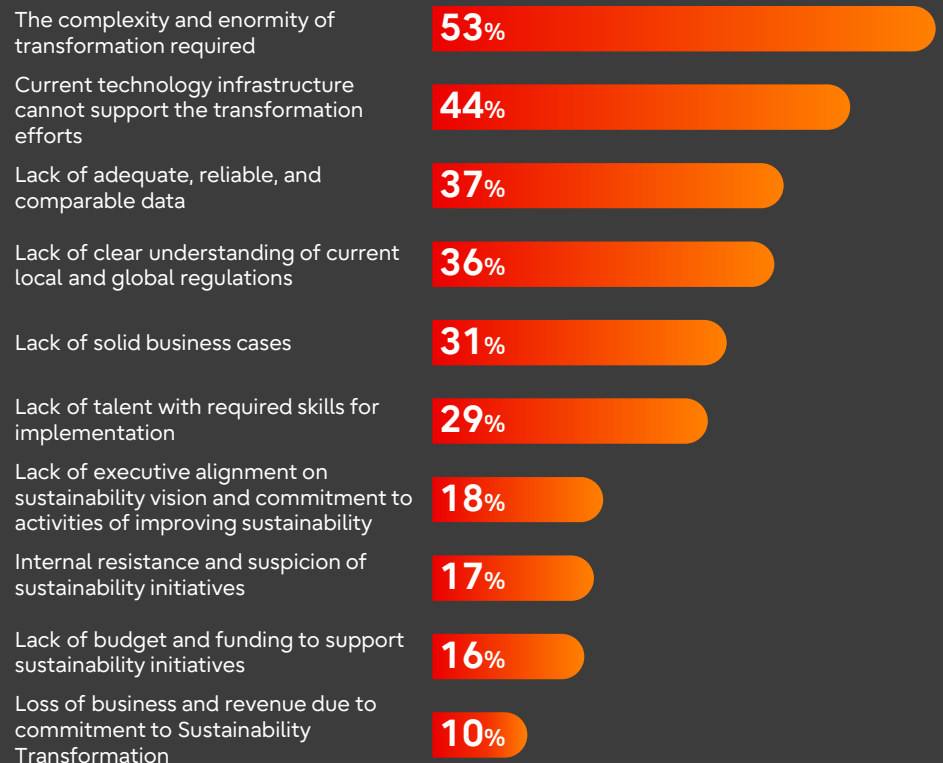
Issues include complexity, lack of technology infrastructure and data

Promoting technology-based Sustainability Transformation is key to turning sustainability challenges into business opportunities. However, there are still various challenges to overcome to achieve this. More than half of business leaders ranked responding to the complexity and enormity of the transformation as the number one challenge. This was followed by the lack of support provided by existing technology infrastructure and the absence of sufficient reliable data.

With the need to embrace a wide range of stakeholders, Sustainability Transformation is both complex and far-reaching. It may also not yield a financial profit in the short term.

So, what actions should be taken to overcome these challenges, promote Sustainability Transformation and develop sustainability as a key business pillar?

Sustainability Transformation issues



Sample size: 794 (organizations who responded that they were engaged in sustainability)

Regenerative enterprise

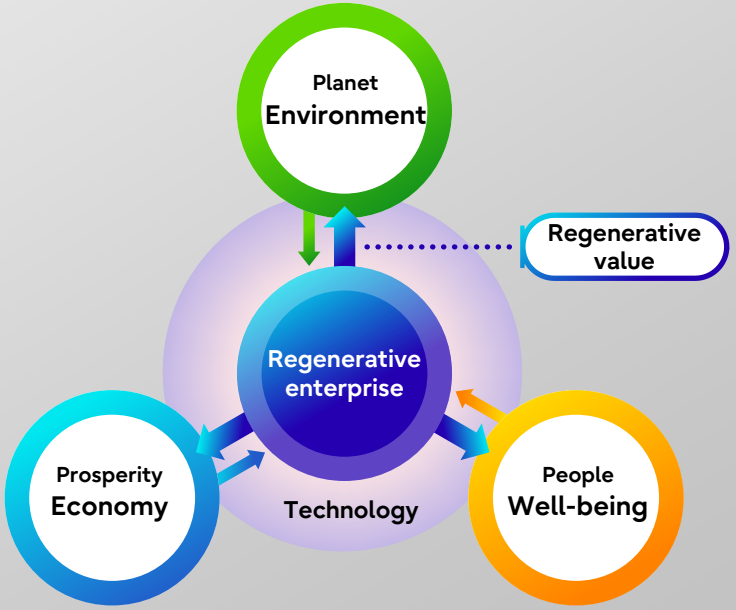
Regenerating the environment, economy and well-being using technology

Fujitsu proposes that organizations should transform into ‘regenerative enterprises’ that will generate net positive value for the environment, the economy and people’s well-being. ‘Net positive’ describes a situation where the organization’s positive impacts on the environment and society outweigh its negative impacts.

Many organizations are already engaged in Sustainability Transformation aimed at achieving net zero or net positive outcomes. However, they are faced with the challenges posed by the complexity of the transformation and insufficient data and technology infrastructure.

On the other hand, there are organizations such as regenerative enterprises that have succeeded in delivering value for the environment, economy and well-being by using technology to transform their organizations.

From the next page, we analyze the features and initiatives of these pioneering regenerative enterprises.

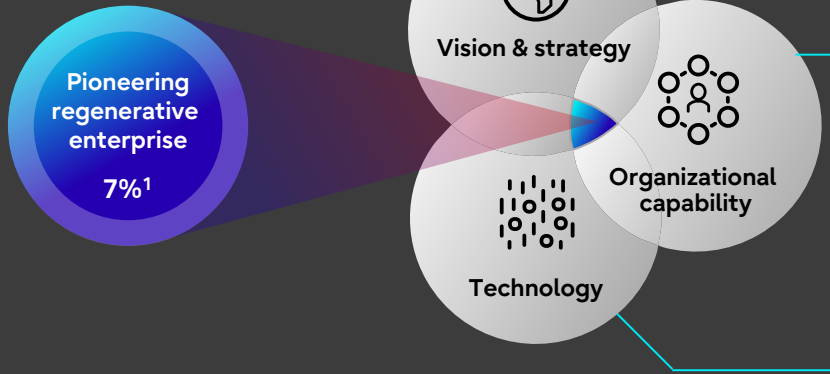


Creating net positive regenerative value with technology

Pioneering regenerative enterprise

Fujitsu has identified organizations that have formulated a clear vision and strategy for sustainability, boosted their organizational capability and proactively deployed technology in their initiatives. We describe these organizations as pioneering regenerative enterprises.

Just 59 of the 800 organizations surveyed (7%) meet the definition of being a pioneering regenerative enterprise. From the next page, we will look at these pioneering organizations' sustainability initiatives, their financial and non-financial performance and their level of AI use.



1. Promoting a sustainability vision and strategy

- Having a clear sustainability vision and company-wide strategy
- Implementing the strategy as an integral part of the business

2. Advanced organizational capability in sustainability

- Hiring and retaining personnel with the skills required for Sustainability Transformation
- Setting sustainability goals and KPIs across financial and non-financial metrics
- Building an ecosystem and sharing future goals and clear KPIs

3. Exploiting technologies for sustainability

- Transforming business processes to drive environmental and well-being value using data and digital technologies
- Using AI to improve employees' productivity, creativity and well-being
- Building a company-wide data platform to manage the performance of sustainability initiatives and business
- Addressing cross-industry challenges by sharing data with ecosystem partners

[1] Pioneering regenerative enterprises: 59/800 companies

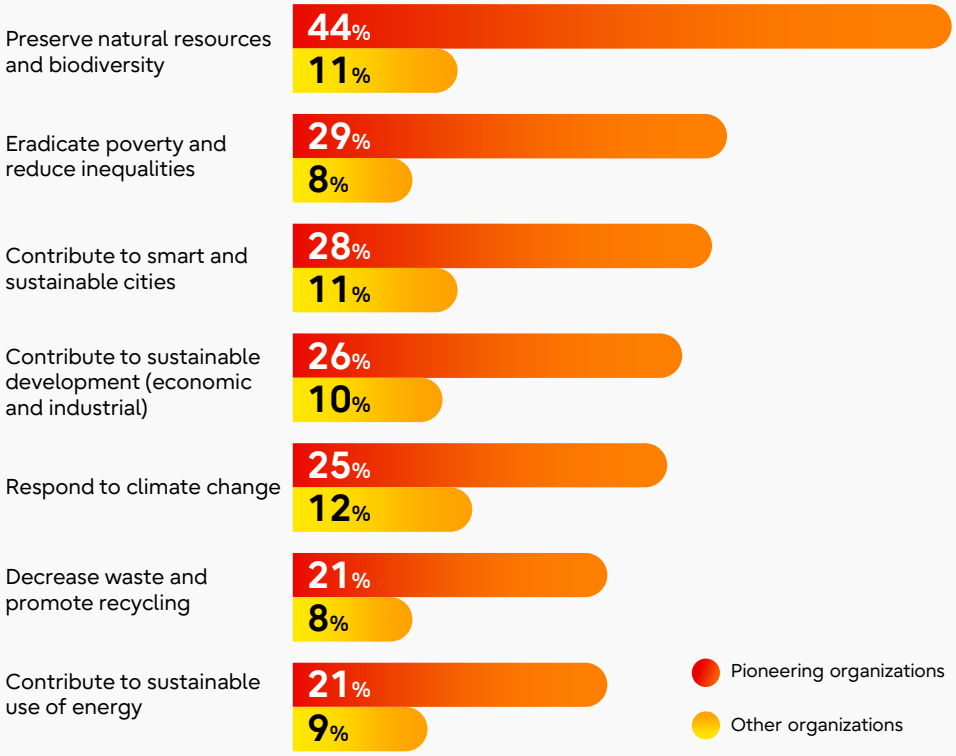
Pioneering organizations lead sustainability in business

Pioneering organizations are the leaders in generating business opportunities and revenue through sustainability initiatives.

For example, 44% of pioneering organizations are generating revenue from preserving natural resources and biodiversity, while only 11% of non-pioneering organizations have reached the same stage. The same is true for other initiatives. More than 20% of the pioneering organizations are generating revenue from initiatives, compared to just 10% of non-pioneering organizations.

More importantly, sustainability efforts are interconnected. For example, addressing climate change is closely connected to using sustainable energy and preserving biodiversity. In fact, around 30% of pioneering organizations are pursuing business initiatives across multiple sustainability areas to generate revenue. That is roughly three times the number for non-pioneering organizations.

Proportion of companies that have generated revenue from sustainability issues



Sample size: 794 (organizations who responded that they were engaged in sustainability)

Pioneering organizations also lead in AI use

Pioneering organizations are also well ahead with the introduction of AI. 90% of pioneering organizations surveyed ranked AI among their top three priorities for Digital Transformation. However, only 38% of non-pioneering organizations put AI in their top three priorities. Similarly, 88% of pioneering organizations have already formulated an organization-wide strategy and guidelines for AI, while only 46% of non-pioneering organizations are in the same position.

Similarly, more than 90% of pioneering organizations plan to use generative AI to support operations and automate routine tasks within the next year. In addition, more than 70% plan to use AI in complex decision-making, such as automating business processes and supporting business decisions.

Pioneering organizations focusing on AI and promoting AI strategy

	Pioneering organizations	Other organizations
AI among the top 3 priorities for Digital Transformation	90%	38%
Setting an organization-wide AI strategy and usage guidelines	88%	46%

Pioneering organizations are actively using AI for a wide range of tasks

	Pioneering organizations	Other organizations
Human tasks supported by generative AI such as ChatGPT	95%	66%
Automation of customer service	93%	79%
Creation of images and other content	90%	65%
Automation of routine tasks	88%	62%
Automation of business processes	88%	48%
Enhancing product and service functionalities	83%	49%
Enhancing management decision making	78%	50%
Enhancing R&D activity	56%	47%

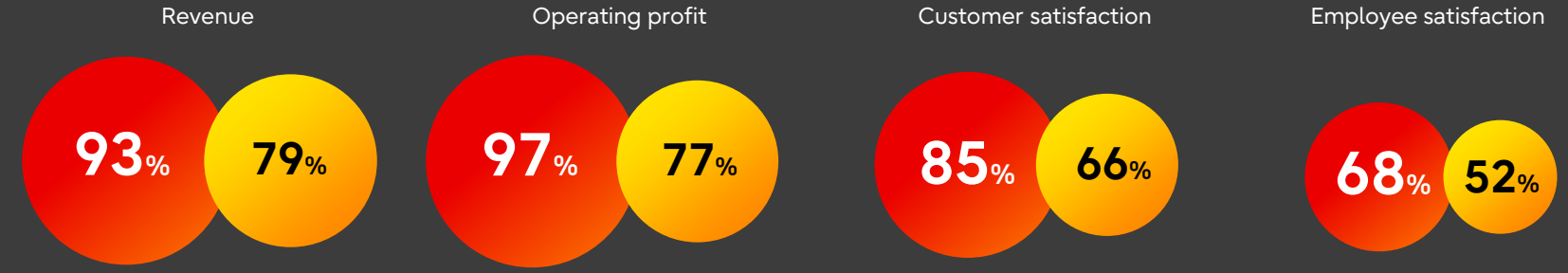
Percentage of respondents who use or plan to use generative AI within the next year

Creating financial and non-financial value

In addition, pioneering organizations outperform other organizations in terms of their financial performance, including sales and operating profit. At the same time, they enjoy a positive reputation for non-financial values, such as customer satisfaction and employee satisfaction. In other words, they have succeeded in providing higher value to multiple stakeholders.

Further examination is needed into the relationship between Sustainability Transformation and financial and non-financial value. However, the results of our previous survey conducted in 2023 clearly show that sustainability initiatives are gaining support from customers who value ethical consumption and employees who share the same values.

Investing in sustainability opportunities while creating financial, customer and employee value



Sample size: 800 (proportion of organizations who responded Improved or significantly improved)

Sustainability Transformation using AI

Sustainability Transformation using digital technology is advancing in various industries. We will now highlight some of the Sustainability Transformation measures being implemented in specific industries using AI-based digital technologies.

Using technology to address environmental challenges

Sustainability initiatives differ from industry to industry.

While all industries are working hard to reduce CO_2 emissions, the transportation sector is more advanced than others. About half of the organizations in this sector are actively monitoring and managing CO_2 emissions. This sector, which relies heavily on fossil fuels, needs to comply with regulations and guidelines introduced by governments and the International Energy Agency (IEA), and to manage soaring fuel prices, which are now encouraging the industry to pursue green initiatives.

In manufacturing, wholesale and retail, and transportation, initiatives such as shared mobility and autonomous driving are advancing rapidly. These sectors need to address rising fuel prices and urban traffic congestion to achieve more efficient and sustainable transport systems. Elsewhere, the public sector is promoting recycling and waste reduction by improving traceability.

The use of technology to address environmental challenges is increasingly important to improving both environmental and business sustainability.

	Financial services	Healthcare	Manufacturing	Public Sector	Retail and Wholesale	Transportation
Monitoring and management of CO_2 emissions	22%	20%	30%	25%	25%	49%
Shared mobility services and autonomous driving, enabling smarter transportation and reduced environmental impact	–	–	30%	23%	38%	28%
Traceability of products and materials, recycling, and waste reduction throughout the value chain	–	–	13%	45%	6%	5%
Cleaner and smarter urban energy	–	–	–	29%	–	–

Sample size: 798 (organizations who responded that they are engaged in Digital Transformation)

Using AI to make business sustainable

In the future, AI will be adopted by all industries and businesses.

AI-based support services have already been introduced into sectors with customer touchpoints, including the financial, public, wholesale and retail sectors. 41% of manufacturing organizations are using AI to enhance product design. In addition, manufacturing, transportation and wholesale and retail sectors are developing AI solutions to visualize their supply chains and logistics. 35% of transportation organizations are working on supply and demand forecasting using AI.

This suggests that AI is already being used in the core areas of value creation in each industry, such as customer service in financial and public sectors, and product development in manufacturing.

As AI strategy becomes more important, investment in AI will continue to increase. Organizations now need to consider other key areas where AI can be introduced to help them enhance sustainability across business and society.

	Financial services	Healthcare	Manufacturing	Public Sector	Retail and Wholesale	Transportation
Using AI to increase the quality of support service	**47%**	**33%**	**29%**	**41%**	**36%**	**17%**
Visualizing real-time operations of manufacturing, supply chain and logistics operations, enabling an agile response to uncertain and volatile changes	**32%**	**28%**	**19%**	**32%**	**36%**	**49%**
Using AI to forecast demand and supply, enabling matching and loss reductions	**–**	**–**	**15%**	**–**	**17%**	**35%**
Using AI to strengthen product design	**–**	**–**	**41%**	**–**	**–**	**–**

Sample size: 798 (organizations who responded that they are engaged in Digital Transformation)

Using AI to improve people's well-being

AI will also contribute significantly to people's well-being, from improving employee productivity through to customer experience.

Organizations across all industries, in particular the manufacturing sector, are working to improve productivity and employee engagement through automation. The financial and healthcare sectors use digital technologies to enhance customer satisfaction by providing personalized services tailored toward the needs of each person.

Initiatives to improve customer well-being by using digital technologies are also attracting attention. 54% of organizations in the financial services are using digital technology to provide services to people who would otherwise have no access to financial services. More than half of all organizations in the healthcare sector provide comprehensive healthcare services, including prevention and prognosis, by linking health, insurance and medical data.

Organizations need to use AI both to reduce costs through automation and to improve the well-being of their employees and customers.

	Financial services	Healthcare	Manufacturing	Public Sector	Retail and Wholesale	Transportation
Using AI to automate work, improving employee productivity and experience / engagement	40%	34%	43%	31%	32%	29%
Merging online and offline to provide personalized and inclusive experience	47%	38%	26%	21%	30%	23%
Using digital technology to provide financial inclusion	54%	–	–	–	–	–
Provision of personalized healthcare services by connecting health, insurance and medical data with ecosystem partners	–	55%	–	–	–	–

Sample size: 798 (organizations who responded that they are engaged in Digital Transformation)

Accelerating Sustainability Transformation

How are organizations using AI and other digital technologies to drive Sustainability Transformation? We will now share specific examples of Sustainability Transformation practices from organizations we have interviewed.

Sustainability as a business – combining the right technology and focus

To be the benchmark company for ecological transformation

Veolia group is a leader in the design and development of water, waste and energy management solutions. Veolia has set ambitious targets to reduce its emissions by 50% by 2032 and to achieve net-zero emissions by 2050, demonstrating its commitment to sustainable business practices and technology-driven environmental change.

In its 2024-2027 strategic program 'Green Up', Veolia aims to create a more sustainable and desirable future by accelerating the deployment of solutions that already exist and innovating to create those of tomorrow.

Kate Moonen
Chief Marketing Communications & Sustainability Officer for Australia and New Zealand
Veolia

Sustainability as a business with the right technology

Working across water, waste and energy, Veolia helps its customers decarbonize, depollute and regenerate resources, which will be supported by a global investment of 2 billion euros over 3 years.

Kate Moonen says, "Locally, my team in ANZ helps customers achieve their own sustainability goals, but also plays a role internally to co-ordinate and communicate our own sustainability plans, including how we will reduce our own greenhouse gas emissions."

Moonen says, "Sustainability as a business is what we do. We need to shift the thinking that sustainability is not commercially favorable. It's not an either-or equation. We can have both profit and positive environmental outcomes with the right people, technology and focus."

Data and AI make cities and business more sustainable

Data and technology help sustainability efforts

Every mile a person travels on mass transportation plays an important role in achieving a better future for our planet. The Chief Technology Officer (CTO) of a major US transportation company says, “The data warehouse helps our sustainability efforts in giving us the ability to measure how many trains we run, and what the percentage of saving on fuel cost is if we go electric versus diesel. If you can't measure it, you can't improve it.”

Chief Technology Officer
Transportation, USA

AI saves energy and empowers people

The CTO adds, “We use AI for passenger counting; how many people are at a particular platform at a particular time. So, that helps us with our scheduling department to schedule fewer or more trains, depending on the number of people we have.”

In addition to saving energy, AI empowers developers in his organization. “I don't think I'd be able to replace a developer today with AI. What I could do is have the AI tools available to them to do their job better. I would say upskill the organization, so they are better equipped to do the same amount of work and be more productive.”

Decarbonize the end-to-end global supply chain

Ecosystem approach to clean the supply chain

Jeffrey Tan, former products portfolio head for Southeast Asia at Maersk, says, “Scope three, the entire ecosystem of suppliers, vendors, and people that are working with us, is very important here. The impact needs to be felt across the entire ecosystem, and we have worked very closely with our suppliers, vendors, and customers to really clean the supply chain.”

Jeffrey Tan
Chief Product Officer[1]
A. P. Moller-Maersk

Chief Product Officer[1]: title at time of interview

Digital supports decarbonization of supply chain

“Digital Transformation has supported the sector's sustainability efforts.” Tan continues, “One is the digitization of documents, because our sector uses a lot of documents. Another is electrifying a tremendous amount of transportation equipment. Additionally, the ability to use robotics and AI to automate the entire process is crucial.”

“If we’re able to deploy AI to make critical decisions first, it will save time and money, whether it’s optimizing the best route or the best way to transport inbound and outbound materials and cargo through our warehouses. The use of AI becomes the number one top agenda in the supply chain management and logistics sector.”

Section 3

Recommendations for business leaders

Recommendations

So far, we have looked at the impacts of AI on business and society more broadly, as well as the current state of sustainability initiatives by organizations and the challenges they face. We have also seen how digital technology, and particularly AI, can contribute to the progress of Sustainability Transformation. We now offer the following advice for guiding business leaders towards successful Sustainability Transformation.

1 Use AI to expand people skills and improve their well-being

It is important to position AI as a trusted partner, using AI to enhance people's capabilities and well-being. In addition, to enhance collaboration between people and AI, it is necessary to reskill employees to develop their unique human capabilities. In the AI era, it is also important to transform business processes incorporating the cooperation between people and AI so that employees can demonstrate their creativity.

2 Formulate and implement an AI strategy and guideline to maximize the potential of AI

As organizations adopt AI, they must address the negative aspects of AI, such as data breaches and privacy violations. Organizations must develop an organization-wide AI strategy and guidelines to manage AI appropriately, and deploy resources such as data, technology infrastructure and people accordingly. To succeed in AI-driven business transformation, it is important to strengthen the resources required for AI utilization.

3 Use AI to respond to sustainability challenges

As responses to climate change and energy issues become urgent management priorities, organizations need to further drive innovation to improve sustainability. Pioneering organizations are using AI to create financial and non-financial value by addressing sustainability challenges. It is important to select sustainability challenges that match the organization's purpose, accelerating the use of AI to tackle these challenges.

4 Strengthen organizational capability to engage in sustainability as business

Organizations need to strengthen their organizational capabilities to engage in sustainability as a business. In particular, it is important to develop financial and non-financial goals and KPIs, develop the skills needed for transformation, and create a cross-company data platform to manage sustainability and business performance. Enhancing organizational capabilities will help transform sustainability initiatives into core business.

5 Build ecosystems oriented towards sustainability

Sustainability Transformation requires a complex and large-scale effort. The key for successful transformation is to build a cross-industry ecosystem by building a secure data linkage infrastructure and sharing data and knowledge. It is important to share a common purpose with trusted partners, and to use technology to overcome challenges such as different country laws and regulations and different capabilities among partner organizations.

Respondents profile

Sample size: 800

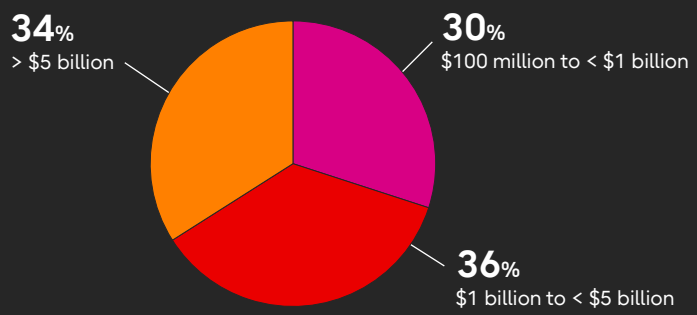
Country

Japan	25%
USA	16%
Canada	9%
UK	5%
Finland	5%
Germany	5%
Spain	5%
France	5%
Philippines	4%
Australia	4%
Singapore	4%
China	4%
Korea	4%
New Zealand	3%
Thailand	3%

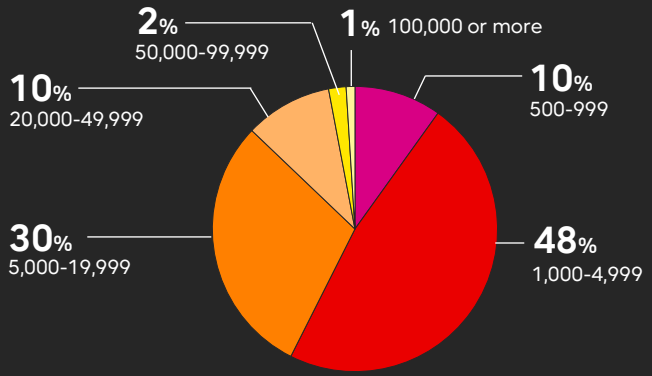
Industry

Wholesale and retail	9%
Consumer product goods	9%
Transportation	8%
Manufacturing	8%
Food and/or beverage	8%
Healthcare	8%
Electronics	8%
Financial services	8%
Energy and/or utilities	8%
Telecommunications services	7%
Chemicals and/or metals	7%
Insurance	7%
Government	3%
Public Sector	3%

Revenue for last fiscal year



Number of employees



Respondents by role

Chief Security Officer (CSO)	11%
Chief Technical Officer (CTO)	10%
Chief Information Officer (CIO)	10%
Chief Analytics Officer (CAO)	10%
Chief Data Officer (CDO)	9%
Chief Financial Officer (CFO)	7%
Chief Operating Officer (COO)	6%
Chief Strategy Officer (CSO)	6%
Chief Compliance Officer (CCO)	5%
Chief Marketing Officer (CMO)	5%
Chief Product Officer (CPO)	5%
Chief Digital Officer (CDO)	3%
Chief Risk Officer (CRO)	3%
Chief Administrative Officer (CAO)	3%
Chief Human Resource Officer (CHRO)	3%
Chief Sustainability Officer (CSO)	2%
Chief Revenue Officer (CRO)	1%
Chief Executive Officer (CEO)	1%

Fujitsu’s Sustainability Transformation

Fujitsu Technology and Service Vision

The Fujitsu Technology and Service Vision (FT&SV) is the evolving story of Fujitsu's insights for the future. FT&SV 2024 sets out specific steps aimed at transforming organizations into regenerative enterprises that deploy AI-centered technology to provide greater value for the environment, the economy, and people’s well-being. Refer to the websites listed below for information on Fujitsu's approaches to the main issues raised in this survey.

Fujitsu Technology and Service Vision
https://activate.fujitsu/en/about/vision/technology-vision

2024 Fujitsu SX Survey - Charting a course for change

In November and December 2023, we conducted a survey of 600 senior executives (CxOs) across 11 industries and 15 countries with the aim of gaining a clear picture of their progress towards corporate and organizational Sustainability Transformation (SX). We define those companies and organizations who are at an advanced stage in their SX as ”Change Makers” and propose four key steps for organizations who wish to follow in their footsteps.

2024 Fujitsu SX Survey - Charting a course for change
https://activate.fujitsu/en/insight/sx-survey-2024

Related information

Technologies to achieve a sustainable society

Fujitsu R&D

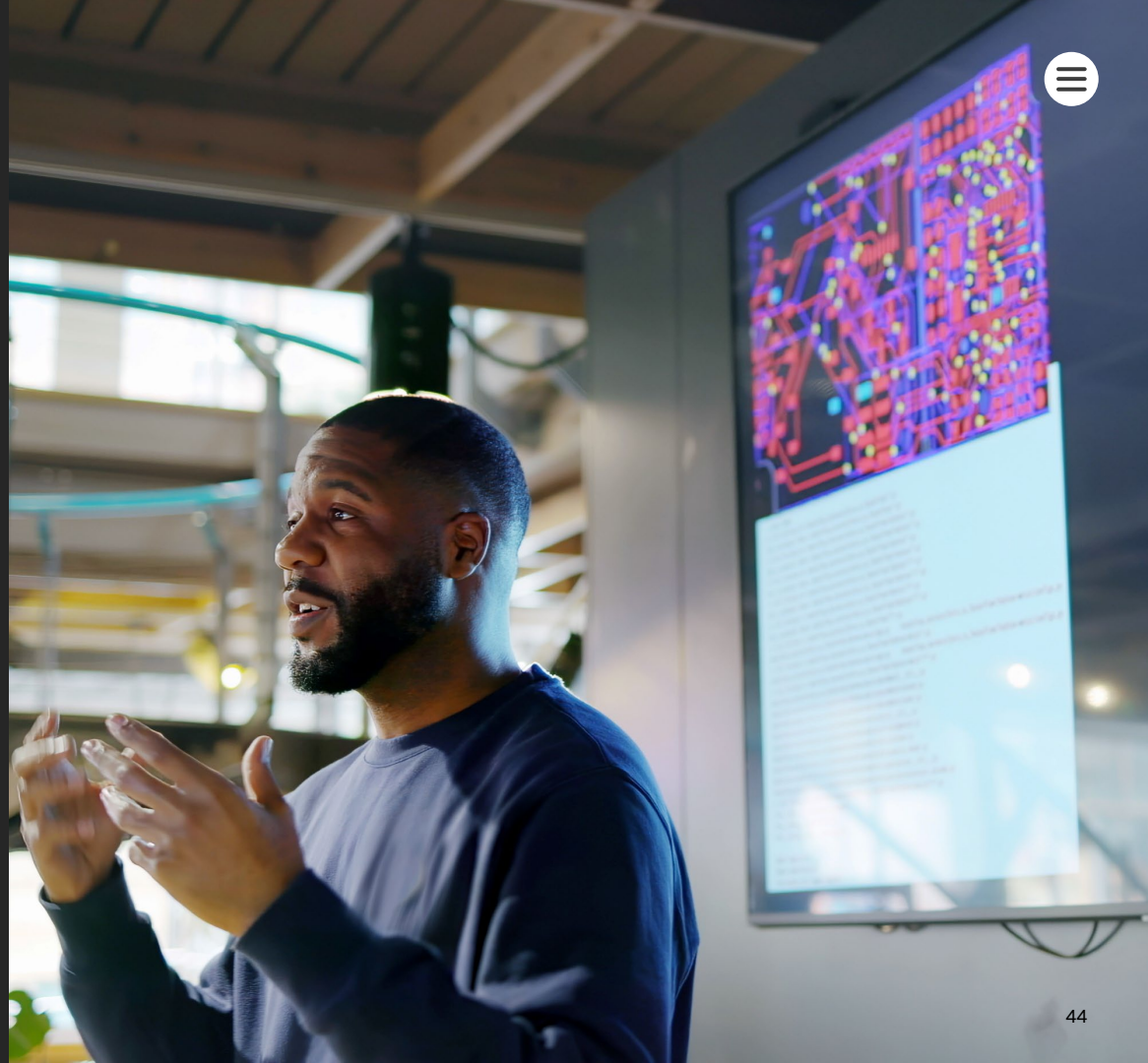
To help achieve a more prosperous and trusting society, Fujitsu is focusing its R&D resources on five digital technologies and contributing to sustainable development for society and the planet.

Fujitsu R&D
https://www.fujitsu.com/global/about/research/about/

Fujitsu Research Portal

The Fujitsu Research Portal is intended for customers who are using digital technology and particularly AI for their Sustainability Transformation. It offers a platform where users can quickly test Fujitsu's advanced technologies through APIs and web applications.

Fujitsu Research Portal
https://en-portal.research.global.fujitsu.com/



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