Redefining the future of FM with AI.

Five ways artificial intelligence drives facilities transformation

AI-driven digital transformation for facilities management

Taking care of buildings and estates is becoming more complex and demanding. The people who use your spaces want more innovation, more sense of community and more collaboration from the services and experiences you provide. Government legislation and public pressure are introducing an immediate need to reduce emissions, embrace renewable energy and provide more transparent reporting. And all of this is accompanied by the ever-present need to demonstrate value from the spaces your building users occupy.

Meeting these demands requires data-driven intelligence. The kind that provides visibility across entire estates, pinpoints where emissions come from, identifies where security threats lie and helps teams on the ground deliver exceptional services and experiences.

We firmly believe that data is key to driving change – to moving beyond facilities management to facilities transformation. And now, a new era of AI is redefining what we can achieve with the data generated by our buildings and services.

Some images in this report have been AI-generated

AI makes facilities
TRANSFORMATION
more humanly possible

AI for facilities management promises a fundamental evolution, with the potential to permanently transform the way buildings and places are maintained, managed and protected.

With the power of AI – supported by the right data – you can uncover more insights, faster. But this isn't about replacing people; it's about enabling them to achieve more.

AI can enhance human expertise with insights that are machine recommended and human verified – automating routine tasks so people can focus on the bits they do best. This is how AI can expand the scope of what's humanly possible…

But what does expanding the scope of what's humanly possible mean specifically? And what does it mean for you?

To answer that question, this guide explores the five themes that support our own AI ambitions with our AI-enabled product suite, Intelligent X.

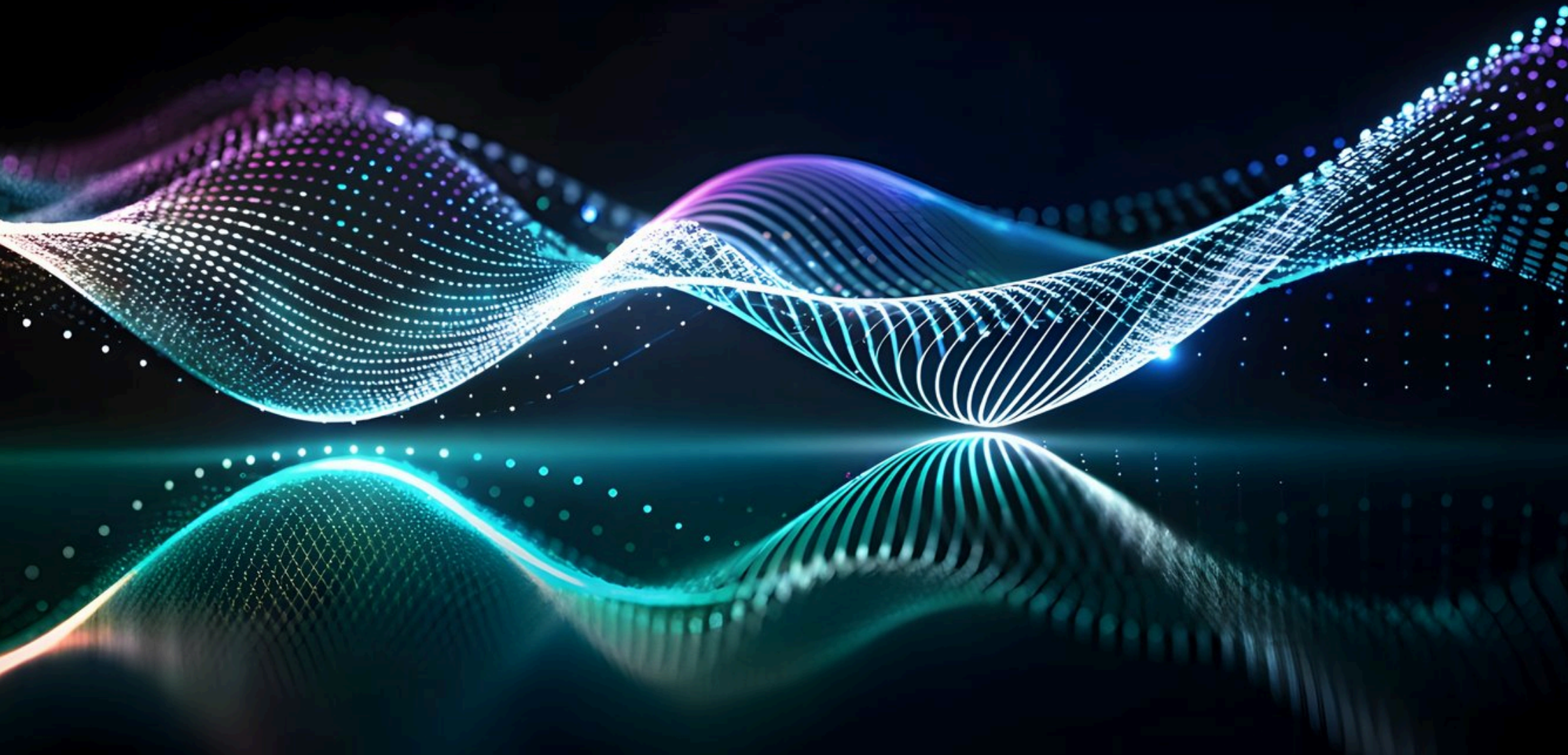| THEME	THEME	THEME	THEME	THEME
01	02	03	04	05
VISIBILITY	READINESS	AGILITY	EXPERIENCE	RESILIENCE

1. Visibility

Move from blind spots to hyper-awareness

Drive change with AI powered insights

The first step towards improving your built environment is understanding its current state – where each weakness and opportunity lies. Data already plays a huge part in this process, providing insight into how buildings are used and the best way to manage and optimise them. But processing data and deriving insights manually can be time-consuming and costly…

AI can automate this process and take that understanding to the next level, painting an in-depth picture of the built environment and FM productivity based on real-time data and peer- and industry-specific benchmarks.

This enables you to consistently make the best decisions for your estate at the best times, from implementing demand-led cleaning and proactive maintenance to reducing waste by powering off equipment when buildings aren't in use.

> "
> The catalyst for facilities transformation is gaining a clear understanding of how your built environment operates today; where every risk, cost and opportunity for improvement lies. Visibility is key."
>
> **Michael Moulsdale**, Head of AI Products at Mitie
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AI-based predictive maintenance can increase uptime by **up to 20%** and reduce annual maintenance fees by **up to 10%** (McKinsey)
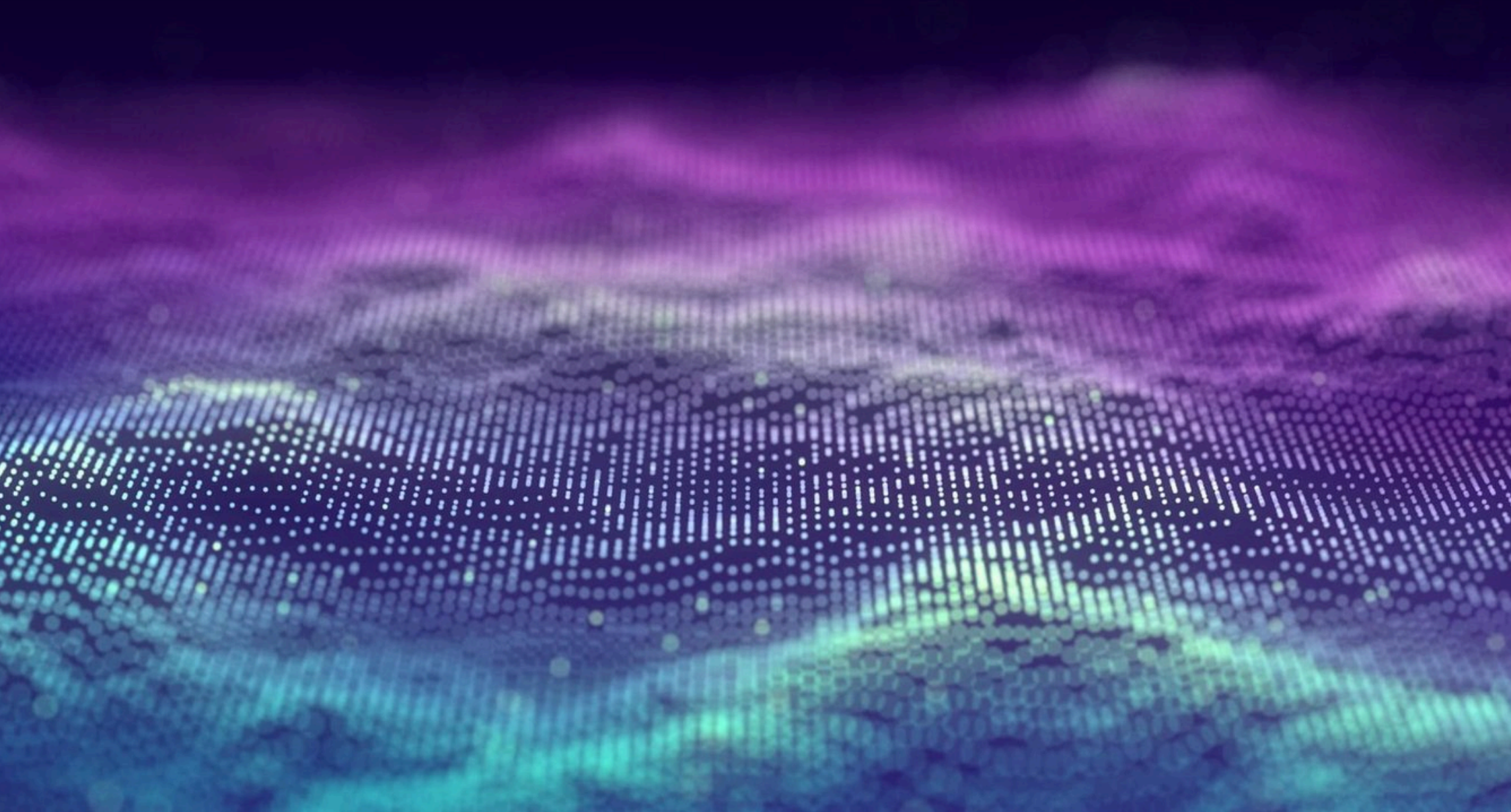
The most important ingredient is good data

Because we self-deliver across all our services, we have one of the most granular structured and unstructured datasets in the market, including engineering callouts, security incidents, time-to-clean, energy consumption and more. And, because it's our own data, we know it's data we can trust – which is crucial for the successful implementation of AI. Ultimately, this enables us to summarise that data, recommend best actions, predict events, and automate processes – while still allowing human control.

Through using AI to analyse this data, we can detect anomalies, diagnose issues and and discover more ways to improve how buildings are managed.

2. Readiness

Go from hindsight to powerful foresight

Fix problems before they arise. Grasp opportunities before everyone else

Whether you're looking to get ahead of asset maintenance to avoid downtime, or make sure your sites are protected from unseen threats, being able to predict what lies ahead can be a game changer.

AI's ability to interpret huge amounts of data and identify patterns can deliver on the promise of predictive analytics. From accessing threat intelligence for public spaces to anticipating asset failures before they happen, you can **more effectively prepare for what's next** and **plan responses to critical situations well in advance**.

The result is greater uptime, lower costs and more consistency in your day-to-day activities.

> "
> Proactive services can be key to ensuring uptime and providing exceptional, uninterrupted experiences for the people that use your facilities. One of the big benefits of AI is its ability to spot patterns in unstructured data and shine a light on the areas that need our attention."
>
> **Daniel Blake**, Data Director at Mitie

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Building the best, with the best

At Mitie, we've always recognised the importance of partnering with industry leaders, which is why we've forged strategic relationships with AI trailblazers including **Microsoft, IBM, AWS, Salesforce and ServiceNow.**

Each of these partners shares our commitment to using AI responsibly. And they also allow us to bring the latest innovations to our customers.

We use **Microsoft Fabric** to uncover new insights in data, **Microsoft Copilot** and **IBM Watson** to make knowledge and expertise more readily available, and **AWS** to create digital twins of client environments so they can simulate and experiment while remaining operational.

3. Agility

Go from reactive to proactive services

Know where and when people are needed

The effectiveness of facilities management relies on your ability to react quickly and effectively to the varying demands from the buildings you manage. Agility is key. But to be agile, you need to know where resources are best directed at any given moment.

You can have cameras covering every inch of your estate and reams of data on asset performance – but unless you can process that information quickly to identify and address issues, it's of little use…

With computer vision analysing footage, sensor technology providing insight into building use and BI applications bringing all these insights together in one place, you can gain the visibility required to **deploy resources when they're needed most.**
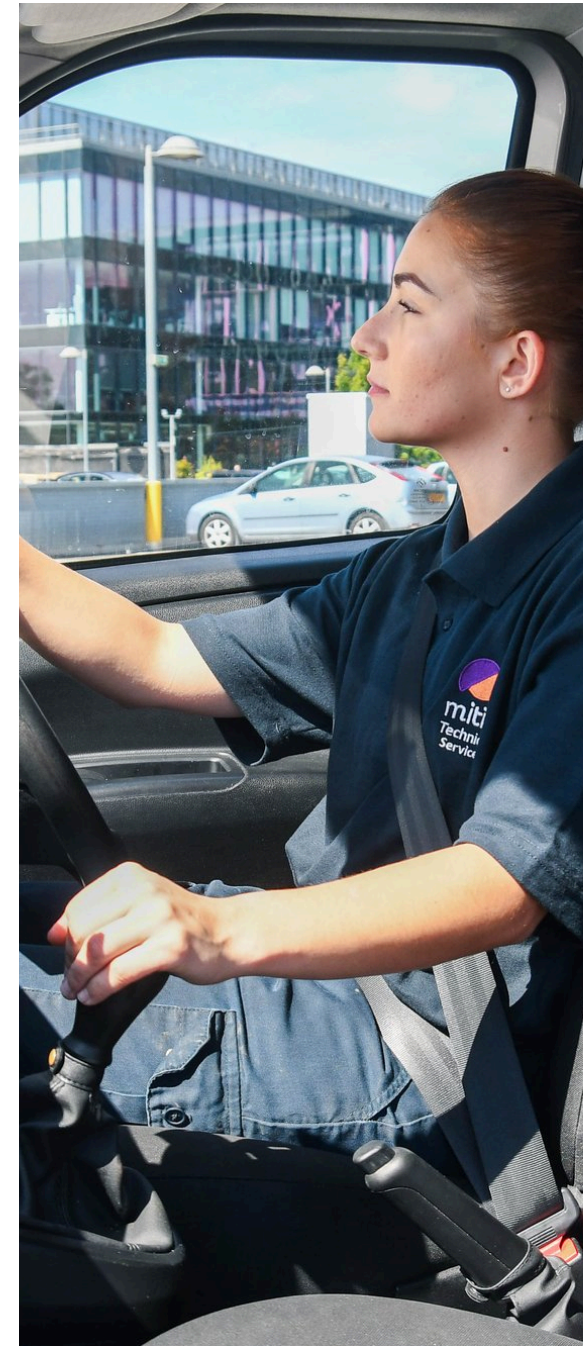
This leads to greater responsiveness, but it can also reduce the costs that rack up through unnecessary overprovisioning.

AI can be deployed to alert service teams to nearby spills, for instance. Or to diagnose faults so engineers arrive equipped to fix them – or even enable them to do so remotely. It's this level of insight that allows FM partners to actively **plan services** and **streamline workflows** – augmenting human effort and eliminating wasted time, costs and carbon.

> "
> Knowing where to dedicate resources through data led insights, and react to changing demands of the building users is not only key to keeping your buildings clean, safe and operational, but also drives efficiency and supports cost reduction.'
>
> **Nick Health**, Director of Cleaning at Mitie
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Unlocking potential and empowering people

We believe this is where AI really shines. We see it as an investment in people, used to empower them to do better, more interesting and more fulfilling work – like data-driven and demand-led services.

It's vital that everyone feels empowered by AI, from frontline colleagues to sector specialists. That way they can feel confident in leading the next era of facilities transformation.

To this end, our Digital Academy provides personalised training to improve digital literacy and give people the skills needed to harness our tech and make the most of AI. Similarly, our Facilities Transformation Hub is always exploring new opportunities and the practical ways new technologies can drive transformation.

4. Experience

Go from daily disruption to everyday delight

Create commute-worthy spaces

In the age of hybrid and remote working, creating commute-worthy spaces is a priority. And AI has a huge role to play in providing clean, safe, green environments and exceptional experiences for those that use your facilities.

With AI you can gain insight into underutilised areas. This can help facilities managers make informed decisions about reallocating space to meet changing needs, or base cleaning and maintenance schedules on real-time information around demand and use.

AI can even help you improve tenant and occupant satisfaction by personalising environments based on individual preferences, automatically adjusting elements like temperature and lighting to improve comfort. And AI chatbots can provide instant support for common queries such as bookings or amenities.

Even before this stage, AI can play a vital role in helping architects and designers map out space and create the optimal environments. The opportunities are near endless.
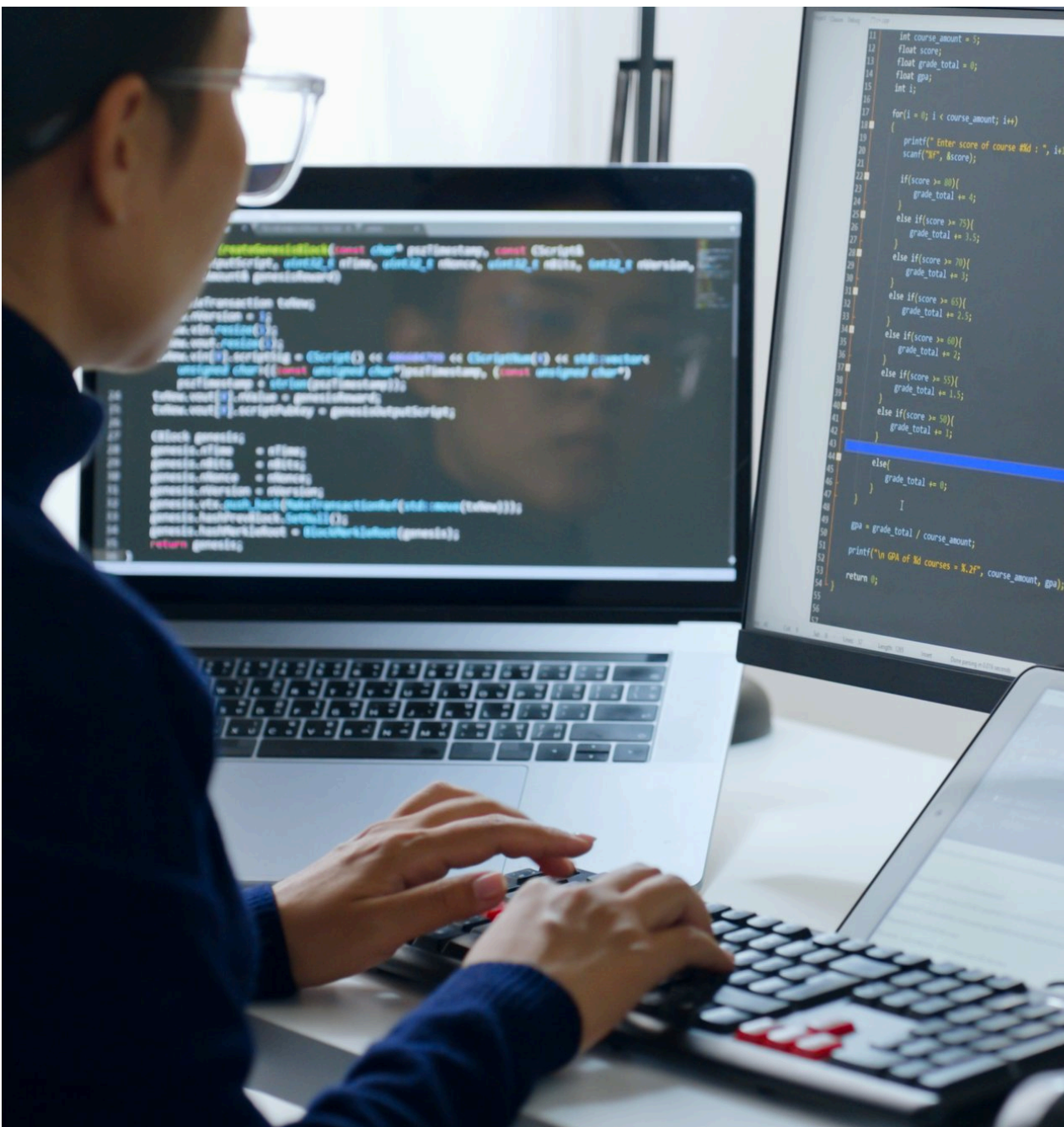
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The built environment has a profound impact on employee and customer experiences, in terms of both comfort and convenience. And this is especially true now, where the role of the workplace is changing. AI can provide a competitive advantage and encourage people back to the office."

Anindya Biswas, Chief Digital Product Officer at Mitie

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Setting standards for AI use

If we're using AI to make decisions about the spaces where people work and to improve the human experience, then we must have robust standards. AI has to be a tool we can trust to deliver what people want and need. For that reason, we strive to set the benchmark for AI use standards in our industry with our Ethical Use of AI policy and an established AI Ethics Board.

These foundations ensure that our **sourcing**, **evaluation**, **development** and **use** of AI is in line with the very latest standards – and that every use case is serving the people it's intended to help. They ensure that AI doesn't include bias that affects marginalised groups, and they enable us to be transparent about the data we use, and how our algorithms and AI models put that data to use. All of this instils confidence in our colleagues, clients and stakeholders – the people AI is designed to serve.
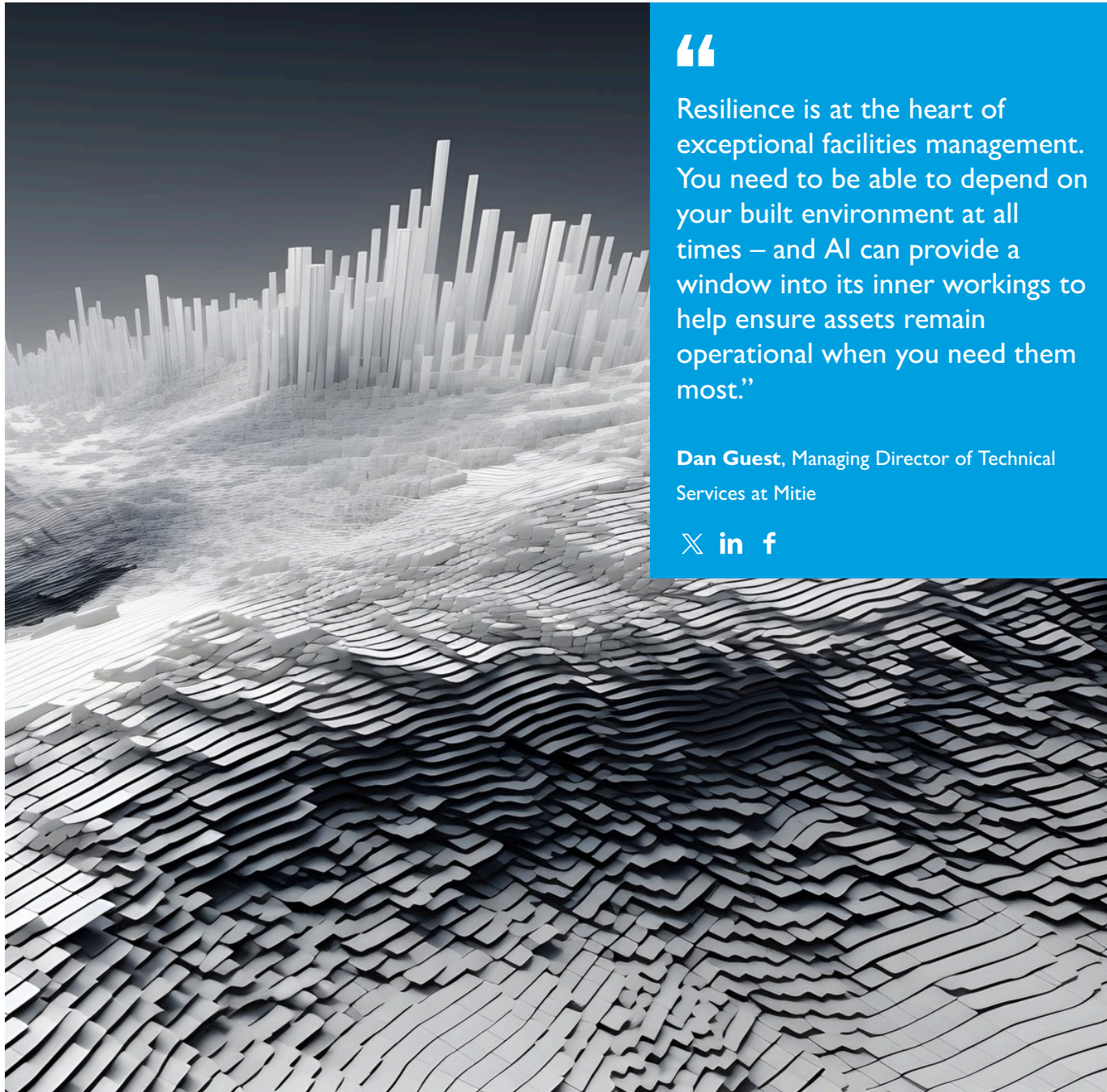
5. Resilience

Go from worrying about downtime to working uninterrupted

Work without distraction

Downtime can have a major impact on all organisations, so keeping operations running smoothly and minimising the impacts of threats is vital. With AI-powered insights, you can spot and remedy incidents before they become a problem, from blocked fire exits to key assets in need of maintenance.

This dramatically **increases response** times of FM teams. But it can also help you **remain compliant**, **minimise downtime** and make sure those who use your buildings can stay focused on the task at hand.

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Resilience is at the heart of exceptional facilities management. You need to be able to depend on your built environment at all times – and AI can provide a window into its inner workings to help ensure assets remain operational when you need them most."

Dan Guest, Managing Director of Technical Services at Mitie

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Keeping your estate secure

Cyberthreats are a common cause of downtime. And the more tech you introduce to your facilities, the bigger your threat landscape becomes. For that reason, we prioritise the highest standards of security to safeguard your data and environments.

We've invested £18m on cybersecurity alone. Our approach involves the continuous monitoring, evaluation and enhancement of our systems, ensuring your data remains secure while delivering added value. And we're backed by leading certifications to prove it:

- Highest cyber security rating of A (98) from independent benchmarking company, SecurityScorecard
- ISO27001:2022 accredited
- Cyber Essentials Plus certification from the National Cyber Security Centre
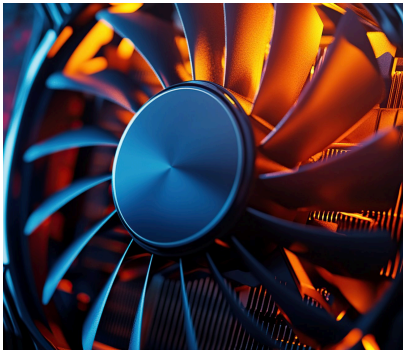
Mitie: Where technology and people combine

Our approach to AI

At Mitie, our work transforming the built environment combines highly-skilled people with the latest technology to enhance facilities management processes. It's an approach we've been refining for years. And as AI takes centre stage, it's now our goal to be an industry leader in that space, too.

We're already using AI to deliver **intelligent engineering, intelligent cleaning**, **intelligent security** and **intelligent projects**. Across these areas of operation, AI helps us summarise information, recommend best actions, predict incidents and automate time-consuming tasks. Ultimately, it arms our experts with the insights needed to drive meaningful change for you, ensuring their efforts are targeted, prioritised and always impactful.

Our Intelligent X services are deployed across four key areas of our operations

Intelligent engineering

We're arming our on-site engineers with the information they need to deliver a first-time fix, as often as possible – improving operational efficiency and reducing costly downtime for clients.

Intelligent cleaning

With AI-powered insights and intelligent spill detection, we're embracing demand-led cleaning so our people can be deployed where they're needed most – for more efficient workflows and a better experience for all.

Intelligent security

Protect your people, property and assets through powerful AI analytics and intelligent foresight. With AI, we make spaces safer, protect against losses and help our clients stay a step ahead of any potential threats.

Intelligent projects

We're accelerating the path to net zero by offering intelligent insights on emissions within the built environment – fuelling solutions that bring our clients closer to their decarbonisation goals.

How we do it…

In the last six years, we've invested **£160 million** in our data infrastructure.

Our data lake comprises one of the most definitive data sets in the industry, with **25 million data points processed every week.** And we already use AI on over **700 terabytes of data** covering every aspect of the built environment and its use. That's the equivalent of over **20 million full filing cabinets**.

Using this data, and that from third-party sources, we deploy advanced analytics alongside industry-leading AI and machine learning capabilities from our partners. This enables more informed decisions, reduces costs, increases sustainability and enhances value across client estates.
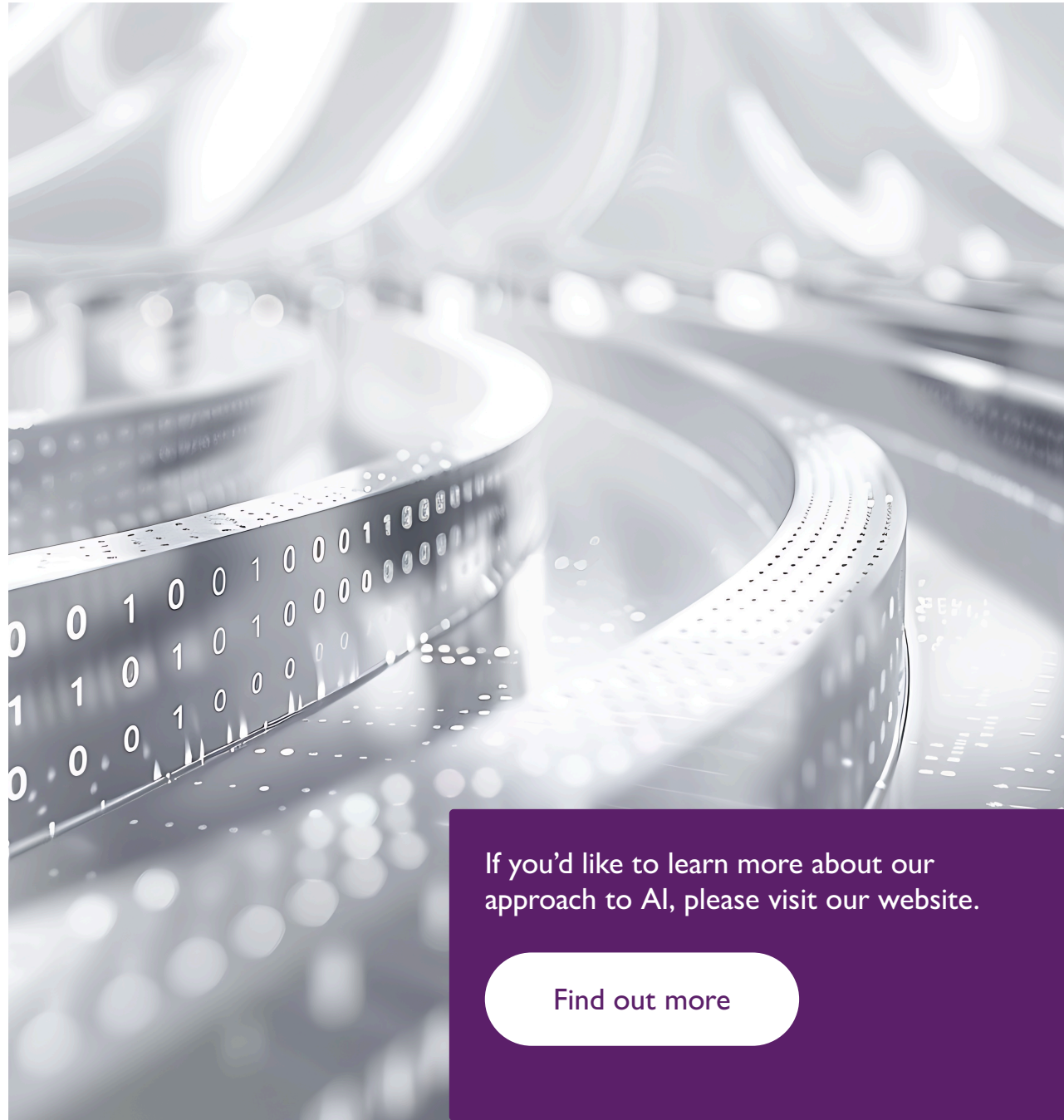
Are you ready for AI?

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The time to start is now

AI promises to unlock the future of facilities management, enabling the shift from routine tasks to responsive and agile services, like demand-led cleaning, risk-based security and condition based engineering maintenance. For managers and industry leaders who want to gain a competitive advantage, now is the time to consider how you will embed and apply these technologies. And to start experimenting.

As the UK's facilities management leader, we've been combining technology and innovation with human expertise to support our teams on the ground and deliver better services to our clients. Now, AI will play a major role in that vision, and we will continue to experiment and implement it to make exceptional facilities management more humanly possible.

If you'd like to learn more about our approach to AI, please visit our website.

Find out more