# The role of AI in facilities management: Transforming operations with data



Digital transformation is fundamentally altering the landscape of facilities management, and the integration of artificial intelligence (AI) is at the forefront of this evolution. Businesses are beginning to recognise the necessity for a solid data foundation to unlock the full potential of AI technologies. Mitie, a leading facilities management provider, has placed a significant emphasis on data as a vital component for implementing successful AI strategies.

According to Dan Blake in a recent piece for Mitie, the company's extensive investment over the past seven years, totalling over £160 million, has cultivated a robust data infrastructure. This infrastructure encompasses both structured and unstructured data, amassing over 700 terabytes of information that spans various operational aspects such as engineering callouts, security incidents, time-to-clean metrics, and energy consumption. The breadth of this dataset enables Mitie not only to understand their internal processes better but also to enhance the services provided to clients.

Mitie's centralised "data lake" serves as a distribution centre for its AI activities, where data from multiple sources is collected, structured, and modelled. This strategic framework facilitates reporting, analytics, automation, and AI functionalities. Partnerships with industry leaders such as Microsoft Azure and the Cloudera Data Platform have enhanced their capabilities, allowing for scalable data processing and sophisticated modelling techniques that empower data analysts to derive insights swiftly.

The application of AI at Mitie extends across several practical use cases. AI technologies are employed to summarise data, recommend actions, predict future events, detect anomalies, diagnose issues, and automate operations. For instance, AI aids in achieving operational visibility by processing significant volumes of data to uncover insights into asset management and resource allocation. This creates an understanding of risks, inefficiencies, and opportunities within facilities, allowing for informed decision-making by human experts.

In addition to visibility, the use of AI has proven effective in cost reduction. By analysing utilisation patterns of various facilities, Mitie can automate systems such as heating and lighting, shutting them down when not in use, which significantly cuts costs and reduces emissions. This approach enables clients to maintain high standards while avoiding the excess costs associated with overprovisioning services.

Moreover, AI is integral in enhancing the workplace experience. By streamlining routine office processes—such as room bookings and concierge services—AI applications promote convenience for building users, thereby improving workplace satisfaction and productivity. Tools like chatbots can facilitate communication and support efficient management of daily operations.

Security enhancements also form an essential component of Mitie’s AI offering. Their business intelligence software, Merlin Protect, analyses vast amounts of data to predict potential security threats in real-time. Such applications help businesses optimise their security measures to protect personnel and assets.

Throughout the process of implementing AI-driven capabilities, Mitie has identified several best practices for managing data effectively. Key recommendations include establishing well-designed data systems aligned with governance standards, providing training for users to maximise data accuracy, and maintaining compliance with evolving data legislation. Regular updates to data capture systems and vigilance against bias in AI models are also critical for maintaining the integrity of insights generated.

The insights from Mitie underscore the pivotal role of accurate data in harnessing AI for facilities management. As the sector continues to embrace digital transformation, the emphasis on solid data foundations will likely become increasingly significant in realising the benefits of AI-driven operations.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

* <https://www.mitie.com/insights-news/insight/accurate-data-the-foundation-of-good-ai-for-facilities-management/> - Corroborates Mitie's investment in data infrastructure, the creation of a robust data lake, and the use of AI for various operational aspects.
* <https://www.mitie.com/insights-news/insight/accurate-data-the-foundation-of-good-ai-for-facilities-management/> - Details the extent of Mitie's data collection, including over 700 terabytes of structured and unstructured data.
* <https://www.mitie.com/insights-news/insight/accurate-data-the-foundation-of-good-ai-for-facilities-management/> - Explains the role of Mitie's centralised 'data lake' and partnerships with industry leaders like Microsoft Azure and Cloudera Data Platform.
* <https://blog.ifma.org/unlocking-the-future-of-facilities-management-with-ai> - Supports the use of AI in facilities management for predictive maintenance, energy optimization, and space utilization.
* <https://blog.ifma.org/unlocking-the-future-of-facilities-management-with-ai> - Highlights the importance of a robust, integrated data framework for fully exploiting AI in facilities management.
* <https://smartbuildingsmagazine.com/news/mitie-launches-its-facilities-transformation-hub> - Describes Mitie's use of AI for various practical applications, including energy optimization, space utilization, and security enhancements.
* <https://smartbuildingsmagazine.com/news/mitie-launches-its-facilities-transformation-hub> - Details Mitie's Transformation Hub and its focus on using AI to drive facilities transformation, including digital twins and location-based task management.
* <https://blog.ifma.org/unlocking-the-future-of-facilities-management-with-ai> - Corroborates the role of AI in enhancing operational efficiency, reducing costs, and improving the occupant experience in facilities management.
* <https://www.mitie.com/insights-news/insight/accurate-data-the-foundation-of-good-ai-for-facilities-management/> - Emphasizes the importance of accurate data and well-designed data systems aligned with governance standards for effective AI implementation.
* <https://blog.ifma.org/unlocking-the-future-of-facilities-management-with-ai> - Supports the need for careful planning and integration of AI with existing systems, as well as training and support for facility managers and occupants.