

Creating Safe, Healthy, and Sustainable Spaces through an Innovative Technology Platform.

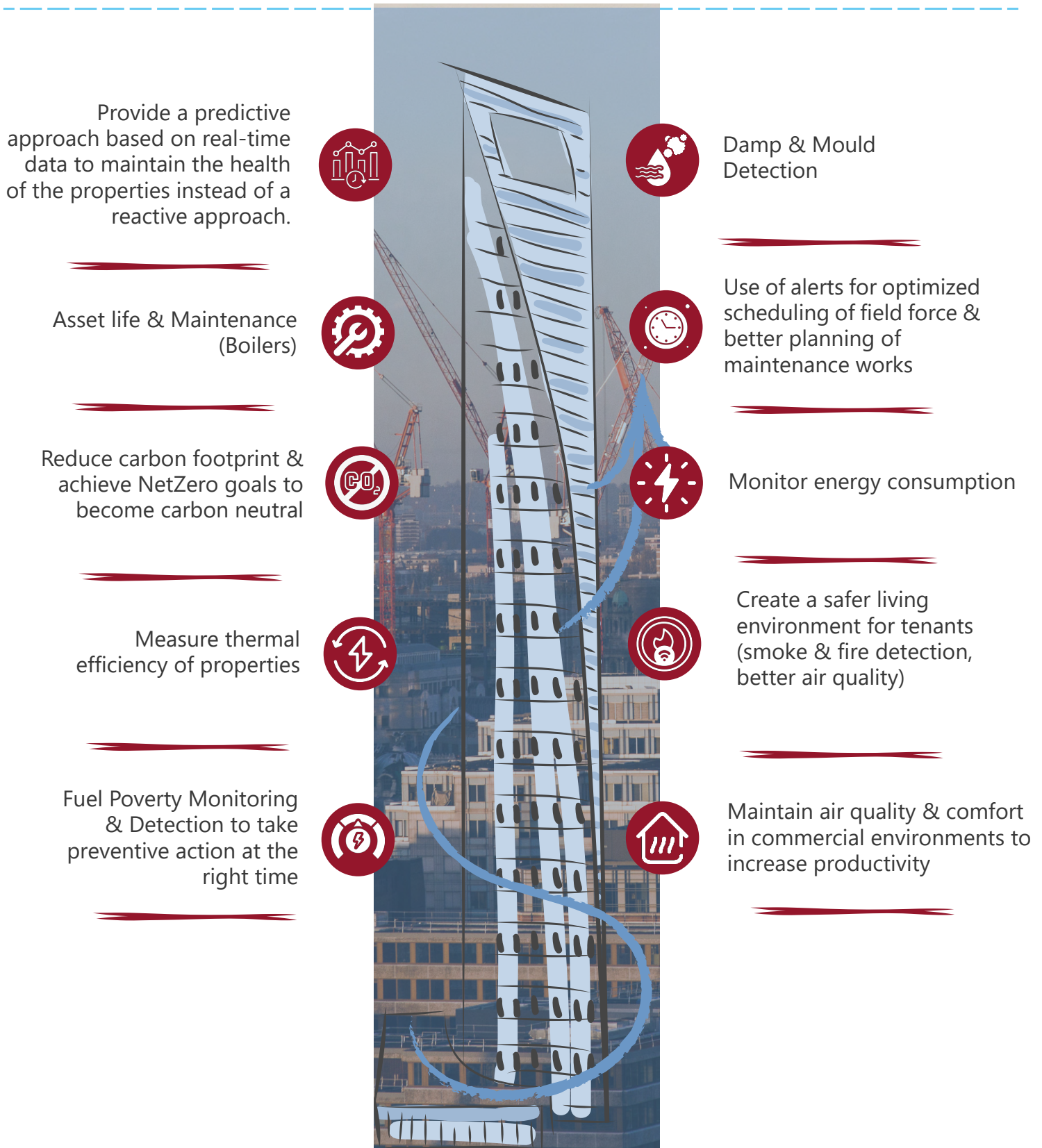
ABOUT THE CLIENT

Morgan Sindall Property Services is a property maintenance provider with over 30 years of experience within the affordable housing sector. The company provides planned and reactive maintenance to over 200,000 domestic properties nationwide in the UK and has a significant portfolio of large-scale refurbishment programmes. Their services include responsive repairs, void refurbishments, compliance services and planned maintenance works. Using data, they provide actionable insights for their clients, helping to inform investment decisions, improve customer experience, identify vulnerabilities in communities and protect the environment.

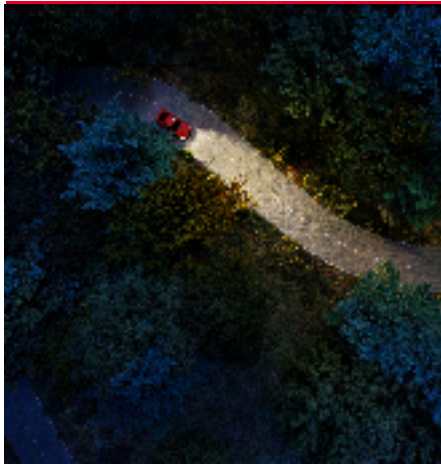


THE NEED

Morgan Sindall's primary purpose was to bring the physical world into the digital world, generating unique insight-driven data analytics through a smart ecosystem of sensors for construction teams, building owners, and occupiers and, along with that, also delivering innovation in designing, building and operating safe, healthy and sustainable spaces within the built environment, through the innovative use of data insight. And for that they needed a platform that can,



THE JOURNEY



Happiest Minds worked collaboratively with Morgan Sindall to bring data from an integrated ecosystem of IoT sensors to the goldeni IoT platform along with other data sources to bring the physical world into the digital world to support evidence-based decision-making within the built environment. We used innovative Artificial Intelligence and Machine Learning to ensure spaces are safe, healthy and sustainable.



Happiest Minds worked as a strategic partner for Morgan Sindall, performed gap analysis and envisioned the target state.



Happiest Minds contributed to creating Power-Bi reports for Morgan Sindall's Construction & Commercial portfolio based on the gathered real-time temperature, humidity, air quality & energy prediction data.



Happiest Minds contributed to all aspects of the IoT Value chain, from creating virtual devices, enhancing their connectivity solution (Wifi in a box), adding new data sources, maintaining & enhancing their core platform, along with envisioning a device & property onboarding application for easier & faster onboarding.

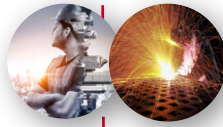


Happiest Minds developed a data science model to predict energy reduction given any change in internal/external environmental factors



I. Added new data sources via partner integrations

- To measure the thermal efficiency of a property using real-time data
- Integrated smart thermostat to measure fuel poverty risk, heat risk, damp & mould risk
- Integrated smart occupancy solution to measure real-time seat occupancy & foot-fall of any given space
- To measure disaggregated & total energy consumption in a property



II. Visualizations

New Dashboards development using Power BI to report the health & sustainability for

- Construction Portfolio
- Commercial Portfolio

III. Insights

Predictive Modelling using Data Science or Algorithmic

- Energy reduction Model
- Damp & Mould Model



IV. BAU

Platform Maintenance Activities

- Maintain existing & new integrations
- RCA & Bug Fixes
- Proactive Monitoring



DIGITAL CAPITAL DELIVERED

Happiest Minds enabled the Golden i IoT platform by adding additional data sources, visualizations and developing analytical models and gained the following business value:



A

Operational efficiency

- Deployed damp & mould model and integrated with Switchee to add it as a data source to identify properties at risk of dampness & mould, fuel poverty and heat stroke based on temperature, humidity and occupancy levels. The Morgan Sindall Property Services Team can leverage this information to plan their remedial works and notify the local authorities to aid people living in fuel poverty.
- Added additional data sources like MetOffice Weather data to provide weather insights to Morgan Sindall Construction teams to plan their work according to the forecast.
- Integrated with Kontakt.io to help Morgan Lovell design teams provide business value to their clients by optimizing their workspaces & reducing costs based on actual space occupancy data.
- The platform also monitors heating systems, detects water leaks, and monitors electricity and gas consumption. It provides social housing landlords and tenants with clear, practical recommendations.



B

Energy & sustainability

- Integrated with SmartHTC to assess the thermal efficiency of a property. These results can be compared before and after construction works to see how Morgan Sindall Property Services has improved the thermal efficiency of a property based on real-time data.
- The platform provides social housing landlords and tenants with real-time, actionable insights to help them ensure their properties are healthy, legally compliant and more energy efficient.
- Added additional data sources like EPC to understand a property's energy efficiency and develop an energy prediction PoC model.
- Provided connectivity to social home sensors to gain insight into disaggregated energy consumption.
- The platform provides practical real-time recommendations for making properties more energy efficient, from using heating more effectively throughout the day to suggestions on the best time to run energy-hungry appliances or improve insulation.



C

Tenant wellness & safety

- Goldeni helps manage IAQ with real-time IoT-enabled sensors and systems, which monitor temperature, carbon dioxide and humidity, providing us with further insights into the internal air quality of the office.
- Implemented commercial dashboards to provide data on health & wellness in commercial properties of Morgan Sindall.

About Happiest Minds

Happiest Minds Technologies Limited (NSE: HAPPSTMNDS), a Mindful IT Company, enables digital transformation for enterprises and technology providers by delivering seamless customer experiences, business efficiency and actionable insights. We do this by leveraging a spectrum of disruptive technologies such as: artificial intelligence, blockchain, cloud, digital process automation, internet of things, robotics/drones, security, virtual/augmented reality, etc. Positioned as 'Born Digital . Born Agile', our capabilities span digital solutions, infrastructure, product engineering and security. We deliver these services across industry sectors such as automotive, BFSI, consumer packaged goods, e-commerce, edutech, engineering R&D, hi-tech, manufacturing, retail and travel/transportation/hospitality.

A Great Place to Work-Certified™ company, Happiest Minds is headquartered in Bangalore, India with operations in the U.S., UK, Canada, Australia and Middle East.

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The Mindful IT Company

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