xpand it

INGKA
INVESTMENTS

Data-driven sustainability

Ingka's strategic evolution

INGKA™

Ingka Group comprises three key business areas – IKEA Retail, Ingka Centres, and Ingka Investments. With a commitment to quality, affordability, and sustainability, Ingka aims to create a better everyday life and is committed to responsible investments that add value for customers.

Ingka Investments' Renewable Energy Portfolio invests in renewable energy assets, such as wind and solar farms, to support the reduction of the IKEA climate footprint and a broader transition towards a net-zero society.

As they continue to evolve and accumulate valuable data from suppliers, customers, and touchpoints, Ingka recognises the importance of centralising and customising its database to drive continuous improvement and informed decision-making.

Challenge

Ingka approached Xpand IT with the need to restructure its core database. Previously, Ingka relied on separate solutions and databases to manage their key data. This resulted in difficulty to manage data effectively across multiple tools. For instance, supplier data stored in Dataverse had to be transferred to SQL, and vice versa, for critical wind turbine data, preventing seamless integration into business processes.
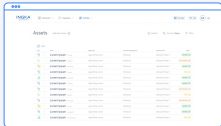
The primary objective was clear: centralise all key asset data to ensure a single, reliable source of information, and allow users to manage the key data in a secure and reliable way. In addition, data needed to be digitised and organised into a sustainable database format to enable seamless integration with other projects and easy sharing across multiple solutions.

By undertaking this database restructuring project, Ingka Investment Renewable Energy aimed to optimise its data management practices, make informed decisions based on accurate insights and establish a more efficient and comprehensive asset management framework.

Solution

Xpand IT implemented a solution to restructure the Ingka Investments Renewable Energy database by leveraging the power of Azure and Vue 3 solutions. On top of this significant challenge, it was also necessary to ensure that several applications using the database could continue functioning seamlessly while assuring centralisation. This required a remarkable team effort, working together towards a common goal.

Azure and Vue technologies used in the solution provided a secure, scalable, easy-to-use experience. Azure's robust cloud platform ensured reliable data storage and processing, while Vue's JavaScript framework enabled seamless data visualisation and interaction with a user-centric design approach. This integration optimised data processing, connectivity and overall system performance.

Asset lists screen

- Overview of the assets and their respective status.

Add new asset screen

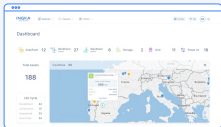- Ability to add different assets, choosing a specific category.

In response to the growing demand for renewable energy solutions, the Ingka Investments Renewable Energy data centralisation strategy provides a holistic view of asset performance, facilitating the identification of trends and optimising energy generation to create a greener future. Using personalised workflows, Ingka can start tailoring its strategies to specific markets, regulatory frameworks and environmental conditions, ensuring optimal performance and maximising the return on its renewable energy investments.

The emphasis on the user experience, facilitated by the Vue 3 framework, guaranteed that the stakeholders had an intuitive and engaging platform for data-driven decision-making.

By implementing this combined solution, Ingka Investments Renewable Energyhas achieved centralised data management, enabling them to make informed decisions, optimise operations, and drive sustainable practices across their renewable energy portfolio.

By harnessing the power of data, Ingka can identify areas for improvement, streamline processes, and achieve greater efficiencies in managing its growing renewable energy assets.

By taking advantage of User Experience (UX) methodologies, Xpand IT's goal was to create an intuitive, user-centred, dynamic experience that provided Ingka with the solution and functionalities needed for them to achieve operational performance and, ultimately, helping them become a data-driven organisation by revolutionising their internal operations.

Dashboard screen

- Dashboard showing the total number of assets and their geographical organisation

Technologies

Vue is a powerful JavaScript framework for building web interfaces and applications. Its intuitive syntax and flexible architecture enable the creation of dynamic and responsive user experiences. In addition, Vue allows the use of an extensive ecosystem of plug-ins and libraries for seamless integration and customisation.

Microsoft Azure

Azure is Microsoft's cloud platform. Azure has integrated tools, pre-built templates, and managed services, meaning that developers and IT professionals can quickly build and manage their apps with technologies they already know, using skills they already have. Furthermore, Azure can support the main operating systems and almost every programming language, framework, tool, database and device.

Benefits

- **Centralised data management:** Consolidating all critical asset data into a single source provides a comprehensive view and facilitates efficient data analysis;

- **Improved decision-making:** Access to accurate and up-to-date data enables Ingka to make informed decisions regarding asset optimisation, performance monitoring and resource allocation, leading to increased operational efficiency;

- **Seamless integration:** The integration of multiple applications using the same database prevents disruptions and enables efficient data flow across the organisation;

- **Customised strategies:** Personalised workflows offer an opportunity to tailor strategies based on specific market conditions, regulatory frameworks and environmental factors, thereby optimising renewable energy investments;

- **Sustainability optimisation:** Opportunities for sustainable practices can be identified by leveraging data-driven insights. There's also space to optimise energy generation, contributing to a greener future.

What really makes Xpand IT stand out from any other company I have worked with is their proactive, collaborative approach to developing solutions. Their team is fully engaged and continuously thinking with us to crystallise our requirements, driving the user experience and functionality of the app to the next level.

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