

HanseWerk helps
customers improve
energy efficiency with
smart metering solution

CUSTOMER
HanseWerk

LOCATION
**Quickborn, Schleswig-Holstein,
Germany**

INDUSTRY
Energy, Utilities, Oil and Gas



Challenge

- Introduce new types of utility services to existing customers and new markets
- Leverage data from legacy systems and customers to provide value-added services
- Detect unintended energy consumption behavior



Solution

- Implement Energy Guardian, an intelligent energy monitoring solution
- Introduce DXC digital delivery factory services for co-creation
- Leverage Socrates platform to implement a cloud-based solution



Results

- AI-supported, automatic energy monitoring leading to improved efficiency due to quick remediation of faulty behavior, resulting in cost savings and energy savings for customers
- Increased interactivity and engagement to improve customer loyalty and retention
- Helped achieve sustainability goals to meet EU regulations



HanseWerk helps customers improve energy efficiency with smart metering solution

Efficiently managing energy usage provides many benefits, including conserving natural resources and reducing costs. One challenge for utilities is to deploy a digitally-driven system that can monitor usage and quickly alert the right people to take action if energy is consumed in an unusual way.

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— **Thorsten Frye**

Chief information officer
and chief digital officer
of HanseWerk

Municipalities in Germany are benefitting from an intelligent energy monitoring system that tracks consumption and sends out an alert if any abnormalities are detected. With support from DXC Technology, HanseWerk has successfully deployed this intelligent early warning system to help customers quickly identify unwanted behavior.

HanseWerk, a utility owned by energy leader E.ON, provides electricity and gas services to municipalities, companies and private customers across northern Germany. As the European Union has established stringent environmental regulations focused on low-carbon

growth and sustainability, HanseWerk has been at the forefront of developing efficient energy solutions.

Thorsten Frye, chief information officer and chief digital officer of HanseWerk, says, “The introduction of Energy Guardian [EnergyWächter] is our response to achieve the EU fuel reduction and sustainability goals, because we are able to detect faulty hardware via its unusual behavior and can prevent the waste of electricity.”

“In co-creation with DXC, we have been able to develop this product initially, introduce it into the market, test it and expand it into a full service.”

— Björn Crüger, product owner, Energy Guardian at HanseWerk



Supplying energy is a commodity business, and HanseWerk is now able to use data from legacy systems and customers to create added value.

Intelligent monitoring

Leveraging a digital platform called Socrates, DXC created the Energy Portal, which makes consumption data easily accessible to energy administrators at municipalities. Unlike traditional siloed data stores, the portal centralizes relevant data and eliminates time-consuming data access and cumbersome authentication processes, providing greater transparency into assets and data.

Energy Guardian is an intelligent metering application within the Energy Portal that HanseWerk developed with DXC. It uses data provided by intelligent measuring systems to monitor how much electricity is being consumed at a particular location. If consumption values are conspicuously high or low, Energy Guardian will sound an alarm.

Lead development was carried out by HanseWerk, with support from the digital.port of the E.ON Customer Service Network (EKN). It drives digital innovations within the E.ON grid companies, and as part of the Energy Guardian development, digital.port has played a significant role in the areas of conceptual design, back-end development and agile project management, among other contributions.

Energy Guardian allows users to access energy consumption data from devices within their buildings. These devices can be placed in schools, fire stations or anywhere energy is consumed. Users such as building managers can automatically receive a notification via SMS or email and can then react quickly to rectify the usage abnormality. For example, if there are abnormalities in energy consumption at a school gymnasium, the manager would receive an automated alert and can take immediate action.

Starting small

The original idea for Energy Guardian started very small and was tested with several proofs of concept, pilots and minimum viable products (MVPs). At HanseWerk, DXC introduced a digital delivery factory approach that serves as a central hub for co-creation, sharing ideas and implementing solutions. DXC provides the knowledge and resources needed to execute the projects.

Björn Crüger, product owner of Energy Guardian at HanseWerk, says, “In co-creation with DXC, we have been able to develop this product initially, introduce it into the market, test it and expand it into a full service.”

Because the Energy Portal and Socrates are hosted in the Microsoft Azure cloud on the front end and connected to legacy data centers on the back end, HanseWerk and DXC were able to leverage out-of-the-box technology and modern APIs for connecting systems.

This allowed the use of predictive monitoring tools and smart metering technology that would never have been accessible from the legacy data centers.

Khaled Popal, DXC’s chief technology officer for E.ON and HanseWerk, says that a key contribution by DXC is serving as HanseWerk’s digital execution partner. “Being the digital integrator and by using our digital delivery factory, we are truly committed to helping HanseWerk achieve its business goals and enter new utility markets with new services. We are also helping it achieve sustainability goals across Europe.”

All relevant data is managed within the Azure cloud, which enables sending out user alerts. Data is collected from different back-end sources and combined in a multitenant data model in the cloud, then prepared and presented to the customer on dashboards.



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Innovative leader

Energy Guardian is playing a key role in HanseWerk's efforts to be a leader in providing innovative solutions in the areas of energy efficiency and sustainability. In addition to saving money and increasing energy efficiency, the solution is driving customer loyalty — a key business outcome, based on customers' easy access to so much useful information.

HanseWerk is meeting its goals of increasing customer loyalty and enhancing transparency with customers in terms of energy consumption and its visualization. Popal says that with Energy Guardian, "Smart energy metering becomes an integral part of your smart life."

Supplying energy is a commodity business, and HanseWerk is now able to use data from legacy systems and customers to create added value. In addition to helping customers save both energy and money, Energy Guardian is well on its way to helping HanseWerk achieve its sustainability goals.

Energy Guardian was jointly developed at E.ON by HanseWerk, EKN and DXC, but all municipalities of E.ON grid companies with access to the Energy Portal, such as Bayernwerk and Avacon, can benefit from it.

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