connectpoint

Development of an Agile, Digital Platform

The Answer to the Dynamized Requirements of the Market

Leipziger Stadtwerke

Stadtwerke Leipzig is a municipal energy company that supplies electricity, gas and heating. It is the market leader in electricity and heating in Leipzig and at the same time one of the ten largest companies of its kind in Germany.

Stadtwerke Leipzig distribution infrastructure:

approx. 3350 km of electricity network

approx. 1084 km of gas network

approx. 496 km of district heating network
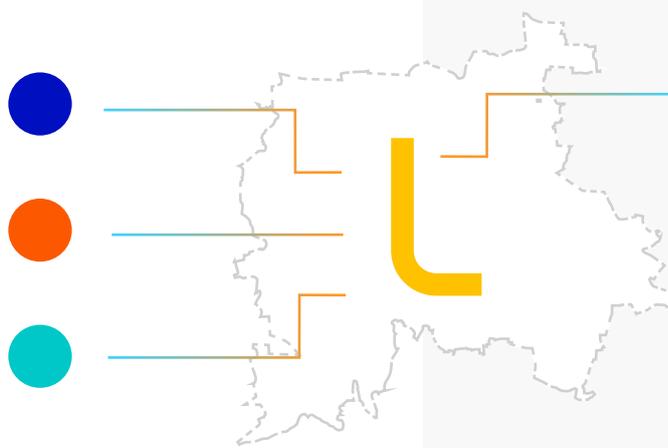
Customer of Stadtwerke Leipzig:

Over 200.000 households in and around Leipzig
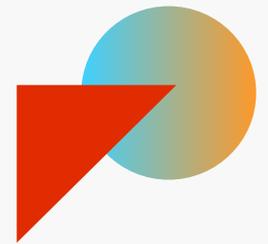
Industry Challenges

Stadtwerkes are traditional municipal utilities that are facing the advancing energy transformation. In particular, the challenge is:

01. Growing share of distributed renewable energy sources.

02. Increased competitiveness in the market due to new business models (virtual power plants, energy efficiency services, intelligent buildings).

03. Liberalisation of the energy market and the resulting customer turnover.

An increasing number of Stadtwerkes cannot meet customer expectations. They lose them to dynamically developing suppliers that can build a more appealing offering. The most important competitive advantage of the new players is their ability to bring technically innovative products and offerings to market in a timely manner.

Stadtwerkes need a new technical approach to respond to these challenges.

Stadtwerke Needs

Leipziger Stadtwerke chosed ConnectPoint, as one of its leading technology partners, to support its digital transformation through a new digital platform. The realisation took into account both the IT infrastructure and the agile approach in joint development and deployment.

01. **Organisation preparation**
The client needed to find a partner with extensive technology experience specialising in the Energy and Utilities industry, who would help to organise the flexible software development and delivery process.

02. **Infrastructure preparation**
The new organisation required a change of approach to infrastructure and information management in the company. It was crucial to enable the sharing of information and functionality throughout the organisation and integrate disconnected IT systems.

Therefore, Stadtwerke needed a new platform that would have a cohensive and extensible architecture based on microservices. The client also wanted to quickly implement advanced algorithms (Data Science) that, among many, reduce manual work and increase organisational efficiency.

An additional challenge was the lack of Stadtwerke's competence in IT-related areas. Due to the outsourcing of the complete IT to external companies, the necessary IT expertise was missing. The goal of Stadtwerke was to quickly rebuild its competence in this area quickly.

Solution delivered

ConnectPoint has built a unique customized cooperation model with Stadtwerke, based on:

01. Delivery of custom software projects.

02. Support in building digital organisation and education (working in joint teams).

03. Implementation of innovation.

01. Preparation of requirements for the new infrastructure organization

Developed during workshops with various teams from the client organization and external consultants.

02.Delivery of a dedicated data and application management platform (Digital Platform)

It provides business services from existing Stadtwerke systems in a uniform form.

03.Maintenance and management of the platform by ConnectPoint

It operates 24/7, in accordance with ISO 27001. A Scalable infrastructure (based on virtual machines, Docker containers and Kubernetes clusters), allows the implementation of proprietary software and software from external producers.

04.Implementation of new applications in subsequent projects on the IoT platform

Management of devices in the infrastructure (meters, nodes, smart home devices).

05. Joint R&D work

Testing the latest ConnectPoint products (artificial intelligence and prosumer integration). Connectpoint supports Stadtwerke in developing digital skills such as working with agile methodologies, coaching and facilitating processes.

Benefits of implementation

ConenctPonit helped Stadtwerke Leipzig become a digital organisation within a short time (24 months). Today, Stadtwerke Leipzig can boast being one of the most modern companies of this type in Germany. The following aspects have contributed to this:

01. Development of an infrastructure (technical and design) that enable new functionalities and allows to deliver new products to the market in an unprecedented time and budget. For example:

  » Implementation of a new billing system and construction of a client portal within eight months,
  » Quick (within 15 months) analysis of the requirements, development and productive launch of the application to manage teams in the field.

02. Open microservice platform architecture allowing for quick integration of products and services of external providers.

03. Unified architecture in the area of OT and IoT, enabling the integration of equipment from different suppliers in different business areas (e.g. gas-fired power plants, thermal centres, dispersed heat sources, wind turbines, photovoltaic panels, smoke detectors etc.).

About ConnectPoint

ConnectPoint is an IT company that supports the process of digitalization in industry, energy sector and public utility segment. It specializes in IT/OT and IoT integration and combine industry knowledge with expertise in the field of OT, Big Data, GIS, Business Intelligence and Machine Learning. It builds systems that allow for effective cooperation between Operations, IT and Business.