Energinet

Successful DataHub solution sets the foundation for the future of the Danish electricity retail market

With the rise of renewable energy production, a growing number of prosumers and the steady proliferation of digital technologies, there is a pressing need in the Danish electricity retail market to balance the energy system and share the large volumes of data and information being produced. CGI's Central Market Solutions, known in Denmark as DataHub, provides a reliable centralized platform that enables fair competition, improves communication between market participants and provides easy and equal access to data and information sharing.

THE CHALLENGE

In 2010, the Danish government made a decision to encourage fair competition in the electricity market. This meant that all the market players involved in the energy ecosystem—from production and transportation through to the supply and trade of energy—would need to communicate with each other and share information.

At the time, all data related to consumers, consumption and settlement was decentralized and shared bilateraly between approximately 120 market players. This made data exchanges between all the parties often challenging and inefficient. It also led to wasted effort and ineffecient processes, like for example, when a consumer wanted to switch to a new supplier.

Energinet, Denmark's transmission system operator (TSO) was tasked with the responsibility of building and operating a new central market system that could:

- Easily be accessed by all market participants
- Ensure uniform communication methods
- Standardize market processes for recording and distributing energy market data
- Provide equal information access to all market parties
- Be automated and simple to use

Key benefits
CGI's Central Market Solutions is a centralized platform that enables:

- Fair competition among all market players
- Easy and equal access to market data
- Consumers to switch electricity providers quickly and easily
- Innovation, product development and the move toward a greener environment
- Clear definition and allocation of roles for all market players

"As a system vendor, CGI is on target for a vital part of the Danish electricity market. We experience qualified expertise when we work with CGI's specialists. There is a sincere commitment and a willingness to learn from each other. Together, we have created a platform for the electricity market for many years to come."
Martin Lervad Lundø, Director of the DataHub at Energinet

THE SOLUTION

To meet these requirements, Energinet chose CGI to develop DataHub, a solution that provided a centralized, secure platform that enabled fair competition, better communication among market parties and easy access to data and information sharing between them. The solution went live in 2013, allowing Energinet to create a central storehouse for the massive volumes of data about consumers (including consumer contracts, grid fee billing and balance settlement), their consumption patterns, and prices from approximately 3.3 million metering points. In addition, all market parties could contribute to DataHub, and access it at any point in time, for any information they needed.

On 1 April 2016, Energinet upgraded DataHub to include a "supplier-centric model", which altered the rules and the roles of market players in the Danish electricity market. This was intended to increase competition and encourage the development of new products and services for consumers. The result—today, the electricity supplier is the single point of contact for the customer and is responsible for all customer communication, including billing.

"Together with our Nordic colleagues, we are continuously looking at how we can expand the market. Norway is going live with its DataHub in 2019, while Finland and Sweden will follow after 2019. They must, of course, make their own experiences first."
Martin Lervad Lundø, *Director of the DataHub at Energinet*

THE FUTURE

CGI's partnership with Energinet and the close collaboration between various market players has formed the cornerstone of the successful implementation of DataHub, and is helping shape the future of the electricity market.

- **Hourly settlement and green conversion:** By 2020, all the distribution system operators (DSOs) responsible for operating the electrical grid and collecting measurements will complete the rollout of smart meters in Denmark. This will enable consumers to be billed on an hourly basis, which in turn will encourage them to save by using electricity outside peak hours, and also help to balance the system.

- **Potential Nordic and European cooperation:** DataHub, the supplier-centric model and Energinet's additional initiatives support a well-functioning electricity market in Denmark and create better conditions for competition. A natural next step is the collaboration and exchange of data with centralized solutions in other Nordic countries, and from there on, all the other European markets.

CGI's CENTRAL MARKETS EXPERTISE

CGI has been at the forefront of building and running central market infrastructures for more than two decades. We deliver and operate the core IT systems and business processes that support centralized energy markets across the globe, including in the Netherlands, UK, and Finland, among others. We have built and currently operate the infrastructures for 12 of the 18 energy markets in the world today.

ABOUT CGI

Founded in 1976, CGI is among the largest IT and business consulting services firms in the world. Operating in hundreds of locations across the globe, CGI delivers an end-to-end portfolio of capabilities, from IT and business consulting to systems integration, outsourcing services and intellectual property solutions. CGI works with clients through a local relationship model complemented by a global delivery network to help clients achieve their goals, including becoming customer-centric digital enterprises.

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