British Gas Modernizes its Operations with Innovative Smart Metering Deployment

British Gas is the UK’s largest energy provider, and serves around 12 million homes in Britain - nearly half the country’s homes - as well as providing energy to around 1 million UK businesses. British Gas provides value for money, dedicated customer service, innovative energy solutions and the highest quality Home Services expertise in the country.

Solution At-a-Glance:
Trilliant Communications Hub

Proven Solutions
- Utilises public mobile networks for high-reliability WAN connectivity
- Supports industry-standard metering protocols; DLMS/COSEM and ZigBee
- Scalable platform: Extensible, field-upgradeable, and secure

Standards-Based and Secure
- Utilises Secure, industry-designed standards and features
- Supports open protocols with flexibility for feature enhancements
- Built-in proven security technology that satisfies the highest industry standards

Consumer Focused
- Enables true consumer engagement
- Empowers consumers to make smarter decisions about energy use
- Offers value-added benefits to increase consumer satisfaction

Mandated Smart Meter Transition
The UK government has mandated that smart meters are rolled out as standard across Great Britain by end of 2020, and this roll-out is estimated to create £14 billion in net benefits to the UK in consumer energy savings and lower energy generation demand, according to the Oxford Economics report, “The Value of Smart Metering to Great Britain.”

While smart-metering systems have been deployed in many countries, the roll-out in Great Britain is unique because it is led by energy retailers, who have responsibility for the Electricity and Gas meters. The decision to have a retailer-led roll out was made by DECC (Department of Energy and Climate Change) to improve customer experience and drive consumer benefits. It has also led to some unique system-level requirements to support the unique local regulatory model.

British Gas began to prepare for the mandated smart meter roll-out back in 2009. They began by working with Trilliant to deploy Trilliant's UnitySuite™ Head-End Software (HES), followed by integration of the Trilliant Communication Hub with British Gas’ meters and in-home display units to create a full end-to-end secure solution for British Gas to reach out to their customers’ homes. The selection and implementation of UnitySuite have proven to be a versatile and scalable software platform, capable of supporting millions...
of endpoints, and supplying them with secure everyday communications, firmware updates and advanced services such as pre-payment. UnitySuite supports a multi-tier architecture comprising of a web server, a multi-component application tier and a database. Redundancy is built into the system at all points to ensure high availability. Each deployment of UnitySuite delivers proven performance and security at a relatively low cost.

Moving towards Mass Roll-out

As part of the implementation of the Trilliant Platform in Great Britain, British Gas and Trilliant have worked closely together to ensure that the open standards used in the implementation are able to meet the unique requirements of Great Britain’s roll-out. By co-locating our project teams, Trilliant has been able to gain an in-depth understanding of the complex requirements that British Gas needs to implement in order to meet their regulatory requirements, improve their relationship with their customers and maintain their quality of service at all times.

In 2012 this paid off, with British Gas beginning their roll out of Electricity and Gas smart meters to customers. From the start and supported by a fast and slick installation process, British Gas achieved high customer satisfaction metrics from their dual-fuel customers. Aftercare has been just as reliable, with Over-the-Air upgradability offering new features, functions and tariffs to these smart meter users without the need to re-visit customer homes. British Gas have also been able to revolutionise the communications that they can engage their customer base with, providing monthly reports to their customers about their energy efficiency.

The Solution: Trilliant Communications Hub and UnitySuite™ Head-End Software

British Gas and Trilliant’s efforts have centred on connecting smart electric meters, gas meters and in-home smart energy devices, using the Trilliant Communications Hub. The Trilliant Hub, which is part of the Trilliant Communications Platform, enables customers to better track gas and electricity consumption, and make educated decisions about future energy use. It is fully compliant with the UK government smart meter specifications. For example, it allows customer to switch between credit and pre-payment payment modes, as well as allowing advanced time of use tariffs to be deployed. The Trilliant Platform enables British Gas to improve their customers overall satisfaction.

The Trilliant Hub is fully integrated with the UnitySuite Head-End Software. This integration empowers British Gas to realize a full, secure, end-to-end solution from meter to back-office. UnitySuite is scalable to support millions of end-points, and offers the option to communicate with other devices in the home beyond the meter, and so is well suited to deliver British Gas their long-term ambitions.

Results

British Gas has deployed over a million smart meters to homes across Great Britain, more than any other British energy supplier. This smart metering deployment, based around the Trilliant Hub and UnitySuite, has achieved a number of benefits for customers, including reduced operational costs and carbon emissions.

Through smart energy modernisation efforts, British Gas has also been able to significantly improve customer satisfaction, and over 45,000 of their customers have been interviewed to hone the offering. In fact their Net Promoter Score amongst their smart meter customers has improved by 40% since the beginning of the roll-out.

Looking to the future, British Gas has plans to expand their smart metering efforts to include more smart energy programs. Trilliant provides a flexible and interoperable communications system that can continue to grow with the expanding needs of British Gas. Trilliant delivers the reliability and robust capability required to deliver any smart energy application, today and tomorrow. To learn more, visit Trilliant’s website at www.trilliantinc.com.