

Lyse Smart

Smart Home Services



EXECUTIVE SUMMARY

COMPANY OVERVIEW

- **Customer Name:** Lyse
- **Industry:** Energy, IT, and Telecommunications
- **Location:** Norway

BUSINESS CHALLENGE/OPPORTUNITY

- Drive demand for smart home services and applications that consumers are willing to pay for, while maintaining a competitive advantage over global over-the-top (OTT) content players.

NETWORK SOLUTION

- Deployment of a smart gateway along with a government mandated smart-meter deployment to enable remote configuration of future smart-home services and applications. A home broadband connection is not needed, because the gateways can use a variety of local network and wide area network (WAN) access technologies, including Wi-Fi (for connecting to an existing broadband access network), radio-mesh, and mobile data access.

BUSINESS RESULTS

- Cost savings on its energy platform, plus new revenue opportunities coming from smart security, home automation, and wellbeing.

Overview

Like other energy companies in Norway, Lyse is mandated by the Norwegian government to deploy smart meters to every home it serves. By preinstalling a smart home gateway free of charge along with the smart meter, Lyse can use open standards and specifications to remotely enable new smart home services and significantly reduce the barriers to entry for future smart home services.

Service Innovation

Lyse is a leading energy company in Norway and provides fiber to the home (FTTH) triple-play services through its Altibox brand. Its latest venture is in the area of smart home services, and the company is currently rolling out smart-metering technology to every home in its energy territory as part of the government's mandate to have a smart meter in every home by 2019.

Alongside this mandatory deployment, Lyse is also installing a free home gateway, which can be used by its new company, Lyse Smart, to deploy future smart home applications and services without customers having to purchase a smart home gateway. This preemptive installation significantly reduces one of the main barriers

to smart home adoption. Lyse Smart operates under the brand Smartly.

Demand for smart services in Norway is already high. By creating a cost-effective and simple solution for its customers to use, the adoption of smart home services is projected to be rapid, creating new revenue opportunities for Lyse and its technology partners.

All homes in Lyse's energy territory can use the new home gateway regardless whether they have a home broadband connection. The gateways can use a variety of local network and WAN access technologies, including Wi-Fi (for connecting to an existing broadband access network), radio-mesh, and mobile data access.

Opportunities

Deploying 40,000 gateways per year, Lyse intends to have a smart gateway installed in each of the 160,000 households it serves. Beyond this initial deployment, Lyse's smart home solution has been designed to build in scale and can be deployed throughout the rest of Norway and internationally.

New revenue opportunities aside, by providing two-way communications, the gateway plus smart meter represents significant business benefits to Lyse through operational cost savings due to a reduction in customer service and meter-reading costs, and achieving better balance to its energy network.

Lyse's smart home strategy extends far beyond smart metering: the installation of the home gateway opens the door for Lyse to explore and develop future new smart-home-revenue opportunities around security (where the company already has business interests with its NorAlarm division), home automation, welfare, and energy management.

Challenges

The biggest challenge to Lyse is to stimulate demand in new smart home services and applications that its customers are willing to pay additional revenue for to justify its investment in the Smartly home gateway deployment.

There is a growing availability of OTT content over smart home devices and applications that consumers can purchase at a one-time fee with no recurring monthly charges. To justify its own fees, Lyse must show greater value than such point solutions.

Even if successful, it is likely that consumers will still purchase third-party solutions from outside of the Lyse ecosystem. Such devices are likely to support a multitude of networking and communication standards, many of which are incompatible with Lyse's gateway. Managing such fragmentation is a challenge and will be a potential cost burden.

“Lyse believes future homes should be run by local companies who will provide customers with safe and secure electricity, energy, water and gas, rather than a global technology or commodity company whose main goal is to own customers' personal data.”

— Jan Holm, Chief Executive Officer, Lyse Smart

Strategic Partnerships

Lyse has partnered with Axiros on a new Internet of Things (IoT) platform-as-a-service (PaaS) solution. Lyse is deploying Axiros' AXPRIENCE 2.0 PaaS for service delivery automation with a distributed execution environment, security orchestration, and API brokering. With this PaaS solution, Lyse can design and deploy truly zero-touch connected devices, reducing the time it takes to get devices to consumers and broadening the service offering for connected devices in the smart home and beyond.

For many of these new services and applications, Lyse is relying on third-party developers and equipment vendors. All solutions implemented in the home are integrated with Lyse's home gateway, which then communicates with the central station located in Lyse's core network.

“Home automation is less about gadgets and convenience. It is about meeting an increasing demand for services, care, even life support. For example, resources to care for our aging population are waning. So what do we do? What if we could provide a safer home environment for a longer period of time, saving on institutional and medical costs—and more importantly—improving quality of life? Lyse is working now to make this happen in the Nordic region.”

— Jan Holm, Chief Executive Officer, Lyse Smart

Monetization and Success Metrics

Beyond cost savings on its energy platform, Lyse intends to monetize the smart home platform by offering a set of smart home services focused around security, home automation, welfare, and energy management. Current services offered are summarized in the following Table 1.

Table 1. Summary of Current Lyse Services

Service	Brief Summary	Pricing
Professional home security	Smartly Security includes alarm with direct connection to the fire department, and 24-hour emergency center in case of burglaries.	Setup: ~US\$240 Monthly: ~US\$46
Heating control	Smart thermostat with mobile control.	Pricing not yet announced.
Smart lighting	Control the lighting in the home.	Pricing provided on application and dependent on customer's requirements.
Wellbeing	Professional smart care solution that monitors various sensors in the home and sends alarms and events in real time to an operations center.	Pricing on application. Lyse also offers solutions and services specially developed for and in cooperation with the public sector.

Lyse Smart is still in its start-up phase, and the operating result was a loss of NOK 61 million (nearly US\$ 7.4 million) in 2014. However, the complete roll out of its services and products started only in 2015. Deployment of the smart home gateways will also take time with only 40,000 gateways expected to be deployed on an annual basis.

However, prospects are promising because the company has a history of exceeding deployment targets. When the company launched Altibox, its goal was to reach 25,000 households by 2015. However, using the experience and expertise in network infrastructure deployment, rollout was rapid, and by 2013 it had reached 300,000 households. The company serves more than 390,000 households with fiber to the home technology throughout Norway and Denmark. There are approximately 2.4 million households in Norway and 2.6 million in Denmark today.

Lyse already works with a number of partner organizations, such as housing and health organizations. Lyse also has existing business interests in the home security market in Norway.

For More Information

For more information about Lyse Smart, visit www.lysekonsern.no.



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