

## Dansk Bredbånd launches the first IPTV solution in Denmark with help from IBM and Cisco.



### Overview

#### ■ **Challenge**

*Upgrade the company's infrastructure to improve performance, enable new services and attract new subscribers*

#### ■ **Solution**

*Team with IBM and Cisco to create a reliable, cost-effective converged communications network for its data, voice and new video offerings*

#### ■ **Key Benefits**

- Larger subscriber base
- Better customer service
- Reduced churn
- Lower overhead costs
- New revenue opportunities

#### **Broadband's own David versus Goliath**

In 2002, broadband connections provider Dansk Bredbånd ([www.dan-skbredband.com](http://www.dan-skbredband.com)) branched off from Sweden's Bredbandsbolaget with only a standard Internet service provider (ISP) connectivity offering. Today, the company commands one of two broadband fiber networks in Denmark and has expanded its services to include IP-based data, voice and television offerings to 23,000 homes, businesses and municipal offices across the country.

Before it became a major player in the broadband marketplace with its IP-based offerings, Dansk Bredbånd had initially set out to compete with Denmark's national utility company, which had a monopoly on the telecommunications industry until the mid-1990s. The newcomer offered its subscribers fiber network connectivity, providing nearly unlimited bandwidth to each household—something the incumbent simply could not match. With the emergence of smaller broadband companies, such as Dansk Bredbånd and its four main competitors, consumers were given more choices, driving the companies to offer new and innovative services at competitive prices.

#### **Capitalizing on the IPTV opportunity**

When the new broadband companies were first battling to differentiate themselves and to win subscribers, Dansk Bredbånd wanted to exercise its ability to support high-quality data transfer and virtually unlimited capacity over its fiber network to be the first broadband provider in Denmark

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*—Birger Hauge, CIO, Dansk Bredbånd*

to offer IP television (IPTV). By offering video on demand (VOD), live TV and viewer customization capabilities, the innovative IPTV services would position the company to deliver a differentiated and convenient viewing experience to its existing subscribers, as well as to attract new clientele. Specifically, Dansk Bredbånd wanted to offer Denmark's first “triple-play” solution, which transmits IPTV, data and IP telephony services over a single broadband connection. To become a triple-play provider, the broadband company first needed a platform on which to launch all three services.

In the summer of 2005, Dansk Bredbånd made its first move to offer IPTV technology to its customers by purchasing a small company with an existing IPTV platform. Dansk Bredbånd leveraged

both the acquired platform and its own existing fiber network to offer IPTV services to a trial audience of 1,500 subscribers in Copenhagen. However, the test subjects found the IPTV solution difficult to install and configure. Moreover, they did not think they received a better viewing experience than they did with their previous cable television. Even the broadband provider's IT staff found the internal platform to be too complicated and inefficient.

Dansk Bredbånd used the pilot results as an opportunity to aggressively pursue a more reliable, easy-to-use IPTV platform. “[We had] the need for a more structured approach, both on the architectural [front] and also [for] finding the right solutions for building a proper and reliable IPTV platform,” expresses Birger Hauge, chief information officer (CIO) of Dansk Bredbånd. The new IPTV technology needed to be more user-friendly at both ends: in Dansk Bredbånd's data center and in customers' homes. In order to deliver improved services to the test group, attract its additional 21,500 subscribers and potentially reach new marketplaces, the broadband provider needed to quickly find a solution for building a reliable, leading-edge IPTV platform.

### **Establishing a winning connection**

Since its inception, Dansk Bredbånd has relied on the products, services and expertise of global technology leaders IBM and Cisco to offer the citizens of Denmark a superior IP-based voice and data experience. So when the broadband company needed to implement a reliable, structured IPTV platform, it turned to them once again. IBM and Cisco worked with Dansk Bredbånd to implement a joint solution combining IBM Global Technology Services with the groundbreaking Cisco IP Next-Generation Network (IP NGN) technology. The marriage of innovations between Cisco and IBM delivered a simplified yet enhanced multiservice, multidevice and multitransport IPTV solution.

The IBM team began an eight-month engagement with an assessment of Dansk Bredbånd's objectives and existing environment to identify capabilities and gaps. Following the evaluation, IBM created both high-level and detailed architecting of a conceptual design, which included Cisco and IBM components. The next phase of the IPTV infrastructure

solution was the deployment of a tailored supporting hardware and software platform. IBM assisted Dansk Bredbånd in performing the core implementation, final testing and commissioning of IBM software and storage solutions and Cisco's IP NGN equipment. IBM's technology experts completed the deployment by training the client's support staff on the new platform.

By November 2006, IBM had helped Dansk Bredbånd complete Denmark's first converged communications network project featuring IP data, IP telephony and IPTV flowing through one broadband connection—making Dansk Bredbånd the first triple-play provider in Denmark. With the robust, full-featured IPTV platform from IBM and Cisco, the company's subscribers can choose to watch the programming that they want, when they want, with pause-and-play conveniences.

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—Birger Hauge, CIO, Dansk Bredbånd

Unlike its core competitors, Dansk Bredbånd has the bandwidth to offer more broadcast channels, support multiple high-definition televisions (HDTVs) per home and enable its customers to establish a user profile for each member of a household—empowering viewers to customize their own entertainment experiences. In fact, the triple-play provider's IPTV infrastructure is so reliable and secure that the company was able to establish an exclusive agreement with ViaSat, a leading direct-to-home satellite-TV company. Under the agreement, Dansk Bredbånd is the only broadband provider in Denmark that can offer ViaSat's services and popular premium channel package.

#### **World-class entertainment in the comforts of home**

After only three months of offering the unique, on demand IPTV services, Dansk Bredbånd had satisfied its original test group with an easy-to-use platform and generated encouraging results. Already, 14.6 percent of its customers have signed up for the IPTV service, 3 percent more than the broadband provider had anticipated. The additional offering is driving up the company's average revenue per user and attracting more subscribers, thereby boosting revenue.

In addition, because Dansk Bredbånd runs all of its services on one communication network, it requires less IT equipment and fewer administrators, resulting in decreased operational expenses. The triple-play provider can now pass its savings on to its customers, which, in turn, helps reduce customer churn. Another advantage of the converged network is that the company can produce a single invoice for data, IP telephony and IPTV services, thereby simplifying the billing process for both the company and its customers.

#### **A seamless experience**

Working with IBM and Cisco was instrumental to the seamless success of Dansk Bredbånd's IPTV initiative. As a smaller telecommunications company in the marketplace, Dansk Bredbånd thought that it was essential to have the IBM and Cisco Systems names supporting its solution. The relationship instantly gave the local broadband provider world-class status and world-class experience. Hauge expounds on that idea: “Definitely, size does matter here. [If] you are a small company—even though we have good and reliable investors—when you start talking about IPTV in a period when you have to explain to people what it actually is, it does matter that you have some of the strongest technology companies in the world backing you up.”



Without the support of global technology leaders, Dansk Bredbånd would have had to procure, install and configure numerous architectural components to build the converged network, which would have been complex and time-consuming. IBM and Cisco proved to be invaluable in helping the company to quickly and efficiently complete the infrastructure. Additionally the collaborative IPTV solution and well-designed hardware and software from IBM and Cisco simplified Dansk Bredbånd's internal maintenance requirements. Today the triple-play provider needs only 11 employees to manage the converged network, which supports 23,000 subscribers.

The IPTV infrastructure solution from IBM and Cisco positions Dansk Bredbånd to penetrate new marketplaces. Moreover, it encourages the triple-play provider to explore new revenue

streams in conjunction with the new technology. As an example, a 1,000-person survey of Dansk Bredbånd's IPTV customer base revealed that 38 percent of viewers would be willing to watch a 30-second movie trailer or commercial before their VOD service started, in exchange for a discount on the program.

As mainstream entertainment continues to adopt the notion of IPTV technology, Dansk Bredbånd is committed to finding new ways to evolve the technology to focus more on the quality of the customer experience, in addition to the quality of services. IBM and Cisco are dedicated to helping the broadband solutions provider achieve its goal of providing the highest-quality consumer experience and state-of-the-art services.

#### **For more information**

To learn more about IBM Converged Communications Services – IPTV infrastructure, contact your IBM representative or visit:

**[ibm.com/services](http://ibm.com/services)**

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