

Ziggo Case Study



EXECUTIVE SUMMARY

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Customer Name: Ziggo
Industry: Cable Telecommunications
Location: The Netherlands
Total Subscribers: 2.9 Million
DTV Subscribers: 2.2 Million

BUSINESS CHALLENGES

- Expand availability of VOD services using customers' existing digital receivers
- Provide engaging user experiences on digital receivers that lack sufficient CPU power and memory for advanced UIs
- Deliver consistent UI across fragmented device ecosystem, including different brands, makes and models

BUSINESS SOLUTION

- Move UI from the device to the cloud using CloudTV™ platform from ActiveVideo™
- Created UI in HTML5 and stream it from the cloud as MPEG or H.264 video to existing digital receivers
- Viewers engage with the interface via keyclicks on their existing remote controls

BUSINESS RESULTS

- Approximately 150,000 activated devices in Q2 2013, an increase of 150% over Q1 2013
- Those 150,000 users have accounted for approximately one-third of all Ziggo VOD usage
- In its Q2 2013 earnings report, Ziggo reported that it had experienced a 56% year-over-year increase in VOD transactions

Background

Ziggo is a Dutch provider of entertainment, information and communication through television, broadband Internet and telephony services. Ziggo supplies approximately 2.9 million households and small businesses with television, almost 2.2 million with digital television, about 1.8 million with broadband Internet, and more than 1.5 million with telephony services. About 1.4 million customers are subscribers to Ziggo's All-in-1 bundle.

Business-to-business customers use services such as data communication, telephony, television and Internet, which are provided over the same network. For home offices and small businesses, these services are provided through business bundles, such as Office Basis and Internet Plus.

Ziggo owns a next-generation network capable of providing the bandwidth required for all future services currently foreseen. Today Ziggo provides 150 Mbps download speed throughout its complete service area. With the technology currently in place in the network, Ziggo can upgrade this to 400 Mbps; moreover, higher speeds already have been tested over networks such as Ziggo's, proving that its infrastructure is a next generation future-proof network.

Among Ziggo's more notable innovations has been its implementation of a Bring Your Own Device strategy for customer equipment. Customers can purchase at retail digital receivers that have been certified as compatible with the Ziggo network. In parallel, Ziggo was the first operator in the world to deploy to scale High Definition cable TV based on the CI Plus standard that enables CE devices to access encrypted services via plug-in conditional access modules that also are purchased at retail.

In 2010, Ziggo embarked on a new initiative that was designed to expand availability of VOD services. At that time access to VOD services required a dedicated, two-way EuroDOCSIS® STB. Ziggo's objective was to deliver VOD and advanced navigation to customers via their existing digital receivers, increasing customer satisfaction without requiring the capital expense of retooling deployed STBs.

During the course of investigating various technical approaches, it was clear that there were significant obstacles to be cleared. Among them:

- Customer premise equipment in place was not built for VOD and had limited resources, particularly in terms of CPU power and memory required for advanced UIs;
- Inability to deliver consistent UIs across a heterogeneous device ecosystem (different brands and generations of STBs), requiring custom engineering efforts.
- The need for the technology to be supported by or in the absence of an integrated Internet connection in the CE; and
- The expressed preference that Ziggo's high-quality DVB-C video network should be used for streaming both the UI and the VOD content.

Ziggo ultimately chose to create a fully cloud-based interactive TV service, using the CloudTV™ platform from ActiveVideo®. CloudTV moves the complexity and the load of the rich, graphical UI from the digital receiver to the network cloud. User interfaces and other content are created in web-standards such as HTML5 and are streamed from the cloud as MPEG or H.264 video to the digital receiver, set-top box or other connected device. A thin software client in the device is used to send certain keyclicks from standard remote controls upstream to the cloud. CloudTV determines which actions are required in the cloud and controls all systems that are involved in executing the desired action. In the case of Ziggo, keyclicks are transmitted upstream via the public Internet.

The Ziggo implementation required that both the UI and the VOD streams be delivered to customers' digital receivers. The existing DVB-C decoders were used to decode both the UI and the VOD streams. The project involved integration of CloudTV with existing VOD back office equipment from Seachange, with digital receivers from Humax and Samsung, and with UI design and construction by Unitid and Webadvance. Ziggo served as system integrator for the project.

Solution

Phase 1 of the project began in 2011 with the creation by Ziggo and ActiveVideo of a cloud-based "virtual STB" that provides interactive capabilities to existing digital receivers. Because the intelligence is based in the cloud, the system needed to be built only once; thereafter it could be used on many different devices and could provide the same user experience on every device.

“ What we now have available is a revolutionary infrastructure, enabling us to open up STBs from several brands for our VOD services,” said Eric Meijer, senior product developer and senior project manager for Ziggo’s CloudTV VOD project. “The UI is uniform on all of these devices and the customer uses his or her own equipment or can choose various options from several brands at retail. ”

The VOD user interface was designed by Unitid and built by Webadvance using common web technologies, notably HTML5 and CSS. Because the UI is rendered in and streamed from the cloud, developers could create rich, graphical products using full color palettes and complex animations.

“ Because CloudTV supports an HTML5, cloud-based UI, Ziggo is able to add functionality or change the UI literally overnight,” said Meijer. “Compared to normal change cycles of several months on STBs, this is a game-changing innovation. ”

While the UI runs on a web server, it is delivered to the digital receivers via the cable television network — not the Internet or the customer’s WiFi network — using the same DVB-C technology that is used to send HD to the customer’s TV. The result is that the UI is delivered with the highest levels of service quality.

For Phase 1, Ziggo directed that the CloudTV client should be integrated into five digital receivers already available to Ziggo customers: The Humax 5100, 5200 and 5300 and the Samsung 7140A and 7140 B. The software client determines processing location based on which key is pressed and the context in which it is pressed. Volume keys, for example, are always processed locally; “compass” keys and the “Select” key are processed locally when the viewer is watching linear TV; in the VOD network while the viewer is watching a VOD selection; and in the cloud when the viewer is using VOD menus to select a movie or a catch-up TV item.

Approximately 350.000 customers owning one of the five Phase 1 digital receivers were informed that a download with new functionality was available at no charge. Customers were instructed to download the software and to connect the receiver to the public Internet, using either WiFi or an Ethernet cable. Pressing the red button the remote control would initiate a forced-tune command from the “virtual STB,” directing the receiver to a designated, personal TV channel displaying the UI for the customer.

Customers using the VOD service can navigate the cloud-based UI as easily as they would on a device-based interface. The notable technological difference is that with each keyclick, the personal UI is modified in the cloud and streamed to the device, enabling significantly richer graphics and animation and a consistent user experience on every device. The latency from keyclick to display of the modified UI is not noticeably different from the latency in device-based scenarios

When a customer chooses a title from the Ziggo VOD library, the virtual STB determines resource allocation and ensures that both the VOD server and the digital receiver are using the same frequency for the presentation of content. Throughout payout, CloudTV-powered trickplay icons can be made available in the overlay plane of the digital receiver. When viewers press the Rewind, Fast Forward or Pause buttons on their remote controls, the virtual STB seamlessly switches between the cloud-based UI and the VOD stream. At the conclusion of the movie, or whenever the customer chooses to stop payout, the digital receiver is again directed to the VOD menu.

Results

The public launch of Phase 1 was announced in September 2012, and service was commercially available to all customers using the Humax and Samsung digital receivers beginning March 2013.

In its Q2 2013 earnings report, Ziggo noted that approximately 150,000 receivers had been activated for the Cloud-TV powered service. This represented a 150% increase over the total of 60,000 devices at the end of Q1. Ziggo reported that those customers had accounted for approximately one-third of all Ziggo VOD activity.

In its Q2 2013 earnings report Ziggo noted that:

“ Digital pay TV ARPU increased by 9.3% from €14.83 in Q2 2012 to €16.21 in Q2 2013, driven predominantly by an increase in the number of premium TV packages per subscriber and growth in VOD. In Q2 we again experienced a strong y-o-y increase in VOD transactions of more than 56%. In addition to the growing popularity of VOD, growth was also supported by the rise in the number of customers with an interactive set-top box to almost 482,000 at the end of Q2 2013, compared to 275,000 at the end of Q2 2012. As a result of the program to upgrade part of the existing set-top boxes in our customer base to enable the interactive functionality through a cloud-based streaming graphic user interface (SGUI), we added another 90,000 boxes during the quarter, which means there are now more than 150,000 set-top boxes that use the SGUI. ”