



Infonova
Truly Transformational Solutions

Case Study | **Liwest ORF**

!TV4CABLE “On Demand” Interactive TV Services

**Rising above the noise of today’s
Telecom marketplace**



Infonova and Liwest ORF

Infonova is a highly pre-integrated BSS solution stack providing a broad range of business capabilities required to support next generation service portfolios including Broadband IP, VoIP, ISPs or IPTV.

On a modular basis Infonova addresses the needs of Telcos burdened with the high costs and operational inefficiencies caused by having multiple disparate legacy systems and unwieldy manual processes. It is an enabling technology for the business transformation journey that many such companies need to undertake to survive and grow in today's Telecom marketplace.

THE COMPANY

LIWEST, the second largest cable MSO in Austria and ORF the public broadcaster in Austria have, in the scope of TV digitization, created a joint project named “!TV4Cable”. While LIWEST provided and extended its back-end infrastructure to enable true VoD (Video on Demand) services, ORF primarily took the role as a content provider for interactive TV services on DVB MHP (Digital Video Broadcast Multimedia Home Platform) enabled DVB-C Set Top Boxes. MHP is a standardized middleware API for digital Set Top Boxes. Infonova has been engaged by LIWEST and ORF to help implement interactive TV services based on DVB MHP, especially emphasizing “On Demand” services (true Video on Demand, Voting).

Infonova showed its expert level capabilities in the area of digital interactive TV, especially in terms of development of efficient DVB MHP applications for digital Set Top Boxes.

Infonova could demonstrate the ability to coordinate a technical complex, multi-vendor project environment in a digital interactive TV environment.

THE CHALLENGE

One of the technical challenges was to offer true VoD services on DVB MHP Set Top Boxes. Since this was not possible with the currently available MHP 1.0.3. standard, extensions from the upcoming MHP 1.1.2 standard had to be introduced to the middleware used in the Set Top Boxes during the trial.

In addition the software protocol between video server, session manager and MHP Set Top Box are proprietary protocols created by the video server vendor. Thus, a specific MHP software component had to be developed to implement this set of protocols.

About 500 LIWEST households have been equipped with required MHP Set Top Boxes. Intensive market research has been done during the 4 month main trial period (December 2005 to March 2006).

There is currently (as of April 2006) only one comparable technical implementation (true VoD on MHP Set Top Boxes) in Europe (cable MSO in Belgium). The project required intensive technical expert knowledge at the DVB MHP level for both of the clients. Infonova has been engaged by LIWEST and ORF in separate contracts.

OBJECTIVES

- Cable MSO (LIWEST) and public broadcaster/content provider (ORF) intended to offer an interactive TV environment to households equipped with DVB MHP compliant digital Set Top Boxes.
- LIWEST aimed to extend its existing digital TV offering (DVB-C) with interactive applications based on the DVB MHP Standard. 500 households had to be equipped with DVB MHP compliant Set top Boxes (Vendor: Advanced Digital Broadcast, ADB).
- “On-Demand” services, which are enabled in bi-directional networks, had to be emphasized (VoD, Voting).
- A (true) VoD subsystem (C-COR nAble/nCube, Harmonic EdgeQAMs) had to be integrated into the LIWEST network.
- The VoD subsystem had to be usable from MHP applications provided by ORF and from LIWEST.
- Additional APIs (borrowed from a not yet standardized upcoming MHP standard) had to be designed and implemented to the MHP Set Top Boxes in order to make them usable with the VoD subsystem.
- LIWEST needed a basic content management system for providing content to its MHP application.
- ORF aimed to offer a rich set of interactive applications (branding “ORF OK”) which make intensive use of “Video on Demand” and voting to stress the true interactive experience.

SOLUTION

Infonova has helped ORF as well as LIWEST to achieve their individual and joint goals. Infonova has been active as system integrator, technical coordinator and MHP software development partner.

Because of the technical complexity and the number of different vendors of subsystems a lot of technical coordination has been necessary. The coordination of complex technology driven projects means that the coordinating party has to have in-depth technical knowledge.

Infonova had the right skill-set / experience in place:

- DVB (Digital Video Broadcast) member since 2002.
- DVB MHP software development experience at expert level.
- In-depth knowledge of Video Server protocol handling (session management, video control).

We could help our clients enormously by asking the right questions to vendors of subsystems, Set Top Boxes (commercial and technical impact).

Integration services

- Basic iTV Content Management System for LIWEST
- Publishing Manager for Videos exported from the ORF Content Management System
- Complete Software development (DVB-J) on the MHP Set Top Boxes. Infonova developed all of the interactive applications in the project. Screen design / GUI functionality has been provided by clients.

Best Practices Implemented

- Development of DVB MHP compliant application software
- Integration of Video Server form C-COR (nCUBE, nAble)
- Session setup, stream control protocol handling inside a DVB-J application.
- Capabilities/experience also transferable to CableLabs OCAP (Open Cable Application Platform)

RESULTS

At the very beginning of the project it was quite unclear if it is possible to implant in a very short time frame a full blown VoD system usable by MHP compliant Set Top Boxes. So the project was an enormous success in terms of reputation for our clients and thus in turn for Infonova.

Both ORF and LIWEST independently expressed their high satisfaction with all work conducted by Infonova.

The project also had a high impact on the plans for digitization in Austria. All results were presented to Austrian media regulatory authority.



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<http://www.infonova.com>



Delivering Sustainable, Measurable Results

Infonova with its more than 250 employees is an Austrian based Next Generation BSS vendor with a solid performance track record for more than 17 years. Through a unique holistic approach, we deliver 360 degree results to help our clients to implement strategic right solutions. The flagship application Infonova provides a proven business transformation model to put the state-of-the-art BSS into efficient operation. According to TMF standards Infonova covers most processes varying from billing to customer care. The Infonova Solution Delivery and Support Center supplies our clients with a 24x7 operations and support service.

To learn more, visit our Web site at <http://www.infonova.com>.

Contact

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