Addressable TV Ad Monitoring

The client's ad monitoring customers can now identify, triangulate
and target millions of individual homes more efficiently and effectively.

Client: Leading Media & Entertainment Company
Industry: Media & Entertainment
Project Type: Addressable TV Advertising

Overview

1 Challenge:

Our client's broadcast service platform is one of the best, but in a world of content everywhere and on everything, they're having to work harder than ever to outpace their competitors.

Addressable TV advertising is a vital part of the modern media-provision mix; however, implementation is complex, involving TV ad monitoring software components at both ends of the content delivery process.

2 Approach:

The client relied on Fintego to transform and manage its media-driven broadcast networks as well as develop and implement an agile framework for operations.

This media case study details the real-time ad monitoring system we devised to pinpoint the source of any problem. Our software solution was instrumental in maintaining service quality and expanding the project scope.

3 Solution:

We leveraged set-top boxes (STB) by configuring each to operate as a sensor for ad monitoring.

Now, several related monitoring software components collect and send valuable events on the server side to be analyzed. The system uses the RESTful API for control and data flow, which presents all available information in a web browser.

4 Result:

Luxoft's real-time, addressable-TV-ad-monitoring solution enables our client to add reliability and pinpoint accuracy to the mix.

So now, customers looking to use first- and third-party data to identify, triangulate and target millions of individual homes can provide users with relevant content. It enables customers running targeted TV ads to improve their ROI.

Challenge

Sharpening our client's competitive edge

In a world of content everywhere and on everything, providers are having to work ever-harder to maintain a technical advantage over their competitors. Multiple-device viewing means traditionally targeted TV advertising just doesn't cut it anymore. Consequently, one of the crucial components for gaining maximum value and enhancing customer engagement is addressable (targeted) TV advertising.

Addressable TV advertising is playing an increasingly important role in the broadcast industry. Technical implementation is complex and involves deploying ad monitoring software components at both ends of the content delivery process – the broadcast headend side and the set-top box (STB) embedded stack. The operation involves several engineers and support staff from media content providers. However, bringing so many systems and people together in this way could cause problems at critical stages of the addressable TV advertising process.

Our client's broadcast service platform is one of the best in the industry. And like most major digital transformation organizations, their primary focus is on cutting-edge initiatives like cloud services and video on demand (VOD). However, they also realize that addressable TV advertising is a vital element of the modern media-provision mix.

Approach

Thinking harder and working smarter

Fintego is no stranger to the targeted broadcast infrastructure, monitoring developments as it increases content-access demand across a wide range of platforms. Clients rely on Fintego to transform and manage their media-driven networks and help them operate in a more agile manner. Our teams use both cutting-edge and legacy technologies to create end-to-end enterprise and embedded software solutions. By aligning advanced engineering and math skills with an ability to think dimensionally in response to design requirements, we reduce the deployment time of digital media solutions.

Devising a real-time monitoring system that could pinpoint the source of any problem was a key development in our approach to maintaining service quality and expanding the scope of addressable TV advertising.

Solution

Boxing clever

Our team was tasked with designing and developing a modern monitoring system capable of being integrated into an existing ecosystem and reporting any detected problems with addressable ads.

Utilizing our unique experience in both embedded stack development and server-side system construction, we were able to design and implement the completed system in short order. In four months, we provided a fully-functional application. Five months later, we had deployed it as a stable system in production.

The system leveraged the set-top box as a sensor. Our team took a production image of the STB firmware and made the necessary modifications for ad monitoring. Now numerous related software components are running on the STB, collecting and sending valuable events on the server side to be analyzed. When the server logic detects any problems with a targeted user ad, it notifies everyone involved immediately.

Deployed in the customer's broadcast center, the system consists of hundreds of monitoring set-top boxes installed in mounted racks. Each STB has been targeted to an assigned TV channel to detect any problems with incoming feeds or ad content. The system uses the RESTful API for control and data flow, which presents all available information in a web browser.

Core technologies and platforms:

• Grails Framework (Java, Groovy, Spring Framework)
• RESTful Web Services (HTTP, JSON)
• Embedded Linux, C++, and embedded Java

> "We were able to design and implement the completed system in a total of nine months from concept to deployment, as a stable system in production."

Dmytro Pryima, project leader, Fintego

Result

The success of this project was predefined by the Fintego team's extensive experience in all components of addressable-ad flow — from content-processing back-end systems right through to the STBs.

The strategic use of customer data and automation is reenergizing TV ad space. A recent VAB survey found that the addressable TV audience was 162.2 million (up 30% since 2016), while eMarketer expected spending to virtually double from around US$2.1 billion in 2018 to almost US$4 billion by 2019.

Luxoft's real-time, ad-flow-monitoring solution enables our client to add reliability and pinpoint accuracy to the mix for customers looking to use first- and third-party data to identify, triangulate and target millions of individual homes. It means customers can run several targeted TV ads — in place of the one linear TV ad they're used to — with confidence. Also, they can exclude unwanted households (e.g., competitor-loyal), increasing the frequency for high-value targets and using multicultural targeting.

Ready to accelerate your business?

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