

# ‘Transforming the way people watch TV’

Nokia Siemens Networks

Ubiquity Multiscreen TV Platform -

Executive summary

Nokia Siemens  
Networks



**An open solution for  
delivering TV and  
Internet as a single  
service on any device  
over any network**

## 1. Answering the challenges of a converging media marketplace

The era of broadcast TV, in which mass audiences consume a limited selection of scheduled programming via a single electronic 'box', is almost over. Today, anyone with high-speed Internet access has a near-infinite choice of video and other content that they can watch whenever they like, on virtually any device with a screen. For young people especially, TV and the Internet are rapidly merging into a single point-and-click experience driven solely by their own interests or by recommendations from friends.

In this new, personalized media environment, the old rules no longer apply. Traditional players are competing with Internet and consumer electronics companies who have entered the arena with ground-breaking platforms, technologies and media formats. And traditional pricing structures are under threat from Internet-based products and services that generate little or no revenue for the networks that deliver them to the consumer.

For service providers relying wholly or partly on the old broadcast business model, these changes in technology, media and consumer behavior are forcing a radical strategic review. For Telcos and other network operators, who are also facing rapid price erosion in voice services, the question of future roles and revenue opportunities is particularly urgent. According to many industry observers, likely options include a niche market approach based on premium TV programming, and a mass market approach based on providing low-cost access to Internet-based content and services.

### **Increasing the value of customer relationships with web augmented TV**

However, for most Multi-Service Providers (MSPs), neither of these old-style business models can provide long-term profitability or brand differentiation. And for most consumers, neither can address their overriding need for one simple interface to both TV and Internet content, any time, on any screen.

The real opportunity therefore lies in bringing these two media domains together in a way that reflects and supports emerging customer behavior, and that enables easy development and delivery of locally relevant services regardless of the consumer's choice of network or terminal device.

For MSPs and consumers looking for genuine new value, the only lasting solution will be one that removes the complexities and costs of multiple TV and Internet technologies and allows each party to enjoy the full benefits of a seamless rich media experience. Only a Multi-Service provider can deliver web augmented TV.

## 2. A better deal for operators and customers

Nokia Siemens Networks Ubiquity Multiscreen TV Platform is a complete end-to-end solution for Telco operators and other MSPs that goes beyond not only traditional broadcast TV but also newer mobile TV services and IPTV capabilities such as time shifting and Video on Demand.

For Multi-Service Providers, Ubiquity Multiscreen TV Platform provides the basis for a profitable multi-screen media business that can:

- generate new revenue opportunities for existing content by addressing the widest possible variety of consumer devices
- drive service uptake by enabling a wide range of new offers and pricing models that seamlessly blend traditional TV with Internet media content e.g. web augmented TV experience

- create additional value from new content-related or stand-alone personalized applications
- drive down Total Cost of Ownership (TCO) by removing development and delivery silos and supporting all platforms (mobile TV, IPTV, Internet TV and Hybrid) from a single back-office system
- reduce OPEX through advanced OA&M functions such as fully modular 'no reboot' upgrades, fully enabled network monitoring, and advanced application monitoring/troubleshooting
- increase efficiency by enabling rapid adaptation of service and content offerings for multiple consumer use cases.

For consumers, it offers:

- a high quality, completely personalized service experience where media consumption is no longer dependent on the type of device used to watch it, or tied to particular times or places
- best-in-class picture quality and fast channel changes
- capabilities such as session continuity, where a given program can be played, paused and resumed on a series of different devices; and social media consumption, where for example a group of friends can watch the same show in different places and simultaneously chat on screen
- the convenience and simplicity of a one-stop shop for all media and device types, and with a single subscription and bill.

### 3. Ubiquity Multiscreen TV Platform: Solution overview

Nokia Siemens Networks Ubiquity Multiscreen Platform is a unique end-to-end solution designed specifically to give MSPs maximum flexibility and responsiveness in their local markets: no competitor offerings provide the same level of scalability, integration or freedom of choice. With Ubiquity Multiscreen TV Platform, MSPs can:

- seamlessly integrate premium TV content with Internet services such as YouTube, Facebook etc via a single user interface – web augmented TV
- add value to their content inventory by cost-effectively delivering it to any user device, including mobile devices, over any network
- add new functionality to STBs and other existing assets
- accelerate the development and deployment of locally relevant new services, applications and 'widgets' by supplementing an existing IML applications toolkit with Nokia Qt, a proven open source software framework with a long-established worldwide developer community
- ensure Digital Rights Management (DRM) for all content on all devices.

#### **As big as it needs to be**

The Ubiquity Multiscreen TV Platform solution works over any network and can scale from thousands to millions of subscribers. It uses Nokia Siemens Networks' expertise in systems architecting and integration to create a single development and delivery system for multiple services across multiple network and device types.

Depending on the individual MSP's size, market and strategic priorities, the solution can include:

- Business consultancy, to work out both business and technology feasibility and to propose the most profitable end-to-end solution
- Systems Integration, to look at the best way of utilizing the operator's existing assets as part of the overall solution

- Service Delivery Framework to enable more efficient interworking between existing or new IP Multimedia Systems, Subscriber Data Management systems or other operational domains.

Thanks to the breadth of Nokia Siemens Networks' expertise, we can also help in related areas such as optimizing 3G network for smartphone signal handling. This will enable MSP customers to use faster, more powerful devices with bigger screens in order to take full advantage of the multimedia opportunities that Ubiquity Multiscreen Platform is opening up.

### **An end-to-end service ecosystem**

Ubiquity Multiscreen TV Platform is not just a server-side solution: on the client side it also provides full integration with Qt, Nokia's proven open source application and UI framework, to provide a consistent, customizable user experience.

For MSPs, this genuine end-to-end approach removes the traditional silos between premium TV content, Internet content and applications, and allows the system to take care of interoperability issues and low level administrative functions such as content subscription, device authentication and DRM. This recognizes the fact that managed and unmanaged content serve different but complementary needs, and frees the operator to focus on developing the services their customers want.

For consumers, it also means they can focus on what they want without worrying about managing different systems or technologies. All they see is one simple interface that makes it easy to consume content and integrate it with other applications such as social networking, any time, anywhere.

### **Harnessing the benefits of the open Internet environment**

Today's legacy TV clients were designed to be deployed over managed networks in which all technology elements are controlled by the MSP. But as more web-based content and Internet-driven technology is introduced into the offering, this control is progressively reduced.

The open Qt-based Ubiquity Multiscreen client enables MSPs to adapt to the ebb and flow of Internet media technology with built-in support for multiple video codecs, multiple DRM schemes and Different UI and application development technologies. For example, the software development framework can be used on consumer devices from virtually any manufacturer, and will work with most major operating systems including Windows, Mac OS X, Linux, iOS, Android and Windows Mobile. Qt also provides a complete spectrum of tools for Java, C++, HTML4/5 and Javascript-based graphics.

Other examples of openness on the client side include Nokia Siemens Networks' ability to work with manufacturers on the systems-on-a-chip (SoC) level, which means that almost any existing STB can acquire full Ubiquity Multiscreen client functionality with a simple software or firmware upgrade. On the Service Provider side, this multiplicity of client devices is supported by multi-technology application servers, and a range of APIs so that operators can integrate Ubiquity Multiscreen Platform with existing OSS/BSS and CRM systems.

Overall, this flexibility significantly reduces the risk of MSPs being left behind by the next shift in internet delivery technology. It also enables them to work with the widest possible range of hardware and software partners to create exciting new services and applications while at the same time making the most of their existing infrastructure.

## 4. Why partner with Nokia Siemens Networks?

It takes an organization with truly global reach and scale to deliver a complete end-to-end TV and Internet solution that works over any network on a local or national scale. Nokia Siemens Networks is currently the only player in the market who can deliver all the elements required to set up and manage a profitable multi-screen media business, both on the server side and the client side, and for any fixed or mobile network in between.

It is also the only player to offer such openness and flexibility. Ubiquity Multiscreen Platform works with multiple hardware and software platforms; it enables rapid development and easy deployment of new services; and it gives MSPs the freedom to innovate in ways that are appropriate to local market demand.

### **Building on a proven platform**

As the product of more than a decade of commercial deployment of IPTV and related solutions, the Ubiquity Multiscreen Platform platform already has a long and successful track record. MSPs such as Belgacom in Belgium, KPN in Netherlands, T-Com Croatia in Croatia and Consolidated Communications Inc. in the USA have all used the openness and flexibility of our solution to build profitable multi-screen TV businesses in their own way for their own markets, using whichever partners best serve their needs.

With Ubiquity Multiscreen Platform and Nokia Siemens Networks support, MSPs do not need to foresee the future. They can simply be confident that they have a competitive answer to Internet-based content and service providers, and will be among the first to take advantage of whatever the future brings.

“As service providers look to differentiate their multi-screen capabilities, **it will become increasingly important for end-to-end solutions** to encompass both a common **back-end platform** to seamlessly share intelligence across resources, as well as a common **front-end** to enable **seamless multi-screen experiences**. With its Ubiquity Multiscreen Platform solution, **Nokia Siemens Networks is demonstrating that it is among the few vendors that can leverage the resources to deliver both parts of a complete multi-screen architecture.**”

Yoav Schreiber, Senior Analyst, Digital Media Infrastructure

Current Analysis