



White Paper

# The Akamai HD Studio

Accelerating Growth, Innovation  
and Profitability with Akamai



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## Introduction

The days of viewers having to arrive at a destination to watch a television program or film are gone. Entertainment follows these days, especially as portable devices from phones to media players, as well as laptop and desktop computers, are doubling as outlets for high definition entertainment.

Indeed, high-quality digital video content is now considered a mainstream must-have, rather than a luxury. That fact alone provides studios and other content providers an additional profitable channel that is highly scalable.

Yet, just having content available is not enough. In fact, consumers are now expecting and demanding high definition (HD) content that is at least as good as what they would experience at home.

So, it's no surprise that content providers are closely watching market trends, listening to success stories and looking for solutions that provide a successful HD delivery strategy.

This white paper aims to help provide a roadmap for those content providers, while also addressing a number of crucial requirements for success that includes a fast and reliable global network, the highest security standards and useful analytics.

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*High-quality digital video content is now considered a mainstream must-have, rather than a luxury.*

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## Market Trends

Even as out-of-home entertainment options become more and more expensive, consumers are still demanding subscription-based home entertainment with a market that looks to grow from \$66B today to \$84B in 2013.<sup>1</sup>

Accessibility to premium content and increased consumption are just two of the many factors driving industry growth. According to a February 2010 ComScore Video Metrix report, online video views grew from 14.8 billion in January 2009 to 33.2 billion in December 2009. A June 2009 PricewaterhouseCoopers report projected that the market for online rental subscriptions will reach \$4.5B in 2013 and digital downloads will grow from \$253M in 2008 to \$753M in 2013.

The ever-increasing size and capacity of the consumer broadband market is, in part, enabling this shift in the market. In fact, over 72 million households had broadband access in 2008. That number is projected to grow to 86 million users by 2013.

At the same time, driven in part by the federally mandated switch to digital broadcasting, consumers are upgrading their living rooms by purchasing HD television sets, installing home networks and buying connected devices.

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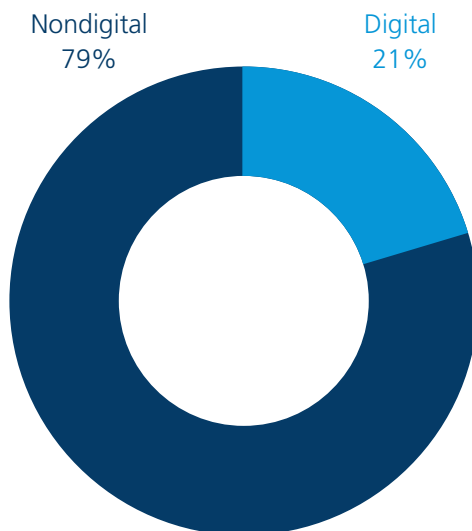
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Companies like Netflix have taken advantage of this trend by turning the technological advances in digital video distribution into a competitive advantage. In Q4 2009, Netflix added a million subscribers to its already impressive 12 million-subscriber mark. A Wall Street Journal article pointed out that 48 percent of Netflix customers streamed at least 15 minutes of video via its Instant Watch feature compared to just 28 percent a year ago.

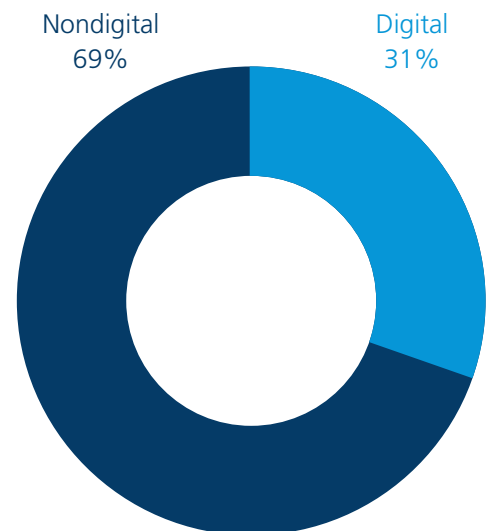
And the next generation looks to build on that trend, given the fact that a majority of them look to the digital world for leisure time activities.

### CONSUMER SPENDING PATTERNS CONTINUE TO MIGRATE TOWARDS DIGITAL MEDIA

**DIGITAL VERSUS  
NONDIGITAL SPEND, 2008**

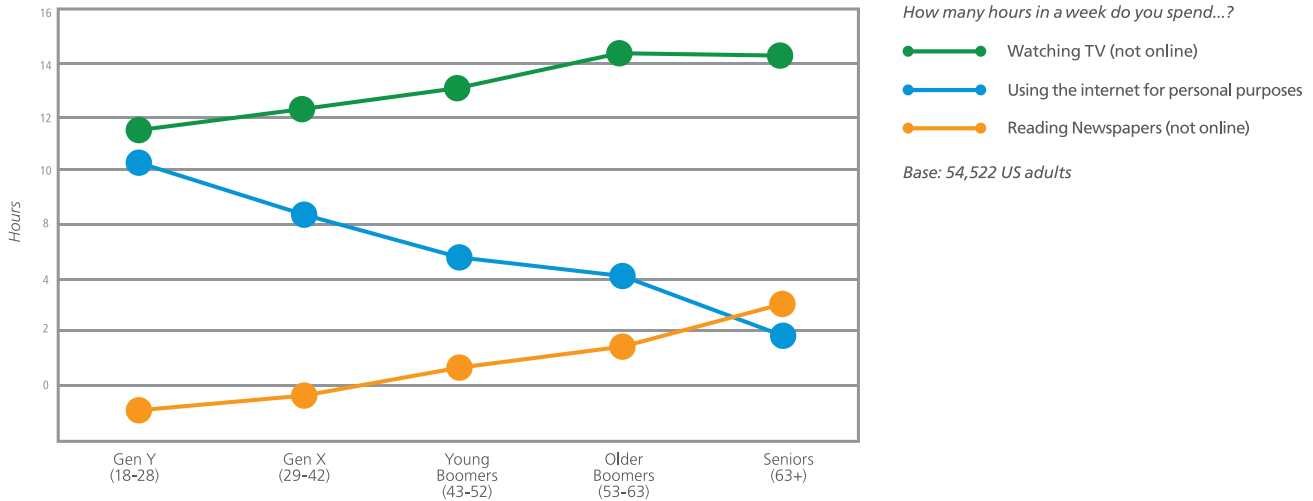


**DIGITAL VERSUS  
NONDIGITAL SPEND, 2013**



<sup>1</sup> PricewaterhouseCoopers, 2009

### Gen Y Spends More Leisure Time Online



## Akamai Solutions Ease Providers' Doubts

Even with increased consumer demand, the opportunities for broadband delivery and the long-term trend towards growth, there is still doubt that supplying premium content over the Internet is reliable, profitable and secure.

### Conquering the Bottleneck

One of the first concerns that content providers raise is the capacity of Internet service providers when the demand for video peaks. The concern is realistic, especially when it's reported that currently over 700 million consumers watch video over the Internet for an average of 10 minutes a day via relatively low quality (1/2 Mbit/s on average) video streams. Globally, that traffic represents approximately 2.5 Tbit/s of data, with expected peaks and valley of usage during the day.

When digital video quality improves, it is estimated that usage will nearly triple with consumers watching two hours of video over Internet per day with an estimated increase in bit rate to 7.5 Mbit/s. The higher bit rate, which is slightly better than the quality of a typical DVD, is still not HD, but it's dramatically better than today's standard. Driven by the higher quality, the estimates for global usage averages 1300 Tbit/s. The number of users and the amount of time they'll be watching online entertainment is staggering.

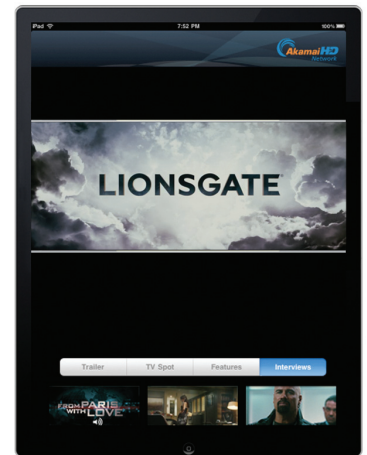
Yet, Akamai has already solved this potential bottleneck by investing and installing servers in every major metropolitan center around the world. Today, Akamai has servers up and running that are close to both the provider and the user.

### Uniting the Fractured

Even with all of the big name Internet service providers selling their services, the truth of the matter is that even the largest company owns less than one percent of the global market share. Therefore, the ISP market is fractured with a multitude of distribution challenges, demands, standards and end-users.

Akamai has already solved this issue, thanks to the company's long history of building an infrastructure that blankets every service provider, from the largest to the smallest.

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*Today, because of Akamai's technologies, even a 3D movie at the highest HD resolution only costs a few cents to get to an end user.*

## Making Digital Delivery Profitable

In the early days of digital distribution, costs were astronomical. In 2000, the transport price from an online distribution partner to deliver a HD movie from a data center in Burbank to a consumer in New York could exceed \$400. Early adopters dealt with this expense by ratcheting back image and sound quality to the point where consumers were driven back to physical media.

Today, because of Akamai's technology solutions that optimize the routes that data travels during a transfer, even a 3D movie at the highest HD resolution only costs a few cents to get to an end user. In fact, in many cases it is less expensive to deliver a HD file from Akamai than a standard definition file from a studio's own data center.

## Answering Consumer Demand

While consumer interest has been piqued, the demand for an experience that feels consistent and stable remains. Indeed, consumers do not want to suffer lag times due to buffering, poorer image or sound quality or even slowed interactivity.

Based on its years of experience, Akamai has designed and implemented technology that answers each of those concerns, including the Akamai HD Network that ensures an uninterrupted playback despite unpredictable and fluctuating Internet connections. Also, the company's global server network delivers the bit rates necessary so that content can be seen in it's highest quality every time. And finally, Akamai's EdgePlatform provides consumers with a seamless experience when shopping, participating in social media or watching interactive content.

## Secure Asset Delivery

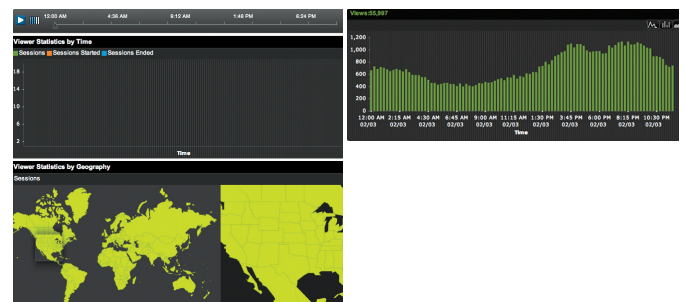
Much like shoplifters threaten the viability of brick and mortar vendors, hackers and Internet pirates are having an impact on every provider's bottom line in terms of asset theft.

Included in Akamai's HD Network are an impressive array of security measures that can reliably protect high-value digital content from being inappropriately accessed, thereby defending a provider's bottom line and stable of assets.

## Reading the User

Marketing to a blank slate is tricky business, especially in an industry where the variety of options is bountiful. So, content providers need to know exactly who their consumers are and how they are using their products. With information like that in hand, providers can expand their business from a one-time purchase to a lifetime relationship.

Akamai's HD Media Analytics solution was designed from the ground up to provide media companies direct information surrounding audience engagement, audience intelligence and usage measurements. Moreover, Akamai's HD Media Analytics gauges the user's level of service and consistency across a multitude of platforms.



## Success Stories

### EPIX

EPIX, the premium movie channel that airs the biggest films from Paramount Pictures, Lionsgate and Metro-Goldwyn-Mayer Studios Inc., has been using Akamai since the company's October 2009 launch to deliver and manage its full-length HD movies.

EPIX is the leading next-generation, multi-platform entertainment service, delivering the latest movie blockbusters, new releases, library classics and original content across its premium, HD television channel, video-on-demand service and on the EPIXHD.com website. EPIX supported a successful public launch of its service by leveraging a full suite of Akamai solutions, including dynamic streaming, Akamai Professional Services, Akamai NetStorage, Akamai's Open Video Player, Akamai EdgeScape for geotargeting and Akamai Media Analytics.

EPIX delivers more than 200 full-length HD movie experiences online with the quality, speed and convenience demanded by today's consumers of digital media. Movie playback on EPIX seamlessly adapts to end-user machines with different capabilities, such as lower processing powers or slower Internet connections, giving consumers a smooth, uninterrupted playback experience online without sacrificing viewing quality.

"Customers are demanding to watch movies online," said Thomas Carpenter, vice president of operations and digital chief of staff for EPIX. "At EPIX, we are focused on enabling broadband delivery of our products, while preserving the cinematic quality of our titles. Akamai's first-rate distribution network, advanced technologies and dedicated professionals let us do just this—deliver a truly movie-worthy, HD experience to our viewers in the broadband medium."

### Roxio CinemaNow

Sonic Solutions®, is leveraging Akamai to support its Roxio CinemaNow digital entertainment services, as the company's entertainment platform continues to expand its reach and deliver entertainment services to more connected devices. Akamai supported a 93 percent increase in movie downloads for Sonic from November 2009 to March 2010.

"The Roxio CinemaNow entertainment platform is helping to create a powerful new distribution channel for content owners and generate new opportunities for retailers and consumer electronic device manufacturers to connect with consumers," said Mark Ely, executive vice president of Strategy, Sonic Solutions. He added, "Akamai is an important ally that allows us to meet the needs of our partners and ensure the highest quality viewing experience for the end user, regardless of where they are accessing and enjoying content."

Sonic relies on Akamai to power video streaming and downloads and to support the increasing demand for Roxio CinemaNow services that has resulted from the company's recent partnerships that have enabled thousands of new customers for Sonic. Sonic is leveraging Akamai's file download optimization for the storage of large files, as well as its Dynamic Site Accelerator to support new dynamic elements of the Roxio CinemaNow platform. The Akamai EdgePlatform helps services like Roxio CinemaNow deliver large files efficiently with increased performance for end-users who are downloading large multi-gigabyte files and increased download completion rates.

*"The Roxio CinemaNow entertainment platform is helping to create a powerful new distribution channel for content owners and generate new opportunities for retailers and consumer electronic device manufacturers to connect with consumers."*

— Mark Ely, Executive VP of Strategy, Sonic Solutions



*EPIX supported a successful public launch of its service by leveraging a full suite of Akamai solutions.*



## Conclusion

The time for high quality digital video presented over the Internet is here. Consumers are demanding it. Content providers have it. Only Akamai can bridge that divide with its with its global network of servers and full suite of solutions. The company answers all consumer concerns and quiets the doubts of providers. Akamai's track record of success and forward-looking approach means that there is no problem without a solution. Contact Akamai to hear more about our solutions and how they can support your business needs.

## The Akamai Difference

Akamai® provides market-leading managed services for powering video, dynamic transactions, and enterprise applications online. Having pioneered the content delivery market one decade ago, Akamai's services have been adopted by the world's most recognized brands across diverse industries. The alternative to centralized Web infrastructure, Akamai's global network of tens of thousands of distributed servers provides the scale, reliability, insight and performance for businesses to succeed online. Akamai has transformed the Internet into a more viable place to inform, entertain, interact, and collaborate. To experience The Akamai Difference, visit [www.akamai.com](http://www.akamai.com)

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