

DOES YOUR OTT SERVICE HAVE TOO MANY MOVING PARTS?

Evaluating the multi-vendor vs single vendor approaches



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Akamai is proud to be co-sponsoring this OTT whitepaper as NeuLion's CDN partner. As the world's largest and most trusted cloud delivery platform, Akamai makes it easier for our customers to provide the best and most secure video experiences on any device, anytime, anywhere. Find out why all of the top 30 media and entertainment companies, all of the major US sports leagues and the leading gaming platforms trust Akamai to deliver the best online experiences by visiting [Akamai](#).




INTRODUCTION

The sports and entertainment media industry is operating in a world of unprecedented customer choice, competition, and complexity of delivery. Consumers have more choices than ever before and they want access to content that is both live and on-demand and, most importantly, relevant to their interests.

Today's technology and adapting consumer habits are enabling this constant change like never before. New business models – like direct to consumer (D2C) streaming – are being enabled by new technologies. OTT services are popping up everywhere, ultimately giving consumers more choices in the content they consume and how they consume it. In this rapidly changing environment one key question arises: how do content owners and content rights holders adapt and thrive? Success will come from taking advantage of the opportunities that present themselves as newer technology and services begin to evolve. We are at the forefront of technology innovation, elevating video consumption on OTT services to seemingly unlimited heights. With customer expectations for easily accessible, high-quality, device-agnostic video, your OTT delivery strategy must be ready to innovate.



A photograph of two young women sitting at a wooden table in what appears to be a cafe or a casual dining area. They are both smiling and looking at a tablet computer that is held in front of them. The woman on the left is wearing a red sweater over a plaid shirt, and the woman on the right is wearing a blue denim shirt. A white mug is visible on the table in the foreground. The background is slightly blurred, showing some indoor plants and wooden furniture.

LIVE AND ON-DEMAND OVER-THE-TOP VIDEO CONTENT, AVAILABLE IN HD, ULTRA HD AND HDR ON ANY DEVICE THAT CAN BE PERSONALIZED BY THE VIEWER IS DRIVING CHOICE, COMPETITION, AND THE COMPLEXITY OF DELIVERY FOR CONTENT OWNERS AND RIGHTS HOLDERS.

No matter what device the consumer prefers, today's live and on-demand OTT services must consistently impress the viewer with broadcast-quality streaming and engaging content. This whitepaper takes a look at the state of today's OTT market, as well as the differences between in-house implemented OTT platforms and those OTT services delivered by managed service providers.


THE PRESENT: OTT INDUSTRY TODAY

According to IABM's Digital Media Market Intelligence Report, provided at IBC this year (2017), the Broadcast Media and Technology industry last year was a \$50.1 billion market. This shows the magnitude of expenditures for both traditional broadcast technology and OTT technology needed for the delivery of live and on-demand content. The global appetite for OTT services is insatiable.

The smartphone and mobile market is also on the rise, mobile traffic is expected to increase 800% in five years. In addition, by 2020, it is estimated over 5.4 billion people will have mobile handsets.

Consumers continue to change their viewing habits, watching more and more long form video on their mobile devices.

Social media platforms are investing more funds in the commissioning of original video content and purchasing sports rights. Companies like Amazon, Facebook, Google and Apple are actively originating or buying content rights. This is fueling a boom in content prices, particularly in sports.



**20%
INCREASE**
in online video viewing in 2017 ⁽¹⁾



**800%
INCREASE**
in Mobile Traffic
Expected in 5 Years ⁽²⁾



**5.4 BILLION
PEOPLE**
Estimated to Have Mobile
Handsets by 2020 ⁽²⁾

⁽¹⁾ Zenith's Online Video Forecasts 2017 ⁽²⁾ Cisco's Visual Networking Index 2016

According to SNL Kagan, there are now over 1,200 over-the-top (OTT) services in operation worldwide, up from the 978 reported in 2016. Additionally, sports rights continue to be a fragmented market, with over 1,300 active rights deals on record, as reported by Sportcal, for the world's largest sports.

The market for live and on-demand services continues to become even more crucial. The urgency for rights holders to create new direct to consumer OTT services went up recently after Disney announced a change to their OTT strategy, selling ESPN programming direct-to-consumer and pulling their content out of Netflix to offer their own OTT.

These recent changes offer huge benefits for consumers – more content, more devices and great video quality.

The phenomenal quality of today's TV experience continues to shape consumer expectations, regardless of what platform is used to watch live and on-demand video (right now there are more than 40 different platforms, according to SNL Kagan).

However, consumer patience runs thin when it comes to poor video quality, latency or buffering, leading to higher churn rates. In a recent study by Mux, 92.9% of respondents (US digital video viewers) have stopped watching a video due to streaming issues. Furthermore, 85.1% stopped watching video due to slow load time, 85% due to stalling and rebuffering, 67.5% due to repeated playback errors and 57.3% due to poor picture quality.

 **1,200+**
OTT SERVICES
Worldwide as of Sept. 2017

 **40+**
DIFFERENT
Device Platforms ⁽³⁾

 **78%** OF U.S.
CONSUMERS
subscribe to at least one OTT service ⁽⁴⁾

⁽³⁾ SNL Kagan's OTT Services And Devices by Service Name, 2017

⁽⁴⁾ PwC Industry Perspective: 2016 Entertainment Media Trends

CONSUMER HOT BUTTONS



HIGH QUALITY VIDEO ON ANY DEVICE



SEAMLESS INTEGRATION BETWEEN DEVICES AS THEY MOVE BETWEEN SCREENS



PERSONALIZATION SERVICES TO DRIVE CHANGES IN THE CONTENT OFFERINGS



INTERACTIVE FEATURES TO CREATE A ROBUST “LEAN IN” EXPERIENCE



TRY AND BUY OFFERS FROM OTT SERVICE PROVIDERS



SOCIAL MEDIA INTEGRATION



CONTENT PACKAGING FLEXIBILITY

THE FUTURE: PERSONALIZED OTT SERVICES UNIQUE TO EVERY VIEWER


In the face of inevitable change, how are companies gearing up for the OTT adventures ahead? Content owners and content rights holders are racing to offer direct to consumer OTT services, and many of these new steaming services will adopt business models including advertising, subscription plans and transactional pay-per-view payment models.

Digital is happening across all industries, but nowhere is it happening faster than in sports media and entertainment. Today's consumers have higher expectations and more options as to how they want to purchase and experience OTT services.

The future is bright for OTT services that can deliver quality as well as offer viewer's personalization features that provide genuine viewer attraction and engagement,

thus increasing consumer retention. Imagine letting each of your viewers or subscribers create their own personalized over-the-top experience with your library of live and on-demand content. The benefits are vast, leading to deeper relationships with consumers and ultimately driving more revenue.

So how will content owners and rights holders attract new subscribers? How will they ensure that video quality and personalization don't fall short of consumer expectations? Finally, how will these rights holders build and deliver OTT services where they can adapt to changing market conditions, new device categories, new video formats and more with agility, speed and profitability?



CONTENT PROVIDERS ARE QUICKLY SEEING VALUE IN HIGH QUALITY, PERSONALIZED OTT SERVICES. TODAY'S NEW OTT SERVICES ARE LEVERAGING PERSONALIZATION FEATURES, LIVE AND ON-DEMAND CONTENT OFFERINGS DRIVEN BY CONSUMER CHOICES, AND VIEWER DATA THAT BECOMES THE "SECRET SAUCE" TO ATTRACTING AND KEEPING SUBSCRIBERS. THE QUESTION NOW BECOMES – BUILD OR BUY?

BUILD VS BUY - THE AGE OLD QUESTION

For content owners and content rights holders, accelerating the delivery time between an OTT service launch and its availability for live and on-demand viewing translates directly into increased ROI. Many organizations today are considering building their own OTT platforms by licensing technology from multiple vendors or, alternatively, working with a managed services partner.

BUILD: OTT MULTI-VENDOR APPROACH

Behind every OTT service is a comprehensive video workflow used to deliver live and on-demand content to a wide array of internet devices. This includes content acquisition, content processing, live video editing, content management, product management, user management, content security, payment processing, real time analytics, marketing tools, content distribution, app development and so on.

HAVE YOU LOST TRACK OF THE NUMBER OF TECHNOLOGY VENDORS NEEDED YET?

OTT technology services should provide content owners and rights holders with full video and consumer management capabilities required to distribute and monetize video content in today's global markets:

- Live and VOD content ingestion, adaptive bit rate encoding and multi-format packaging
- Content metadata ingestion and management including content rights data
- Live to VOD clip editing and publishing
- Content Management System for detailed control over metadata attributes, content availability and geo controls.
- User management including personal information, transaction history, etc.
- Product management for content packaging, bundles and pricing
- Marketing tools including product merchandising, content promotion, coupon code management and segmentation tools

THINKING OF TAKING THE MULTI-VENDOR APPROACH?

Here are the components needed for a successful OTT service





When it comes to delivering live and on-demand content over the internet, it tends to be complex and complicated with many moving parts. Luckily that is not the only option. There are many benefits of choosing an end-to-end managed service platform that outweigh the disadvantages, making it the preferred choice of many companies.

Here are a few reasons why:

REDUCED COMPLEXITIES

One of the biggest advantages of an end-to-end managed service platform is increased compatibility. Using a multi-vendor approach, there's always the possibility — and sometimes the inevitability — that individual components or solutions will be incompatible with one another. Even worse, as video technologies continue to evolve and mature, companies juggling multiple vendors may find themselves using a mishmash of products and services that don't support seamless integration.

INNOVATION

All too often, multi-vendor approaches rely on products and services that were created with a specific project in mind. This can lead to services that may perform one task very well, but fall behind in other tasks, lack key features, or are incompatible with alternative video formats. Further, companies taking a multi-vendor approach must have employees or third parties manually connect or map data between respective product components, which can be extremely time consuming (more on this below). Taking a single vendor approach, gives you the flexibility for agile development and the ability to move quickly on new projects.

STREAMLINED WORKFLOWS

The management of video services is complicated. Customers using a multi-vendor approach often find themselves overwhelmed by these challenges. With an end-to-end managed service approach, however, the workflow becomes the responsibility of the platform provider, who has the single focus of delivering high-quality video services. Companies using an end-to-end approach can leave the technical aspects of multi-platform management and support to their platform provider, and instead focus on delivering great, high-quality content to customers, regardless of the devices they use. Companies no longer have to worry about writing code or creating interfaces between each component.

TIME-TO-MARKET AND REDUCED COSTS

With an end-to-end managed service approach, you don't have to spend time negotiating individual video and software licensing agreements. Even more, your IT department doesn't have to spend precious time and resources integrating and supporting various components and services. For example, the process of integrating data either manually or programmatically is often very time consuming. Best of all, this streamlined process greatly speeds up time-to-market with new features and abilities, helping you stay competitive and take advantage of new opportunities. In short, end-to-end solutions save you time and money, and keep you ahead of the game.

BUY: OTT MANAGED SERVICES APPROACH

In today's fast paced, competitive OTT environment, it is not only about cutting cost but also about reaping the benefits of a strategic partnership to leverage skilled expertise and OTT experience, while increasing efficiency as well as reducing time to market and project complexity.

REDUCTION IN NUMBER OF SUPPLIERS – The single vendor approach meets many of the requirements of today's largest OTT brands, reducing the number of suppliers needed, therefore leading to reduced project complexity and increased market agility.

NEW AUDIENCE EXPANSION – Easily and seamlessly expand services into new markets with support for localized apps and currencies.

DEPLOYMENT OF INNOVATIVE CONTENT BUNDLES – Content owners and rights holders will be able to package and bundle content rights catalogs in a variety of ways. For example, creating bundles that mix linear channel bundles with live events and VOD collections or movie titles.

FUTURE PROOF SERVICE CAPABILITIES – Stay up-to-date on the latest next-generation video technology and viewing experiences as they enter the marketplace such as 360, VR, 4K and HDR.



ONE PLATFORM. ONE PROVIDER. ONE POWERFUL SOLUTION.

As the only complete end-to-end video solution, the NeuLion® Digital Platform simplifies the digital video workflow and provides all the tools you need to get your content into consumers' hands quickly and easily, ensuring they will be loyal, long-lasting customers.

The NeuLion Digital Platform is owned, developed and fully managed by NeuLion. This allows our content partners to have complete control over the customer experience, and not rely on the capabilities and restrictions created by stitching together a complex suite of third-party solutions. NeuLion's technology architecture allows the platform to be delivered on any cloud-based infrastructure.

Our work in the marketplace has been attracting very big brands in both the sports and entertainment industries. From the NBA, UFC, and Sky Sports to Univision, Rogers, and Carrefour, these household names have all selected the NeuLion Digital Platform to power their OTT and direct-to-consumer services.

SOLUTION COMPONENTS

NeuLion technology and services enable our partners to launch OTT services quickly and easily.

Our solution components include:

- Live and VOD content ingestion, adaptive bit rate encoding and multi-format packaging
- Content metadata ingestion and management (including content rights data)
- Live to VOD clip editing and publishing
- Content management system for detailed control over metadata attributes, content availability, geo controls
- User management (e.g. personal information, transaction history etc.)
- Product management (e.g. package content, bundles and pricing)
- Marketing tools including product merchandising, content promotion, coupon code management and segmentation tools
- Support for any combination of access and business models: TV Everywhere authentication, subscription, pay per view, EST, TVOD (rental) and ad supported
- Content protection including token-based security and multi-DRM
- Real-time and historical analytics dashboard for audience measurement, insight and app analytics
- App design and creation for all required devices: web, mobile, tablet, connected devices, game consoles, and smart TVs
- Player SDKs for integration with third-party app developers
- Live channel and event support. 24/7/365 operations support provided by NeuLion Operations Centers

YOUR CONTENT

NEULION DIGITAL PLATFORM

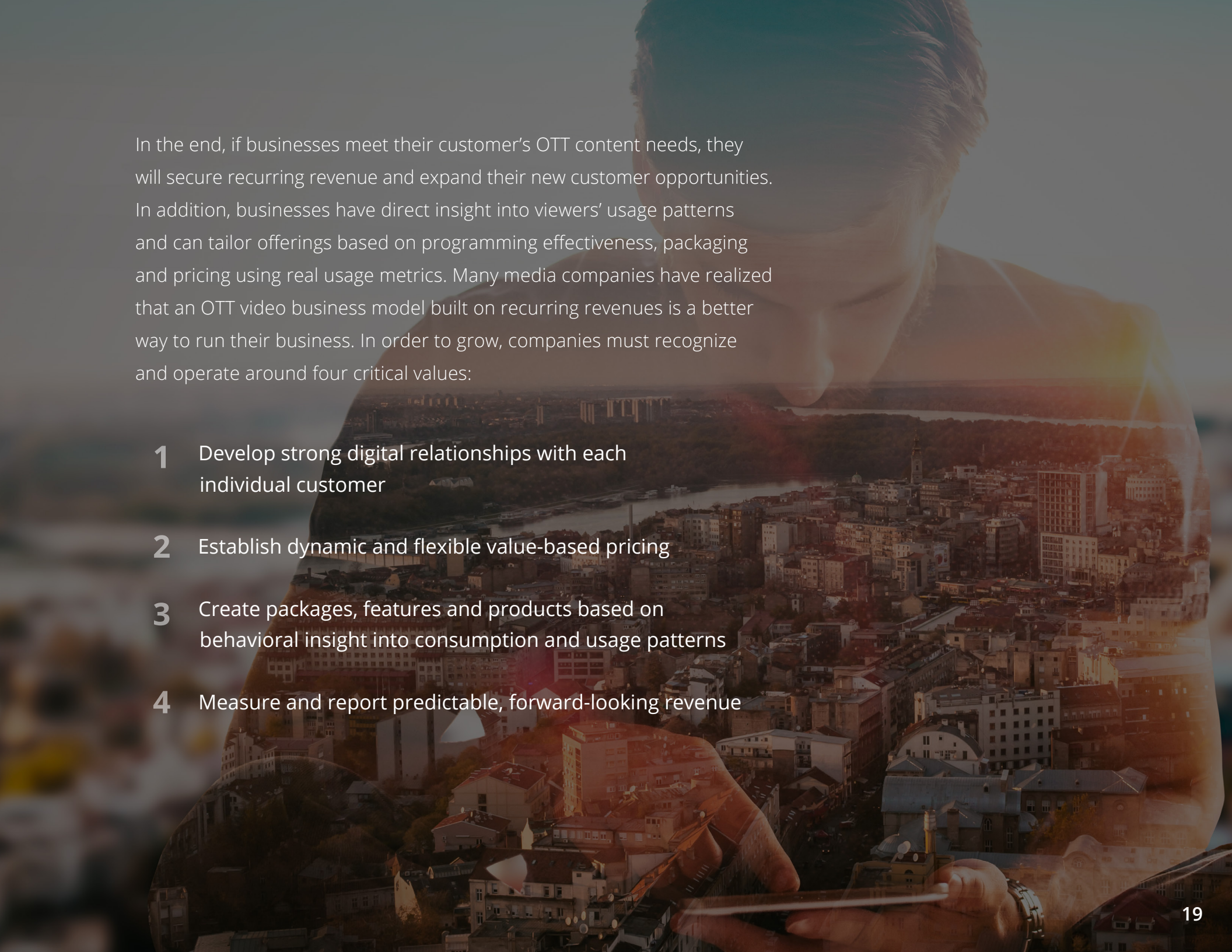
DELIVERY TO CONSUMERS



MONETIZATION: GROWING YOUR OTT BUSINESS

All OTT services have something in common: the goal of making money. When it comes to monetization, course correction and adaption are the norms and not exceptions. Success is out there for the companies able to deliver a truly differentiated experience. But once you've got an audience, how do you keep them and grow your business?

Successful OTT businesses are generally based around quality, premium (paid) content that allows the consumer to choose how and when they want to watch and interact with the content. With premium content, OTT video subscription and transactional pay-per-view models are a win-win for both the consumer and media companies. SVOD and AVOD services also offer content owners and rights holders the benefit of monthly recurring revenue and advertising-free content. Consumers receive the benefit of quality content, while businesses focus on consumer success, earning trust and continually providing new offerings to meet consumers' high demands.



In the end, if businesses meet their customer's OTT content needs, they will secure recurring revenue and expand their new customer opportunities. In addition, businesses have direct insight into viewers' usage patterns and can tailor offerings based on programming effectiveness, packaging and pricing using real usage metrics. Many media companies have realized that an OTT video business model built on recurring revenues is a better way to run their business. In order to grow, companies must recognize and operate around four critical values:

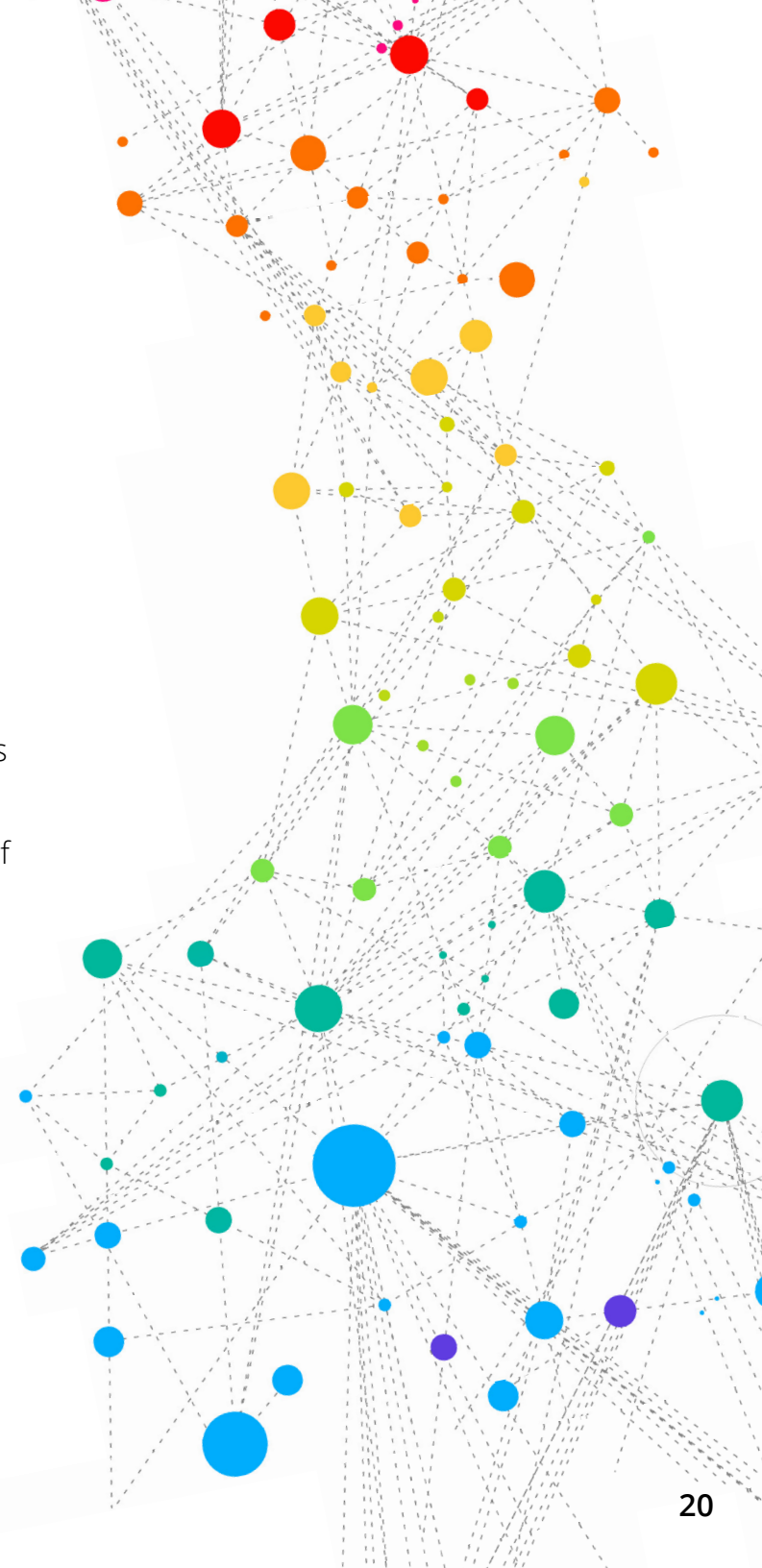
- 1 Develop strong digital relationships with each individual customer
- 2 Establish dynamic and flexible value-based pricing
- 3 Create packages, features and products based on behavioral insight into consumption and usage patterns
- 4 Measure and report predictable, forward-looking revenue

THERE'S END-TO-END. AND THEN THERE'S NEULION

At the core of NeuLion is the NeuLion Digital Platform, which continues to build market share. Through continued innovation, we have stayed on top of the marketplace by focusing on high quality video delivery, deep merchandising tools coupled with analytics and best-in-class NeuLion designed and powered end user app experiences.

NeuLion supports all video formats including 4K Ultra HD and HDR. We have developed a platform for our customers that supports all business models necessary to build a successful direct-to-consumer digital business. Customers leverage business models from authentication, subscription, pay-per-view/transactional, ad-supported and electronic sell through, to any combination of all five. As our customers take their content to market, we provide them with a wide array of content packaging options, worldwide localized storefronts and pricing support, offer management and most importantly, promotional tools; all designed to help NeuLion customers build their digital business. Our success as a company is directly tied to our customers' success in growing their digital services.

REDUCED COMPLEXITIES | LAUNCH FASTER | LOWER COSTS |
CREATE LOYAL VIEWERS | TURN CONTENT INTO DIGITAL REVENUE



ABOUT NEULION

When we started Neulion, we set out to change how entertainment was delivered and consumed by viewers. Today, we are a global leader specializing in digital video broadcasting, distribution and monetization of live and on-demand sports and entertainment content to any connected device. We bring tremendous experience and expertise to all our customers by continuously driving their business forward, providing them with the ability to organize, deliver and monetize their content across multiple devices in global markets.

WHY OUR CUSTOMERS CHOOSE US

ABOVE, BEYOND & OVER-THE-TOP EXPERIENCES

In an ever changing digital world, we are on a mission to continually innovate and enhance our complete video ecosystem, to deliver the most far-reaching, interactive digital experiences in the market.

POWERFUL PERFORMANCE SOLUTIONS

Whether you are looking to create a service from scratch or build upon an already established service, choose a partner with a complete video workflow to deliver flawless content in the highest quality, saving you time and money, while eliminating hassle.

SUCCESSFUL TRACK RECORD

We develop digital media strategies that have continually exceeded expectations for the biggest names in sports and entertainment including NFL, NBA, UFC, Univision, EFL, Eleven Sports Network and others.

OUR UNMATCHED DEDICATION

With a devoted team of experts and decades of experience, we are committed to the success of your business - from unlocking additional revenue to driving substantial growth - we're here for you.



IMAGINE WHAT WE CAN DO WITH YOUR CONTENT.

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