



**Fulfilling
expectations
for Pay TV
providers and
their subscribers**



I Love Lucy. Doctor Who. M*A*S*H. Dallas. Friends. Game of Thrones. The SuperBowl.

These are just some of the TV shows that have energized video consumption over the past decades.

But, consumers now have new ways of defining and viewing TV



Amino provides solutions that empower Pay TV providers to deliver the content consumers crave – whether it is traditional linear programming from national and local broadcasters or video-on-demand content streamed by an increasing number of content providers. The TV industry is a market in transition.

What does this mean for the consumer, Pay TV providers and the future of the set-top box?

**How are
consumers
watching TV?**



The TV is still relevant

The TV itself is still relevant. According to Statista, In January 2021, there were 1.7 billion Pay TV households worldwide. However, the rise of video consumption via Smart TVs (now representing 70% of the TVs sold globally), dongles, tablets and smartphones means that streaming is here to stay.

The definition of TV has expanded to include any type of video content delivered via Pay TV operators or OTT streaming providers. Amino recently collaborated with Endicott College Curtis L. Gerrish School of Business to assess TV consumption trends. When asked how survey respondents watched TV:



48%

watch via a cable TV or satellite subscription

This is consistent with findings from Grand View Research that indicated that current cable TV market share is slightly below 50%.

A report from Samsung Ads shows that linear TV viewing time as compared to streaming view time, in UK, France, Germany, Italy and Spain decreased in 2020.

Jan 2020



51%

Linear TV Viewing



49%

Streaming Viewing

Dec 2020



46%

Linear TV Viewing



54%

Streaming Viewing

**Amino's
Voice of
Consumer
2020**
indicated that

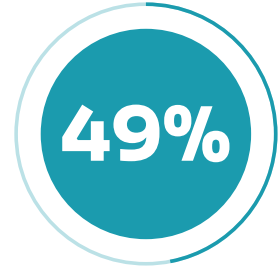
53%

of European consumers would like their Pay TV provider to integrate streaming content.

In the United States, arguably a market leader in adopting various TV technologies, a recent report sponsored by Amino partner, Innovative Systems shows how consumers in rural America are accessing TV content:



via national Pay TV provider



via a streaming service



via local Pay TV provider



via antenna

Source: Pivot 2021

With Pay TV providers facing new challenges and challengers it is more important than ever to understand what is important to Pay TV subscribers.

Amino's recent **Voice of the Customer survey** revealed that operators believe that subscribers are focused on price and content.

indicate that price is a top priority



Endicott College research reflects a higher percentage of consumers focused on price with **92% indicating it is important to them.**

92%

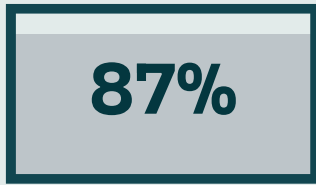


However, this was surpassed by **94%** of survey respondents **prioritizing their interest in the variety of content.**

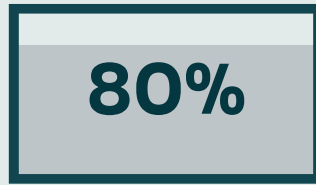
94%



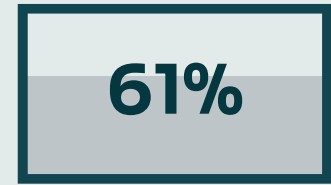
When it comes to content, our **Voice of the Customer** survey indicated that subscribers are most interested in:



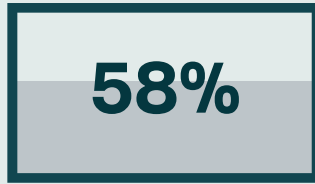
Live sports



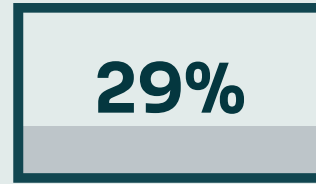
Local news



Linear channels



Premium OTT



Free, ad-supported OTT

Content is important

When it comes to cord-cutting, one reason U.S. subscribers hesitate to take action is for fear of losing access to favorite local affiliates of national broadcast networks such as ABC, CBS, FOX, NBC and PBS.

But live sports is still the mainstay of Pay TV.



Parks Associates
recently stated that

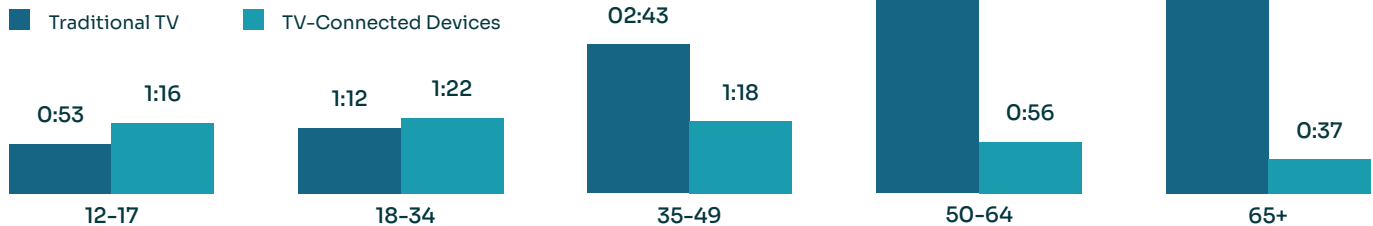
55%

of Pay TV households consider live sports an important factor in their decision to keep their Pay TV subscription.

While it is clear that millennials and Gen Z are watching less traditional TV, those over 35 still watch more traditional TV than connected TV, which means Pay TV providers still play an important role in delivering video content to their subscribers.

Traditional TV vs. TV-Connected Device Usage

in Q3 2020 (daily hh:mm, total population)



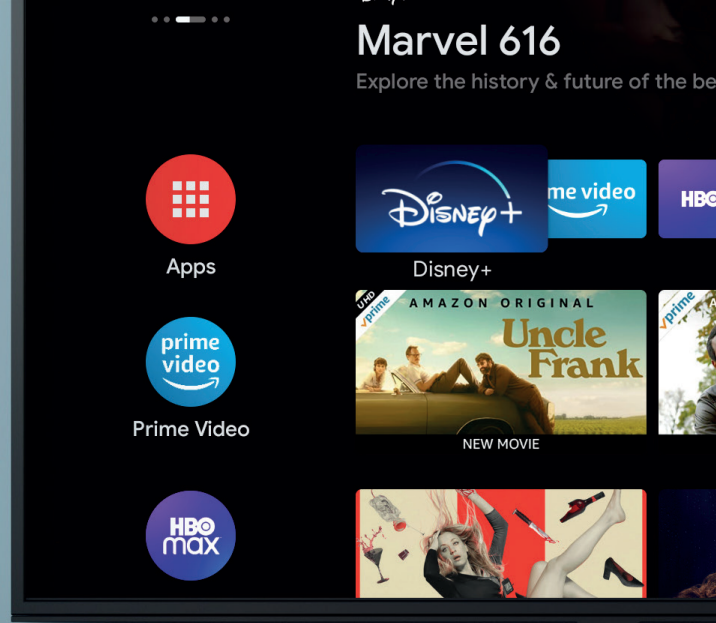
Published on MarketingCharts.com in May 2021 | Data Source: Nielsen

Traditional TV refers to all live + DVR/time-shifted TV viewing during the quarter for the total population

Connected TV refers to DVD/Blu-Ray Devices, Game Consoles, and Internet-Connected Devices (including streaming media players and smart TVs)

With this understanding, the set-top box is the key enabler of video delivery to the consumer home.

Why is the STB still important and valuable to Pay TV providers?



In the US there has been growing interest by operators to enable consumers to

“Bring Your Own Device (BYOD)”

There are multiple reasons for Pay TV provider interest in this option.

One is to remove the capital expense of procuring and operational expense of deploying set-top boxes.

Another is to give consumers the flexibility to access TV services via their device of choice and compete on a level playing field with streaming service providers show do not incur costs related to consumption devices.

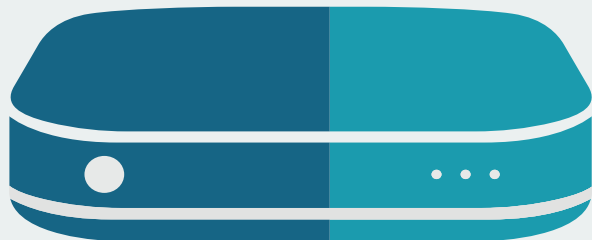
Our VoC survey, targeting Tier 2/3 operators, reflects a relatively low level of interest in BYOD.

While Pay TV providers are prioritizing ways to reduce the cost of managing their video services,

only 33%

expressed interest in BYOD as a way to reduce costs of managing a video service.

DTVE's annual survey investigated attitudes towards the set-top box



55%

not interested or indifferent

45%

STB absolutely or very useful

Of those that find the STB absolutely or very useful

79%

Enable e2e monitoring of video service / network performance.*

71%

More secure platform for content delivery

70%

Branded presence in consumer home

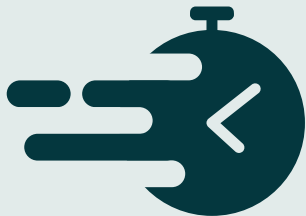
68%

Data about consumer habits

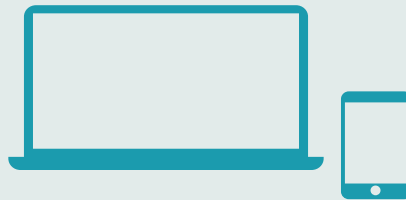
* Amino Voice of Customer Survey indicated that 76% want data related to service quality metrics – top service quality metrics wanted are video stream quality and video performance)

With the assumption that Pay TV providers will continue to offer their services using the set-top box - they need these devices to support their goals to give their subscribers the content they want.

This means the set-top box must facilitate access to content with features like:



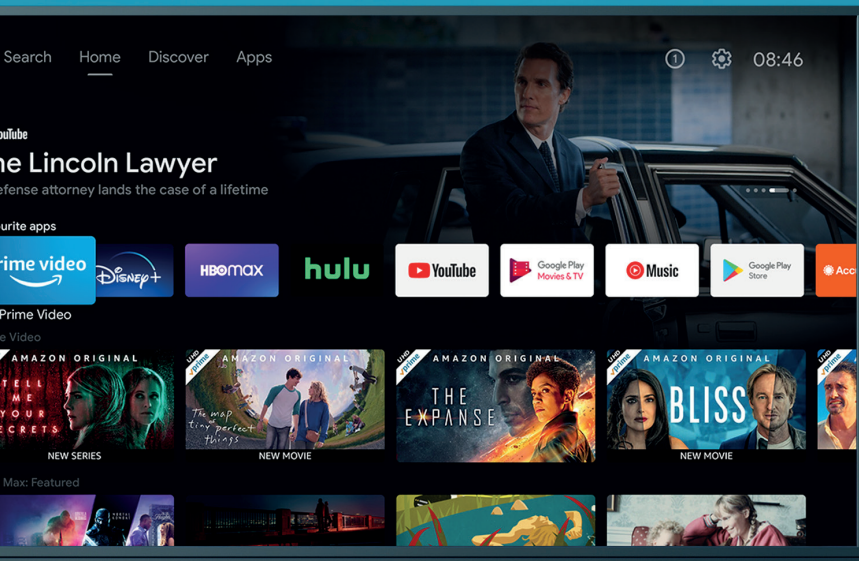
**Fast channel
change**



**Ease of EPG or
UI navigation**



**Voice
control**



Why Android TV?



Our **Voice of Customer survey** indicated that

71%

of Pay TV providers have prioritized integration of streaming content

By 2025 **Rethink Technology Research** predicts that

29%

of all set-top boxes will be powered by an Android TV operating system.

This reflects significant growth at the expense of Linux.

Why are Pay TV providers interested in Android?

According to OMDIA Android is attractive to tier 2/3 operators as it helps them become the home entertainment hub – aggregating both linear channels and streaming apps.

Research from Endicott College supports this perspective, finding that the majority of consumers want ease of access to their favorite programs and the ability to “control the moment” by choosing both the content and how it is consumed.

At Amino, our goal is to help our operator customers provide more content without more cost

Digital TV^{Europe}

DTVE's annual survey indicates that **72% believe that super aggregation is the best strategy for Pay TV operators**

64% of our Voice of Customer survey respondents **indicated they were interested in Android TV**



**2021
VOICE OF
CUSTOMER**

Why?

64%

of them said because it helps them to aggregate streaming content

64%

of pay TV providers want to attract and retain subscribers

What else is attractive about Android TV?

DTVE says time and access




say time to market important to them
(how long do our average ATV
deployments take?)



appreciate access to
the Google Playstore

While Android TV is appealing, operators do have some concerns - most of which can be addressed by Amino's Operator Ready Android TV Solution.

| Digital TV¹ Operator Top Concerns |  Operator Ready Android TV |
|---|---|
| 80% STB Software Updates | Amino Engage provides cloud-based centralized tools to manage software, firmware, APK and launcher updates |
| 80% Integration with legacy tech | Amino Expertise with Ecosystem middleware and security platforms |
| 79% Support for broadcast TV | Amino devices with legacy tuner support and expertise to address unique requirements |
| 77% Google control of data | |
| 70% UX doesn't appeal to all users | |
| 74% Lack of flexibility in customizing UI | Amino's sister company, 24i, develops highly customized UIs within Google guidelines |
| 67% Certification Process | Amino manages end-to-end operator tier certification within 4-6 weeks |

It's clear that consumers want the best of both worlds

Pay TV providers are at a crossroads as households within their subscriber base want the familiarity and comfort of linear TV combined with the flexibility of streaming services.

From an operational perspective, Android TV helps operators deliver the video services that will attract and retain subscribers. Amino's expertise and technology capabilities enhance the ready-made Android TV platform, helping operators overcome concerns and giving them the operator ready solution they need to update their video service.

Android TV core capabilities:

- Apps via the Google Play Store
- Modern user interface
- Voice control & search
- Accelerate time to market

Amino provides support for:

- Legacy DRM clients
- IGMP Multicast
- MPEG2
- RTSP, RTP, RTSP interleave
- Retransmission
- DVB Subtitling & Teletext
- QoS Tagging
- PPPoE
-and more





Conclusion



Whether selecting a Pay TV provider or a streaming subscription, making it easy for consumers to access to the TV and video they love is a top priority.

Consumers have confirmed that the way they watch TV is changing, but Pay TV is still important to many. Operators want to attract and retain subscribers but need a cost-effective manner of updating their services so that they can remain the primary entertainment hub in the consumer home.

Content continues to be the primary driver of consumer behavior.

Consumers prioritizing availability of popular TV shows and movies when selecting a video service

90%
Pay TV



93%
Streaming

(source: Endicott College Curtis L. Gerrish School of Business)

Google has paid attention to the needs of Pay TV operators giving them many of the flexibilities needed to retain brand presence and control channel lineups. Amino provides the “extras” needed to easily integrate with existing technology.

Are you ready to give your subscribers the content they love?

Learn more about Amino's
Operator Ready Android TV.

letstalk@amino.tv