

# Broadband Industry Report (OVBI)

---

3Q 2019

# Introduction

OpenVault is a leading provider of broadband industry analytics and software-as-a-service (SaaS) technology solutions for operators worldwide. With over 150 service provider engagements across 4 continents, OpenVault's SaaS platform captures broadband usage data from millions of residential and commercial subscribers. With this unique visibility into real-time broadband usage data, OpenVault publishes its OpenVault Broadband Industry Report (OVBI), providing a quarterly advisory outlining important data usage trends for the broadband industry.

In addition to providing these important industry metrics, the OVBI also explores the impact of changing subscriber bandwidth usage on broadband service providers. OVBI findings are based on aggregated market data from millions of subscriber usage data points, providing analysis and comparative period results for identification of key market trends.

---

## **New OVBI data offers revealing insight into the impact of cord cutting, both operationally and financially, for network operators.**

---

OpenVault's actionable SaaS solutions platform enables broadband service providers to track usage trends based on both flat-rate billing (or unlimited data usage) and a usage-based billing approach, where subscribers are billed based on their bandwidth usage. For the purpose of this report, flat-rate billing data will be identified as FRB and usage-based billing data will be identified as UBB.

This OVBI analyzes data from the third quarter of 2019 (3Q19) and reveals important industry trends, including ongoing analysis of power users and their impact on the network. It also continues to examine the impact of video cord cutting behavior on broadband operator networks.

New OVBI data offers revealing insight into the impact of cord cutting, both operationally and financially, for network operators. OpenVault's analysis has identified opportunities for network operators to address both these impacts. These opportunities include broadband package upselling strategies which could lead to growing higher margin package penetration.

Lastly, this OVBI highlights noteworthy bandwidth usage trends at the higher speed tiers in Europe, which draws an interesting comparison to North American usage behavior.

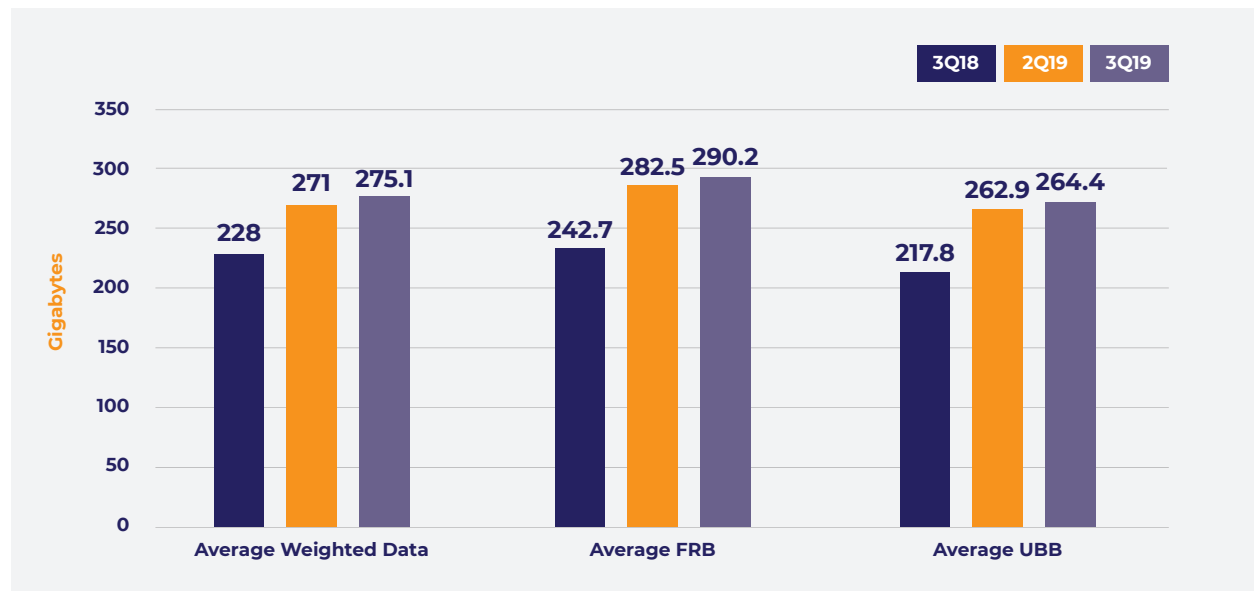
# 3Q19 BROADBAND USAGE KEY FINDINGS

## Broadband Usage Growth Data Points

The monthly weighted average data consumed by subscribers in 3Q19 was 275 gigabytes (GB), up 21% from 3Q18's weighted average of 228 GB. Weighted average data grew slightly in comparison with 2Q19—approximately 4 GB.

Weighted average data usage includes subscribers on both flat rate billing (FRB) and usage-based billing (UBB). Historically, OVBI data reveals a strong correlation between billing approach and bandwidth consumption, as the average UBB subscriber consumes less data overall.

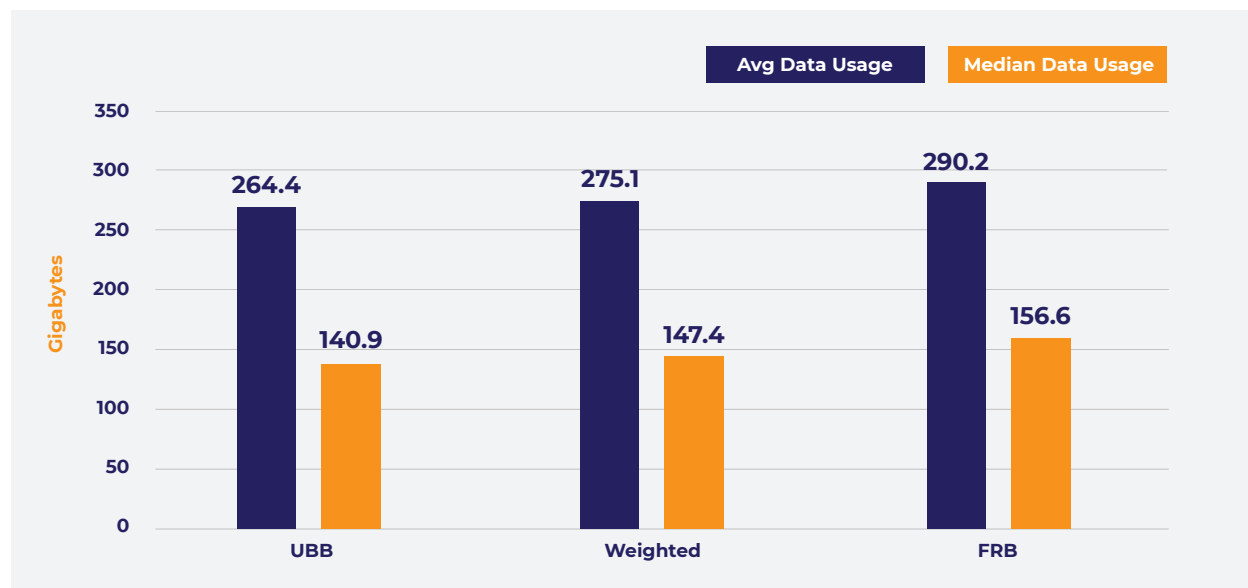
## Average GB Usage by Billing Type 3Q19



**Comparing the two billing approaches, average FRB subscriber usage was nearly 10% higher than UBB subscriber usage in 3Q19.**

In 3Q19, the average subscriber on unlimited or flat rate billing (FRB) used 290.2 GB, up nearly 20% from 242.7 GB in 3Q18. For UBB subscribers, average total usage in 3Q19 was 264.4 GB, up over 21% from 217.8 GB in 3Q18. Comparing the two billing approaches, average FRB subscriber usage was nearly 10% higher than UBB subscriber usage in 3Q19.

## Median Data Usage Comparison 3Q19



The median monthly weighted average usage in 3Q19 was 147.4 GB, up nearly 25% from 3Q18's 118.2 GB (weighted average usage combines both FRB and UBB billing approaches). Notably, median usage growth regularly surpasses average usage growth, a pattern which indicates that subscribers at all levels of broadband

---

**The median monthly weighted average usage in 3Q19 was 147.4 GB, up nearly 25% from 3Q18's 118.2 GB**

---

consumption are using more data. Median usage of FRB subscribers was 156.6 GB in 3Q19, which is over 11% higher than the median usage of UBB subscribers (140.9 GB).

## Power Users

OpenVault has been tracking power users for several years. These users are currently defined to include those who consume more than 1 terabyte

---

**As of 3Q19, nearly 4.2% of all subscribers could be considered power users. This figure has increased by 62% from 2.58% in 3Q18.**

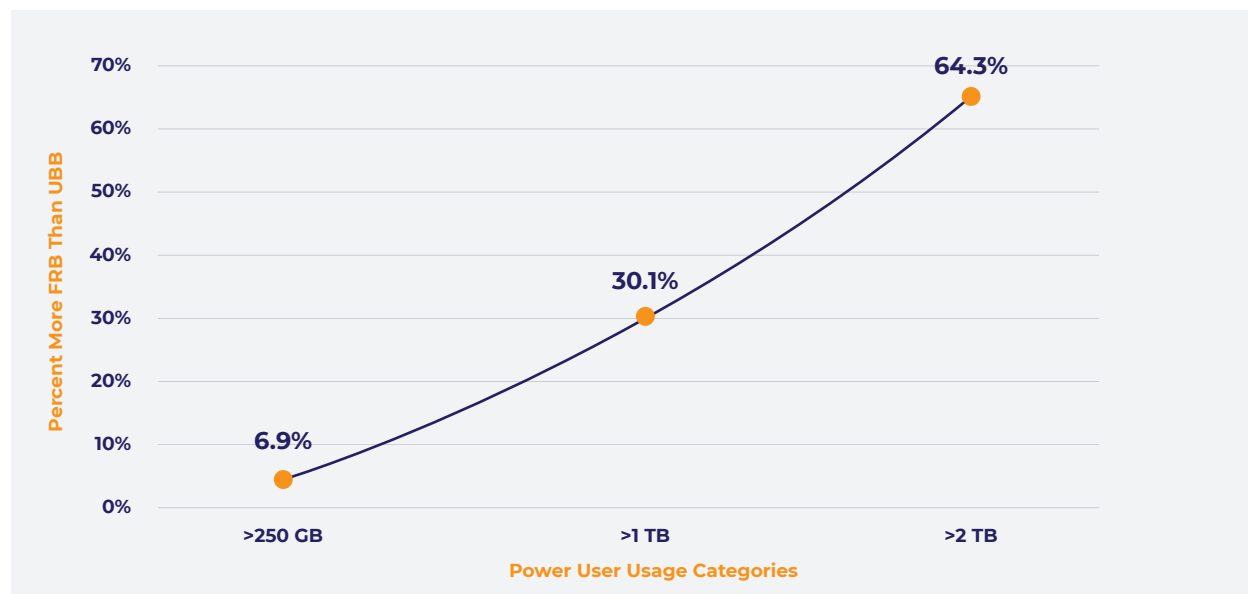
---

(TB) of data per month. Power usage has significant implications for service provider networks, including an outsized impact on bandwidth demand and the capacity challenges

that creates. If not managed properly, power users can negatively impact the quality of experience for the average subscriber. As of 3Q19, nearly 4.2% of all subscribers could be considered power users. This figure has increased by 62% from 2.58% in 3Q18.

Power users clearly have evolved. Just a couple of years ago, anyone using 250 GB or more per month was considered a power user. In 3Q19, well over one third of subscribers (37.1%) consume at least 250 GB per month, up nearly 18% from 31.5% in 3Q18.

## Power User Delta FRB vs. UBB



Power usage and billing approach are directly correlated. As of 3Q19, 3.7% of UBB subscribers were using more than 1 TB of data per month, 30% less than the 4.8% of FRB subscribers who exceed that level. When looking at the most extreme power users — those using more

than 2 TB of data per month — UBB's impact is even more pronounced. The percentage of subscribers using 2 TB of data per month or more is over 64% lower among UBB subscribers (.28%) compared to FRB subscribers (.46%).

## Provisioned Speed Tiers

The overall percentage of subscribers provisioned for gigabit-speed service increased 25%, to 2.5% in 3Q19, up from 2% in 2Q19. Just over half of all subscribers (51%) now receive provisioned broadband speed of 100 Mbps or higher. The most popular broadband tier is the 100 Mbps to 150 Mbps tier with 35.2% of subscribers receiving that speed tier. The next most popular tier is 50 – 75 Mbps, with close to 27% receiving it.

A clear trend has emerged for provisioned speed tiers in the North

American market. A higher percentage of FRB subscribers are provisioned for lower-speed packages compared to UBB subscribers. Among FRB subscribers,

---

**UBB subscribers choose 1 Gbps packages at a rate 89% higher in comparison with FRB subscribers, even though there is a higher percentage of power users in the FRB category.**

---

nearly 38% currently are provisioned for speeds of 30 Mbps or less, compared to 12% among UBB subscribers. This

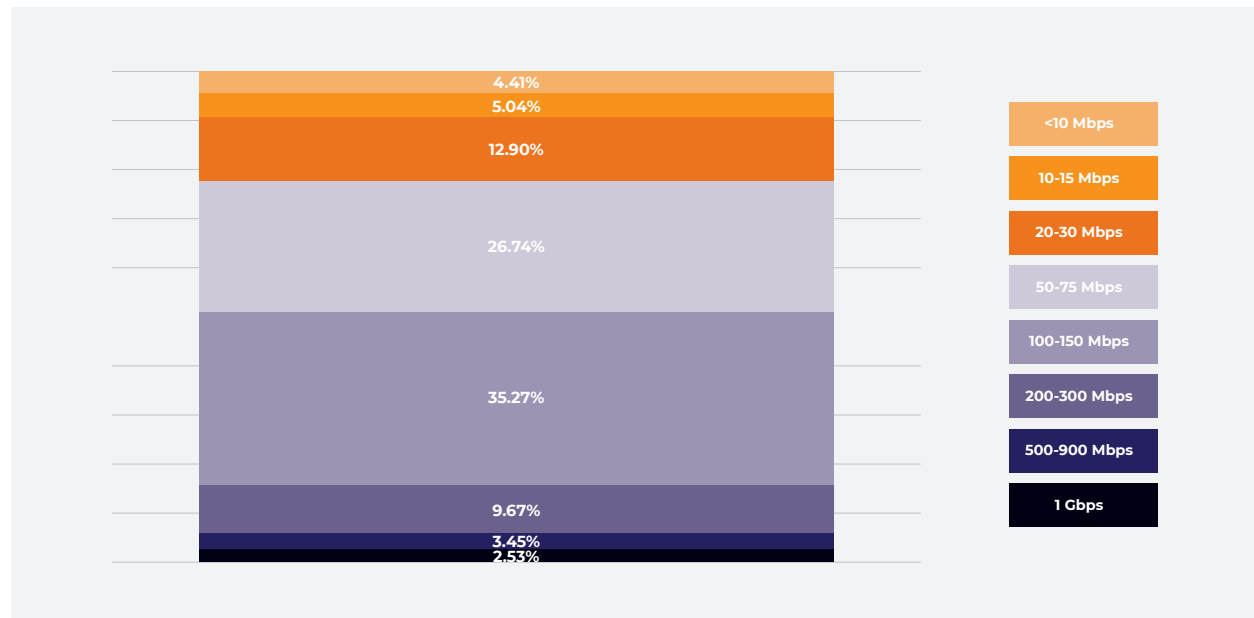
is consistent with data gathered throughout 2019 and indicates that a UBB strategy encourages subscribers to opt for higher speed packages.

Indeed, UBB subscribers choose 1 Gbps packages at a rate 89% higher in comparison with FRB subscribers, even

though there is a higher percentage of power users in the FRB category.

The 1 TB power usage category is 30% higher among FRB subscribers than UBB subscribers. The upshot is that FRB subscribers are consuming more data at lower margin speed tiers.

## Weighted Speed Tier Percentage Distribution



## Cord Cutting Impact – Broadband Upselling Opportunity

The trend of video cord cutting has profound implications for network operators. Cord cutters are embracing

**Over 12% of cord cutters are 1 TB power users, almost triple the 4.2% of weighted average subscribers and nearly double the percent observed in 2Q19.**

OTT video and their bandwidth usage demonstrates it. As of 3Q19, on average, cord cutter subscribers are consuming more than ½ a terabyte of data per month,

at 520.8 GB. That's up 7% from 2Q19. Cord cutter average monthly bandwidth usage is almost double monthly weighted average subscriber usage of 275.1 GB.

Median usage for cord cutter subscribers was 403.7 GB as of 3Q19. This increased data consumption is also highlighted in the power usage category. Over 12% of cord cutters are 1 TB power users, almost triple the 4.2% of weighted average subscribers and nearly double the percent observed in 2Q19.

This data reveals the significant impact cord cutters have on the network as well as the financial implications for

---

**New data subset analysis by OpenVault with select operators during 2019 confirms that there is a definite opportunity for selling broadband upgrades at the time of cord cutting.**

---

broadband operators. The network implications include the need to efficiently manage the increased bandwidth demand created by cord cutters in order to ensure an acceptable customer experience (CX) across the entire network.

Additionally, operators need to manage the financial impact. Cord cutting reduces overall ARPU, and while video service is not typically high-margin, the trend can negatively impact margins nevertheless — especially when ancillary higher-margin products such as set-top box rentals are taken into consideration. Network operators need to address the negative

ARPU and margin implications of cord cutting. New OpenVault data confirms an effective strategy for doing so — upselling broadband speed packages at the time of cord cutting. New data subset analysis by OpenVault with select operators during 2019 confirms that there is a definite opportunity for selling broadband upgrades at the time of cord cutting.

Higher-speed broadband packages generate handsome margins and can be an effective replacement strategy for lost margins from video cord cutting.

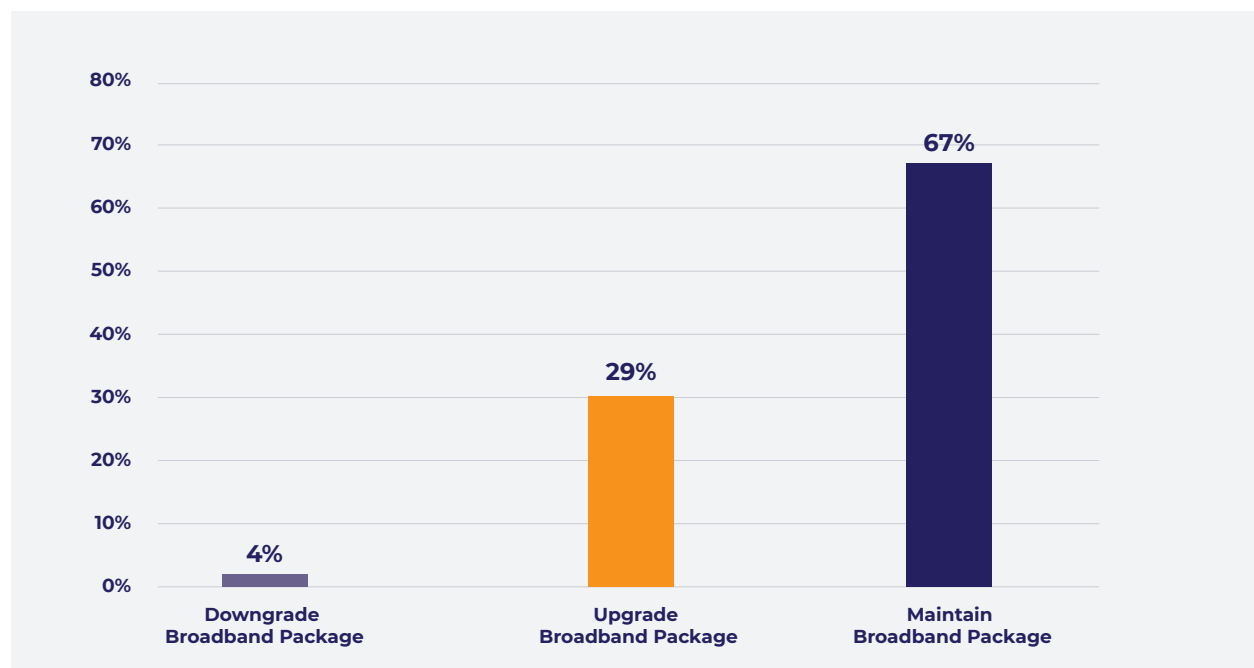
---

**Only 29% of eligible cord cutters opted to upgrade their broadband speed at the time they cut the cord.**

---

This analysis reveals that only 29% of eligible cord cutters opted to upgrade their broadband speed at the time they cut the cord. Two-thirds (67%) stayed with their current broadband package, while 4% actually downgraded their speed package.

## Broadband Upsell Opportunity



Operators should pay attention and prepare for this trend. A cord cutting event usually signals a need for faster broadband speed packages. Cord cutters are opting for high-bandwidth OTT services, and are using multiple devices in the home to consume video.

This behavior lends itself to faster speed, higher margin broadband packages to ensure an acceptable broadband CX, and the cord cutting event is the best time for operators to educate customers and upsell them accordingly.

## European Markets

European usage trends in 3Q19 reveals closer alignment with North American trends at the higher broadband speed tiers. European subscribers who take 100+ Mbps broadband tiers consume 333 GB of data monthly. That compares to 398 GB of data usage at the same speed tiers in North America, a difference of only 19%.

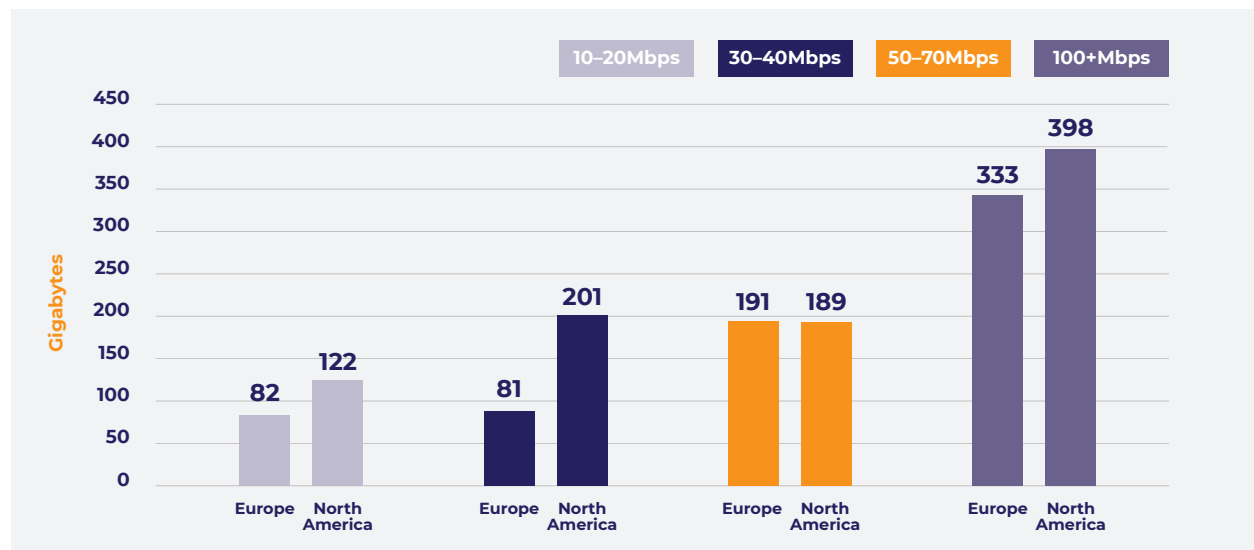
**At higher broadband speed tiers, European subscriber bandwidth usage behavior more closely resembles North American.**

At lower speed tiers, data consumption average between North American

and European users is much wider. At the 30 – 40 Mbps speed tier, North American subscribers are consuming nearly 150% more bandwidth (201 MB) than Europeans (81 MB) at that same speed tier. At the 10 – 20 Mbps tier, North Americans consume nearly 50% more bandwidth than Europeans.

The trend highlights that at higher broadband speed tiers, European subscriber bandwidth usage behavior more closely resembles North American. At the 50 – 75 Mbps tier, North American usage (189 MB) and European usage (191 MB) is nearly identical.

## European vs North American Broadband Usage





Historically, Europe has lagged North America in average monthly bandwidth usage. OVBI findings suggests this data point may be more driven by relatively higher broadband speed tiers on average in North America, which drives higher bandwidth usage. As European operators

upgrade their networks and begin more widely offering faster broadband speed tiers, they can look towards North America to get some relative predictive market intelligence regarding usage behavior trends for their markets.

## CONCLUSION

In 3Q19, the overall US weighted average broadband usage (combining customers on FRB and UBB billing) was 275 gigabytes, up 21% from 3Q18's weighted average of 228 GB. During the same period, the median monthly weighted

---

**Average video cord cutter subscriber usage surpassed half a terabyte in 3Q19, almost double monthly weighted average subscriber usage.**

---

average usage increased nearly 25% from 118.2 GB to 147.4 GB. Cord cutting continues to have a profound impact on the broadband business, both operationally and financially. Cord cutting shows no signs of slowing down, especially with a number of new high-profile streaming services from the likes of Disney and Apple about to launch.

Average video cord cutter subscriber usage surpassed half a terabyte in 3Q19, almost double monthly weighted average subscriber usage. In the midst of this accelerating cord cutting trend, OpenVault has identified an opportunity for network operators to leverage cord cutting trends for broadband package upgrade sales. Success with this strategy enables operators to replace lost revenues and margins that are a result of cord cutting.

Network operators also need to recognize the continuing impact of power users on their network and how their billing approach influences power user behavior. Power users increased 62% between 3Q18 and 3Q19. Subscribers on FRB plans consistently subscribe to lower margin broadband speed packages yet consume the most data on average. The 1 TB power user category is 30% higher among FRB subscribers than UBB subscribers. UBB subscribers choose 1 Gbps packages at a rate 89% higher in comparison with FRB subscribers.

A European market trend worth further observation involves broadband usage behavior at higher broadband tiers. European usage behavior, on average, tracks closely with North American usage behavior at higher speed tiers, a trend that's not apparent at lower

---

**Subscribers on FRB plans consistently subscribe to lower margin broadband speed packages yet consume the most data on average.**

---

speeds. North American usage patterns at higher broadband speeds may offer European operators some predictive market intelligence.

## About OpenVault

As a global leader of broadband analytics and actionable solutions, OpenVault provides meaningful insight and intelligent solutions to one of the world's fastest-growing, ever-evolving marketplaces. In this way, OpenVault's solution suite tracks broadband data usage consumption levels for millions of subscribers and helps operators across the globe better manage their networks, saving time and costs while increasing revenue and subscriber satisfaction. Network operators use OpenVault's easy-to-use tools to dramatically improve visibility into their networks and automate management functions to proactively handle congestion, forecast network requirements, monetize broadband growth and communicate with subscribers.

To learn how our solutions can help you better automate and optimize your network, manage and improve subscriber quality of experience and significantly increase revenue, contact [sales@openvault.com](mailto:sales@openvault.com) or visit [openvault.com/solutions](https://openvault.com/solutions).

For more information on this report or to find out how our global data can explain an industry trend or illuminate a market environment, please contact [marketing@openvault.com](mailto:marketing@openvault.com) or visit [openvault.com](https://openvault.com).

### **OpenVault**

95 River Street  
Hoboken, New Jersey 07030  
[sales@openvault.com](mailto:sales@openvault.com)  
+1 (201) 677-8480