



UNDERSTANDING THE EFFECT OF CONTENT TYPE ON THE VALUE OF OTT AUDIENCES

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ABSTRACT

Over the top (OTT) video networks distribute diverse types of content and attract unique audiences, each with specific expectations. As such, the strategy for managing an OTT business will differ depending on the way in which users engage with the service, with much of the variation in user behavior based on content. This paper discusses the ways in which content variation affects key aspects of the service, including subscriber monetization, viewership, and content management. Understanding these differences allows for better planning for resource allocation when launching and growing an OTT network.

INTRODUCTION

In October 2015, Verizon launched their mobile-first over the top (OTT) network *go90* with much fanfare and a healthy budget. In fewer than three years, it was shuttered. Comcast, through their subsidiary NBC Universal, tried their hand with *Seeso*, a comedy-centric OTT network, in early 2016. It survived for a little over a year and a half. Just last year, Turner Broadcasting's *Filmstruck*, a service for classic, rare, and foreign films, closed its doors after two years of operation.

These services did not fail because they were unable to garner attention or even an audience. *go90* was estimated to have 2.1 million monthly active users¹, while *Seeso* and *Filmstruck* saw subscriber numbers in the hundreds of thousands². Rather, the cost of each service was such that the necessary return on investment could in no way match the expected lifetime value of a customer. Paradoxically, the money spent to force these networks into success was the very thing that doomed them.

While these are some of the most public cases of failure, they are not fully representative of the market as a whole, which is estimated at \$11.4 billion in the US for 2019, with a 3.1% CAGR³. The size of these notable examples belies the scale of the opportunity for OTT networks with a modest number of subscribers who nevertheless face the exact same questions. What is the value of a new customer to their service? How engaged will new customers be with a network's content, and on what devices? How much should networks spend on customer acquisition?

In many cases, the answers to these questions are difficult to find until well after a network has been budgeted, developed, programmed, and launched to market. Services may try to increase customer lifetime value after launch by enhancing product features or lowering acquisition costs with focused marketing efforts, but these changes serve at best as



marginal improvements. They do not address the fundamental challenges of the business: what video content should be offered, to whom, how, and for how much. The following research posits that one key factor influencing the strategy of every OTT service is the type of video content.

By analyzing both viewership and subscriber data across *Vimeo OTT*, the following analysis evaluates clients from myriad backgrounds with diverse audiences and a range of content types, all of whom leverage a consistent product offering. This allows for a stable baseline across which to measure the effects of differences in content. By grouping similar content together, measuring a range of business metrics and comparing each to the others, it is the goal of this research to indicate what value is created by content type alone and thus position any organizations managing a network with said content to not only survive but thrive.

RESEARCH METHODS AND OBJECTIVES

Defining Content Type

Before beginning data collection, it is essential to define what we consider to be a "type" of content. In separate research the appropriate word would be "genre", but in video, this word is often limited to Entertainment sectors and used to group media content by a collection of tropes, such as "comedy" or "horror." The more loosely fitting word "type" was chosen, as it allows one to consider a grouping that is both more wide-ranging and has fewer preconceptions.

Content Type	Definition	Example
Broad Entertainment	Multiple content types intended for a diverse group, often movies or TV series.	Netflix, Hulu, Crackle
Niche Entertainment	Similar to Broad Entertainment, but content focused on a specific interest group.	Criterion Channel, Black&Sexy TV
Faith	Religious content ranging from prayer service to media content with a religious message.	TBN, UP Faith & Family
Fitness	Exercise, health, diet, and wellness content that is updated with new routines or advice.	Yoga With Adriene, Les Mills, Brooke Burke
Instructional	Lecture or informative videos to expand knowledge about a specific academic or technical field.	The Great Courses, Armchair Medical
Kids	Entertainment or education specifically for children.	Kidscreen, Toonz
News	Topical content related to journalistic reporting on current events, or punditry around said events.	Cheddar TV, The Young Turks
Sports	Athletic events, competitions, or historical content, or commentary about such events.	ESPN+, Echoboom Sports

Table 1 – Definitions of Content Types

For the purposes of this research, content will be grouped into the "types" defined in Table 1, presented along with popular examples of the category. *Vimeo OTT* represents enough of each of these types of channels in order to obtain useful data, and in circumstances where we do not, such data has been omitted. Finally, in situations where content types overlap (such as a Faith channel specifically for children), we included the data in the type we consider most restrictive. For instance, Faith content for Kids would be in the Kids category rather than Faith, as the Kids content type is a limit on the type of Faith user.

With these types defined, the next step is to decide on the high-level metrics we will generate and compare across type. These metrics breakdown into two major types: monetization and viewer behavior.



Data Collection

All of the data presented in this research are from the *Vimeo OTT* product during the full calendar year 2018. The data have been cleaned to remove test data, staff-related activity, and any data collection that occurred prior to a channel launching publicly. Finally, these data are limited to our subscription video on demand service and therefore do not include audiences for free content or content monetized through advertising.

Monetary metrics involve determining both the total revenue collected from an average user on a recurring basis as well as their likelihood of remaining a subscriber. As part of the OTT platform, we log each discrete subscription event, including the initial signup, each renewal, and any final cancellation event. We also account for cases where the beginning of a subscription is through a free trial, if there is a reduction in price due to a promotional code, and if the event ending the subscription is a pause rather than a full cancellation (in this case, the pause is treated as a cancellation and the return creates a new starting point.) Each subscription is also tied to the app on which it was initiated and we can connect multiple subscriptions to the same user (for instance, if they re-subscribe after some time following a prior cancellation), so long as they use the same email address.

Viewership metrics describe the behaviors around how end users consume video content. Specifically, our player tracks events such as play, pause and seek forward and backward, as well as any buffering or errors that may occur. We also send what we refer to as a 'timeupdate' event every ten seconds during the user's viewing, allowing us to know how long they watched a video. Finally, we record the duration of the video in every event as well as the position in the video the user is currently viewing, thus allowing us to see how far into the video a user watches, even if they manually change position in the video.

These data points for both subscription and viewership can be aggregated across all users of a given service and then again across all the services of a given type, to give us some insights as to how the audiences for each of these types of content differ from one another.

Defining Metrics

In order to compare the various content types, we can use industry standard metrics for both monetization and viewership. These metrics and their definitions are enumerated in Table 2.

The metrics generally agreed upon for use in monetization analysis are Average Revenue Per User (ARPU) and Monthly Churn Percentage, both of which combine to form a customer's Lifetime Value (LTV.) There

Metric	Definition
Churn Rate	The number of paying users that left the platform out of the total number at the beginning of that time period.
Average Revenue Per User (ARPU)	The amount paid by an average user in a given time period, typically one month.
Lifetime Value (LTV)	An estimate of any given user's expected revenue for the entire time they are subscribed to a service.
Video View	The first instance of a video beginning playback, regardless of how long the video subsequently plays.
Completion Rate	The percent of users that viewed more than 90% of the video, thus counting as a completed view.

Table 2 – Definitions of Metrics

are some important clarifications to make regarding the interpretation of these data. Lifetime Value is a useful top-line metric that is directly



instructive when considering the cost of customer acquisition, but the underlying factors (specifically churn and ARPU) are more relevant in understanding how to improve LTV.

For instance, consider a fictional service with a customer LTV of \$100. This could be due to an ARPU of \$10 monthly and a 10% churn rate, or it could be due to a \$5 ARPU and a 5% churn rate. While the total LTV remains the same, the strategy to improve said LTV differs for each. The former would be better served by reducing churn, while the latter would find success in increasing ARPU. It is because of this distinction that this research presents each component in addition to the overall lifetime value.

There is more flexibility when analyzing viewership, regarding both the value of a given metric and its definition. For the purposes of this research we will be focusing on total videos watched monthly per user, minutes watched per user, minutes watched per play, and completion rate. We will also look at which platforms are most popular for which types of content, thereby providing some insight into the value of being accessible across multiple devices via native applications.

Finally, this research measures a few elements of the publisher's own behavior as determined by content type, as well as how this behavior affects the monetization and viewership patterns of their audience.

RESULTS

Differences in Monetization

Vimeo OTT operates as a platform on which clients act as publishers of their own content. These publishers range from small independently owned businesses to large established brands, with subscriber numbers from hundreds to hundreds of thousands. The nature of this subscribership distribution is long-tailed, meaning most channels have fewer total subscribers and there are fewer of the very popular channels.

Based on analysis of the audiences for over 600 clients, we were able to obtain aggregate values for monthly ARPU, churn rate, and thus LTV of an end customer across eight different content types. The summarized results are captured in Table 3.

The first area of interest is that Entertainment channels, whether Broad or Niche, are the worst performing in terms of LTV, although Niche Entertainment does outperform Broad by nearly two and a half times. In many ways, this is the result one may expect given the failure of the media OTT networks referenced in the introduction of this paper. This category has massive churn of 28.4%, meaning the average user leaves the service inside of four months.

In the case of a network like *go90*, where the content focus is generally broad, it is unlikely users will pay enough and stick

Type	LTV	ARPU	Churn %
Broad Entertainment	\$21	\$5.98	28.4%
Niche Entertainment	\$50	\$6.30	12.7%
Faith	\$213	\$17.02	8%
Fitness	\$212	\$16.92	8%
Instructional	\$464	\$45.91	9.9%
Kids	\$78	\$6.99	9%
News	\$66	\$5.48	8.3%
Sports	\$78	\$9.86	12.6%

Table 3 – Monetization Results



around long enough to recoup acquisition expenses. For instance, Verizon spent \$200 million on content alone for its 2.1 million users, roughly \$100 per user, all before any marketing or customer acquisition expenses. While we cannot know what their customer LTV was or if they found additional ways to monetize, this analysis does suggest Verizon faced a tough road to recoup their costs.

On the other end of the spectrum, we see that Instructional content attracts the most valuable customers, followed by Faith and Fitness. In many ways, these content types share common aspects in both theme and usage. One would expect content to be produced and released regularly, whether for education, exercise, or religious practice. Thus, end users would return to the channel as part of a routine, lowering the inclination to churn.

Moreover, the comparably high ARPU for Instructional content is due to the content's substitute for much more expensive versions of the same education, such as in-person classes or tutoring. Instructional sellers average a \$45.91 monthly fee, whereas both Faith and Fitness are near \$17. As such, similar comparisons exist for fitness and the cost of group classes or gym memberships, as well as for faith with regular tithing to a religious organization. These OTT services, rather than being viewed as additions to a crowded entertainment environment, are seen by audiences as replacements for a previously non-video aspect of their lives.

Finally, Kids, News, and Sports content are all grouped in the middle, with LTVs ranging from \$66 to \$78. What is so useful about this particular phenomenon is that two content types, both Kids and Sports, have identical LTVs but with differing underlying composition. Kids content audiences appear to be more price sensitive, commanding an ARPU of \$6.99 on average, but with a lower churn rate of only 9%. Meanwhile, Sports content can demand a higher revenue but sees a higher general churn, perhaps due to enhanced interest for niche-based game footage combined with the ebbs and flows of a traditional sporting league schedule. This is a perfect demonstration of how LTV is a useful assessment for business decisions around budgeting for acquisition costs, but to affect this value it is necessary to dig deeper into the underlying levers of customer behavior.

Differences in Viewership

We see similar striations in content viewership as we did in the subscriber behavior. The following data describe both the amount of content consumed by users through metrics like total views per user and minutes watched per user on a monthly basis, as well as the audience's level of engagement via minutes per play and completion percentage. These results are listed in Table 4.

Niche Entertainment
outperforms Broad

Type	Views/User	Minutes/User	Minutes/Play	Completion %
Broad Entertainment	10.04	73 min 10 sec	9 min 36 sec	29.7%
Niche Entertainment	18.27	506 min 56 sec	26 min 56 sec	27.7%
Faith	16.32	312 min 58 sec	20 min 50 sec	39.0%
Fitness	20.17	206 min 19 sec	13 min 14 sec	34.6%
Instructional	18.96	116 min 11 sec	8 min 40 sec	44.8%
Kids	38.07	349 min 52 sec	9 min 32 sec	59.1%
News	10.83	107 min 33 sec	9 min 58 sec	48.7%
Sports	10.00	133 min 2 sec	13 min 47 sec	26.6%

Table 4 – Viewership Results (Monthly)



Entertainment in every metric of viewership. Niche content has nearly double the views and completions per user, as well as 7x the number of total minutes watched per month and almost 3x the number of minutes watched per video played.

The metrics around Fitness and Instructional networks demonstrate why these content types work so perfectly for SVOD, demonstrating a typical user with high levels of engagement. This group of users average about 20 play sessions per month with more manageable content requirements, viewing roughly eight to 14 minutes per play. These numbers indicate the audience in fact derives value from being able to stop and come back at a later point.

There are a few more interesting notes that we were able to find in the data. Kids content tends to be short and consumable, by far the shortest content we offer. In turn, it also has the highest rate of completion. While in no way conclusive, some anecdotal evidence suggests that this is aided by the auto-play feature that was requested early on by our kid-focused channels. They have the second highest total watch time and the highest overall engagement in terms of number of views per user; however, the average number of unique videos viewed is one of the lowest, signaling tons of repeat viewing. Anyone with children and an awareness of Doc McStuffins may recognize this pattern.

Lastly, News requires the constant creation of substantial amounts of video. It is the only category that averages over 200 video views per month, which users consume in short, 10 minute bursts. This makes the category one of the most production-intensive, while also commanding the lowest ARPU. It seems indicative of the current state of journalism, forced to backtrack on a recent trend of focusing on video production and distribution⁴.

Viewership and Apps

The platforms on which customers decide to view content also changes based on the type of content. Figure 1 provides an overview of these differences (with notable exceptions of Broad Entertainment and Kids, as there were not enough apps in production at the time of data collection).

Here we again see patterns that have existed throughout the research. Faith, Fitness, and Instructional are similar, favoring Mobile apps more than other content types. This allows audiences to workout, study, or worship from anywhere, providing support for the hypothesis that these types of services provide additional value in excess of what can be found in a similar in-person service.

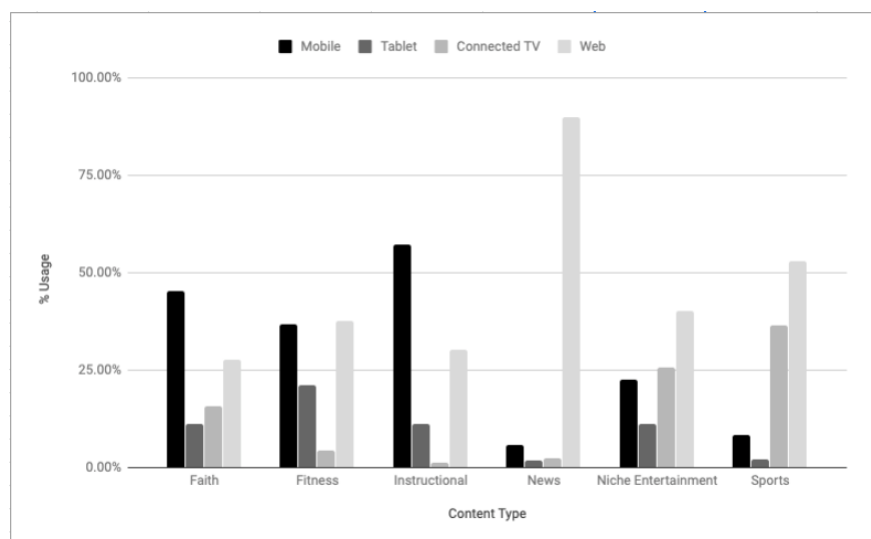


Figure 1 – App Viewership by Content Type

A few other key differentiators are revealed in this data. First, Sports content is most suited to either Web or Connected TV apps, indicating that audiences prefer a “lean back”



experience for this type of content. Niche Entertainment shows the most even distribution, indicating a diverse audience that expects to have access anywhere they are. News likely indexes so highly on Web due to the publishers in the study having a large footprint on free-to-view websites prior to launching their own channel.

The most striking takeaway is that in every category except News, the combined ecosystem of Mobile and TV apps accounts for more viewership than Web alone. The need for apps is undeniable.

Differences in Publisher Behavior

A final note regarding the effects of content type, this time on the sellers themselves rather than their audiences. There is an important question to be asked by all potential OTT services: does the content production and distribution schedule affect their subscribers' behavior, or are the publishers themselves affected by the way audience behaves?

For instance, we find that Broad Entertainment tends to upload videos averaging 27 minutes long, which is the fourth longest in our sample. Thus, the relatively typical length of those videos would not explain the fact that the Broad category see the fewest total minutes watched by their audience. However, that same category starts their service with the lowest number of available videos, an average of 65 total, and while they do add a substantial catalog within the first 10-12 weeks, at that point they tend to stop adding content completely. Therefore, it appears that Broad Entertainment may lose a considerable portion of their audience based on the first impression of the content library as the service is starting, while losing another segment just under three months later.

Some of this is due to the nature of licensing or producing content, but the data show the need for an effective strategy aimed at mitigating a slow start and overly aggressive expansion afterward, which is unlikely to command a high ARPU or result in a low churn rate.

Compare this to a content type like Fitness with similar length videos of 21 minutes on average. They begin with an average of 54 videos at the time of their first sale, but have a consistent pattern of adding new content. Fitness channels add videos in a way that keeps people interested but does not harm their ability to produce new content. Successful Fitness networks steadily release new content at least twice a week for the life of their service, thus reducing churn by giving their audience a reason to come back.

No single content release strategy will be effective for every type of content, but it is apparent from this research that tactics differ and these differences are easier to exploit if the content lends itself to being released on a steady and incremental basis.

SUMMARY AND CONCLUSION

The analysis of both the subscriber and viewership data across the *Vimeo OTT* platform shows us two things very clearly: the expectations of an audience vary by the type of content offered, and their resulting behavior depends on how these expectations are met. Networks like *go90* and *Seeso* did not fail due to their lack of ability to gain an audience. Rather their mistake came from inaccurately valuing that audience when compared to the content they were offering



Entertainment is one of the most difficult areas in which to succeed and doing so on a smaller scale may necessitate either a niche focus or additional revenue streams. For example, while *Filmstruck* was not sustainable, a portion of the library they licensed, *The Criterion Collection*, decided to leverage their very focused content into an owned and operated network using the *Vimeo OTT* platform.

This research should not be interpreted to imply that someone considering launching an Entertainment network should completely revamp their service to provide fitness videos. Decisions about content typically stem from the desires of those managing the service, knowing what kind of business they want to run and what content they want to create. Nor should these results be interpreted as saying that a Broad or Niche Entertainment effort will necessarily fail, as many of the most successful networks fall into these categories.

Rather, this analysis should be taken as a way to inform business decisions, from content and customer acquisition costs to release strategy and library sizing. Generally, the cost to acquire a user should be roughly a third of their total lifetime value⁵. In what has been an opaque world to this point, it is a hope that this research may illuminate where producers of OTT services can create value for whatever type of content they offer and build sustainable businesses.

On a final note, the explanations for differences in audiences may not be completely found in our data sets. For instance, we do not have any indication of exactly why one audience has a lower churn rate than another, though we can offer hypotheses based off of our anecdotal experiences. However, what we do come away with as part of this research is the clear indication that the world for OTT is vast and the type of content publishers leverage to enter into that world plays a huge part in every subsequent decision they will make.

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