

MILLENNIALS AT THE GATE

FALL 2016

An in-depth look at streaming,
ad blocking and piracy habits
of young millennials.

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TABLE OF CONTENTS

03	Key Findings
04	Introduction
05	Ad Blocking
11	Piracy
16	Sharing Streaming Passwords
19	Ad Blocking & Piracy
22	Discussion
25	About ANATOMY

METHODOLOGY

The findings of the *Millennials at the Gate* report are based on a Google consumer survey conducted between June 29 and July 5, 2016.

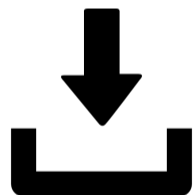
2,700 millennials between the ages of 18 and 24 participated in the survey. This sample is representative of the U.S. population in that age range.

KEY FINDINGS



AD BLOCKING

2 out of 3 young millennials use an ad blocker on a desktop or mobile device.



PIRACY

69% of young millennials use at least one method of piracy (download, stream or mobile).



SHARING PASSWORDS

3 out of 5 young millennials who stream content use a shared password or cable log-in.

INTRODUCTION

Streaming is the priority. Linear is secondary.

The purpose of this study is to examine the viewing behavior of young millennials (aged 18-24) in non-linear environments.

Much has been written about the precipitous decline in millennial viewership of linear television. According to a 2016 study by Horowitz Research¹, millennials (aged 18-34) report 54% of their TV viewing time is spent streaming and just 25% view live. Streaming is the priority. Linear is secondary.

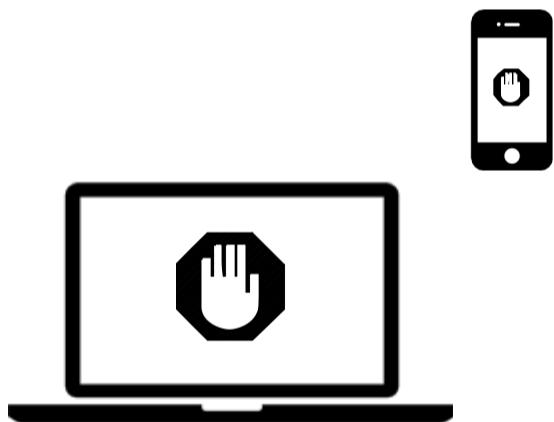
Other studies have explored what platforms and programs are popular. We know *where* and *what* millennials stream. But *how* do they stream? Do they pay for what they stream with their data, dollars, or demographics?

To answer these questions, in this study we critically examine three key streaming behaviors:

- 1. Ad Blocking**
- 2. Piracy**
- 3. Sharing Streaming Passwords**

¹ State of Cable & Digital Media Report 2016 Horowitz Research

AD BLOCKING



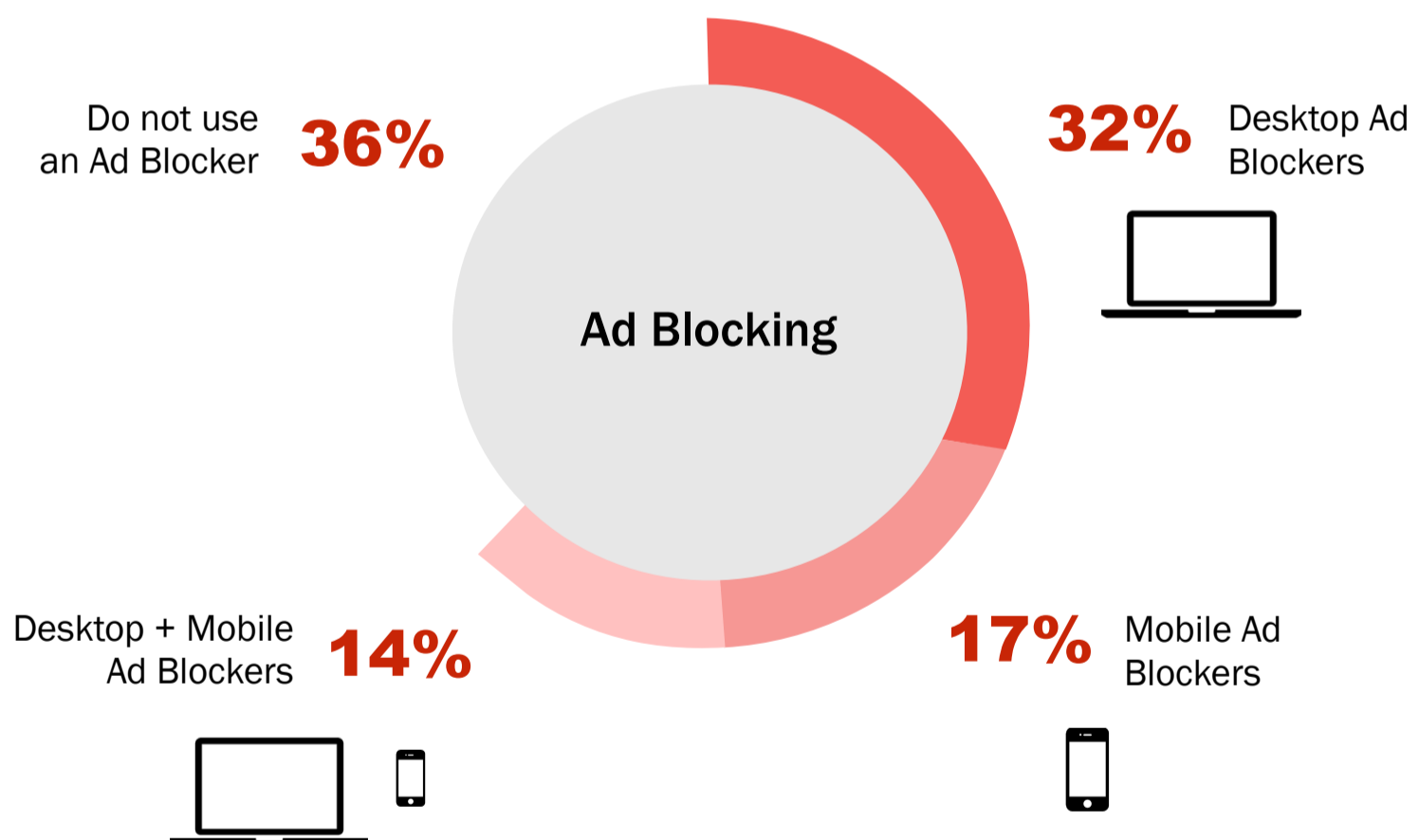
2 OUT OF 3

young millennials use
an ad blocker on a
desktop or mobile
device.

Percentage of Young Millennials Using Ad Blockers

Most millennials aged 18 to 24 use an ad blocker on at least one device.

Figure 1: Percentage of young millennials who use an ad blocker.



Ad blocking is a social norm among young millennials.

At its simplest level, ad blockers are tools that allow people to enjoy the internet without advertising.

Functionally, ad blocker software installs a proxy server onto a user's computer, and from that point on, all data is routed from the user's browser to the proxy server *before* it is passed along to the user.

The proxy server inspects everything and evaluates if it is advertising or not. If something is deemed to be advertising, it is stripped out.

The 2015 Ad Blocking Report indicated that ad blocking had 15% penetration in the U.S.²

This is just the tip of the iceberg.

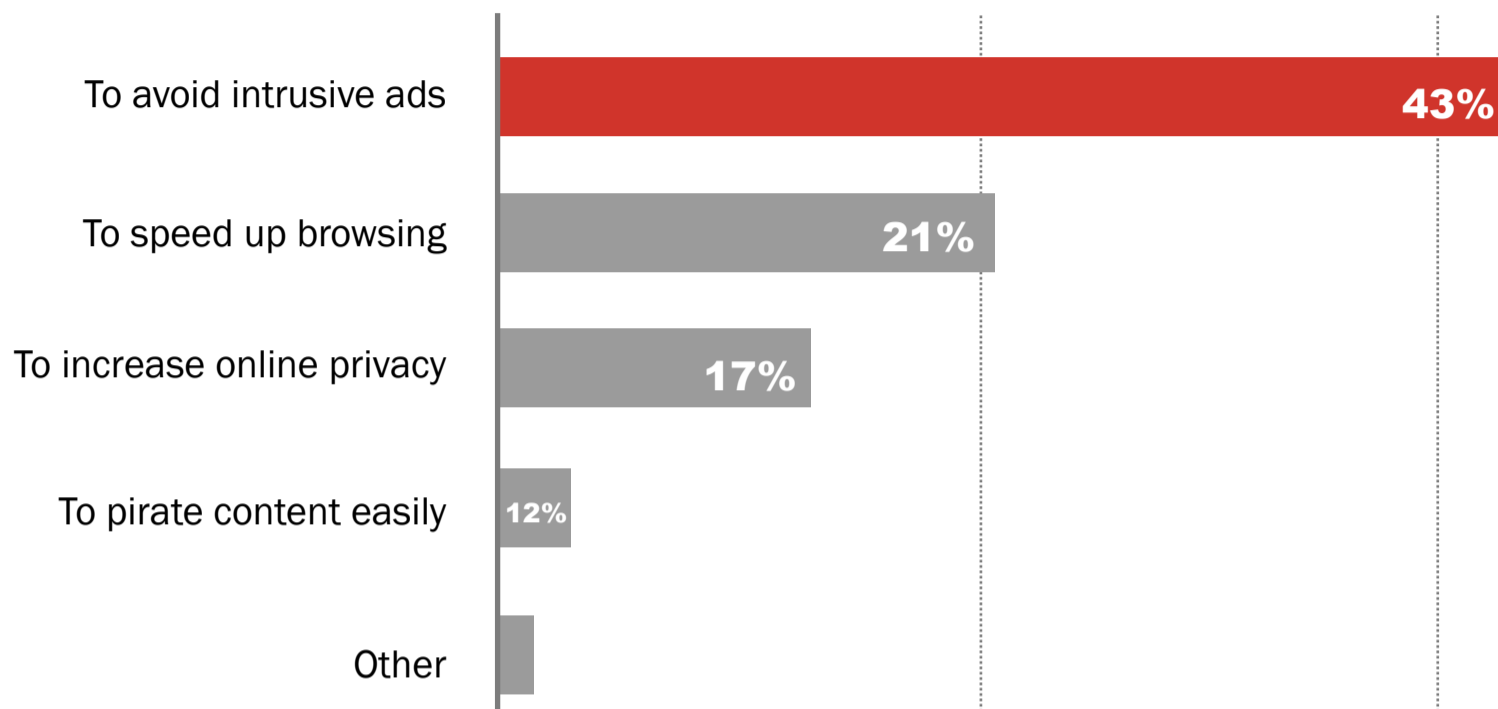
Two out of three young millennials use it on a desktop or mobile device. Ad blocking is an established social norm among their group.

People do not adopt regressive technology (in this case, viewing ad-supported television on a television set) as they age. Instead, these young millennials are early tech adopters and evangelists.

Behaviors that originate with them migrate downstream to their younger siblings and friends, and upstream to their parents and beyond.

² "The 2015 Ad Blocking Report," PageFair, August 10, 2015, <https://pagefair.com/blog/2015/ad-blocking-report/>

Figure 2: Why do young millennials use Ad Blockers?



On the internet, if content is king and distribution is queen, then USER EXPERIENCE, it would seem, IS GOD.

Millennials use ad blockers to assert control over their user experience, reduce their data usage, and get access to their desired content faster.

Video ad avoidance is a key driver.

Ad blocking is a significant impediment for digital publishers.

For the last several years, ad blocking has been discussed as a threat primarily related to written content (e.g., newspapers and magazines).

However, it is notable that it is actually video ad avoidance that is driving the adoption of ad blocking.

64% of young millennials who employ ad blocking software do so in order to avoid video advertising.

Young millennials report that the number one reason they use an ad blocker is to escape pre-roll ads on short-form content such as YouTube videos.

Figure 3: Why do young millennials install ad blockers?

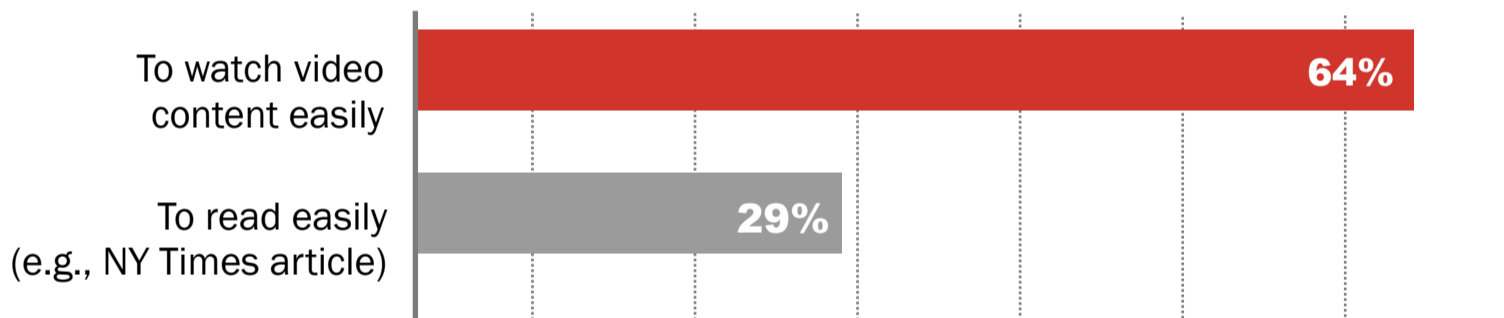


Figure 4: What kind of video ads do young millennials want to block?

Type of Ad	Young Millennials
Pre-Roll on Short-Form (e.g., YouTube videos)	36%
Long-Form Content (e.g., ads in a TV series)	28%

Figure 5: Ad Block Wall Test. Do ad blockers work on streaming sites?

Network (Broadcast)	Adblock On	Adblock Off
CBS	Blocked	Ads
FOX	No Ads	Ads
The CW	No Ads	Ads
NBC	No Ads	Ads

Network (Local)	Adblock On	Adblock Off
KABC (LA)	Ads	Ads
WABC (NY)	Ads	Ads
WCBS (NY)	No Ads	Ads
WNYW FOX (NY)	No Ads	Ads
WNBC (NY)	No Ads	Ads

Network (Piracy)	Adblock On	Adblock Off
HulkUSC	Blocked	Ads
LiveNewsBox	Blocked	Ads
Watchseries	No Ads	Ads
PlayLiveNew	No Ads	Ads
ProjectFreeTV	No Ads	Ads

Network (Cable)	Adblock On	Adblock Off
A&E	No Ads	Ads
AMC	No Ads	Ads
Comedy Central	No Ads	No Ads
Destination America	No Ads	Ads
Discovery	No Ads	Ads
Food Network	No Ads	Ads
FOX News	No Ads	Ads
HGTV	No Ads	Ads
Lifetime	No Ads	Ads
Logo	No Ads	No Ads
MSNBC	No Ads	Ads
Oxygen	No Ads	Ads
Spike	No Ads	Ads

How can publishers deal with young millennials' ad avoidance?

One strategy is to employ an ad block wall. An ad block wall is a website feature that detects ad blocker software and prevents a user from viewing a site's content until the ad block software is disabled.

We conducted an audit to assess, on average, how many TV networks take advantage of the ad block wall technology. The results? Close to none.

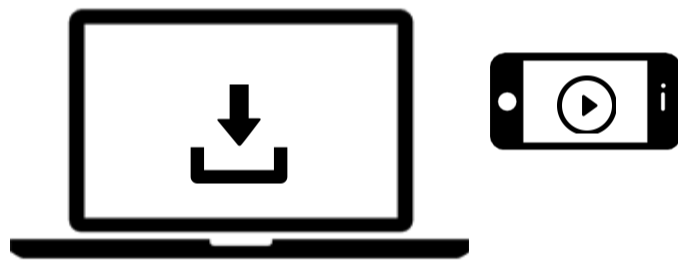
Of the 17 networks we audited, only one (CBS) employed an ad block wall. The other 16 networks are missing out on revenue from the two-thirds of young millennials who visit their site, but use an ad blocker.

We also tested local affiliate networks. While none of the affiliates (including CBS) employed an ad block wall, ABC affiliates (KABC and WABC) attach pre-roll ads directly to video. Interestingly, because the affiliates do not appear to use dynamic automated ad insertion, but rather directly attach the pre-roll advertisements to their content, the ad block technology is unable to identify the advertisement as an advertisement and does not remove it from the user's experience.

We also tested several piracy streaming sites. Notably, both LiveNewsBox and HulkUSC, two sites that pirate streams of live news networks, had ad block walls in place – thereby obtaining ad revenue that the network, whose content they lift, does not.

It is vital that video publishers begin to employ anti-ad block strategies.

PIRACY

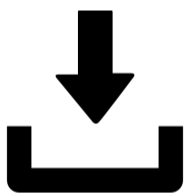


69%
of young millennials
use at least one
form of video piracy.

Video piracy is pervasive among young millennials.

The manner in which users are securing content illegally is changing. Torrenting video files (i.e., downloading unlicensed content) is no longer the dominant form of video piracy among millennials. Today, streaming portals and mobile apps that host unlicensed content are the most popular methods of piracy.

What is piracy?



Past: Torrent

Napster-era piracy in which users download unlicensed files directly to a computer.



Present: Streaming

Present-day piracy in which users access unlicensed content via free streaming websites.



Future: Mobile

Emergent piracy in which users access unlicensed content via mobile apps.

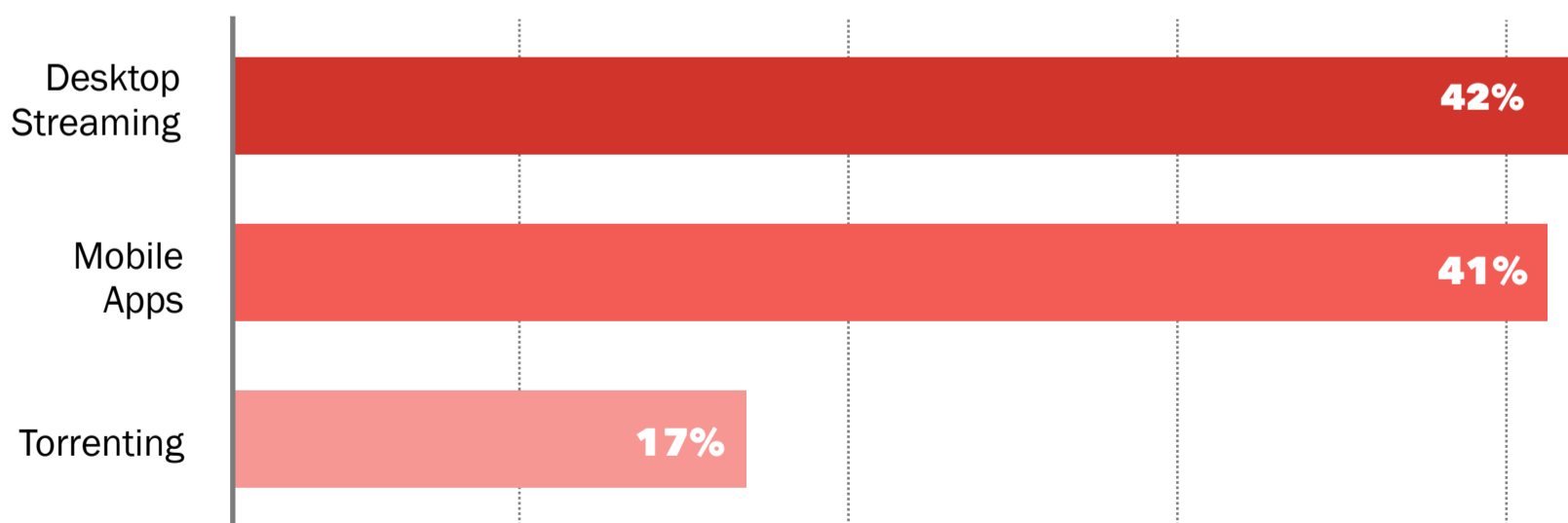
69% of young millennials use at least one form of video piracy.

Of that group, a whopping **60%** are streaming content without paying for it. These streaming millennial criminals, or what we call “striminals,” watch what they want, when they want, where they want, and they don’t pay for it.

Figure 6: Percentage of young millennials who pirate TV or movies by method.

Survey Question:

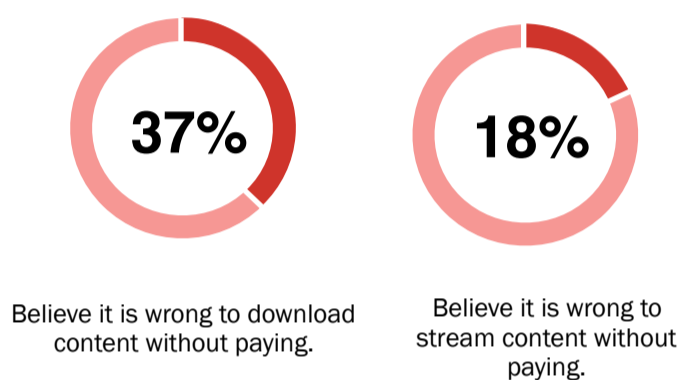
Check all of the ways you watch content without paying for it.



Attitudes Towards Piracy

In our survey, we sought to gauge young millennials' attitudes toward content theft. Do they believe content piracy is wrong? Do their attitudes differentiate between forms of piracy? Do they mistakenly believe piracy is legal?

Figure 7: Young Millennials' Attitudes

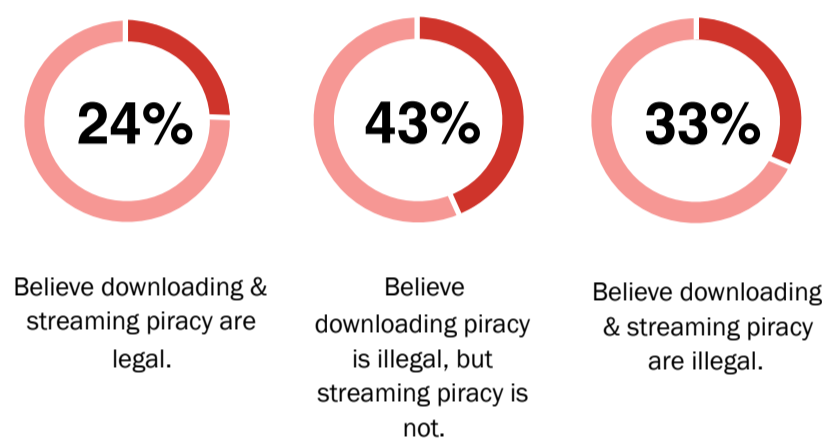


We asked our respondents a set of questions to assess their attitudes toward two different types of content theft: downloading and streaming.

In keeping with their behavior, more respondents said that it is wrong to download unlicensed content (37%) than said it is wrong to stream unlicensed content (18%). This reflects an aggregate shift in the nature of content theft from torrenting to streaming and is consistent with the industry-wide behavioral shift from purchasing and downloading to renting and streaming. It is notable, however, that in both instances the majority of the respondents did not feel that either behavior was wrong.

67% of young millennials mistakenly believe at least one form of piracy is legal.

Figure 8: Percentage of Young Millennials Who Believe Piracy is Legal



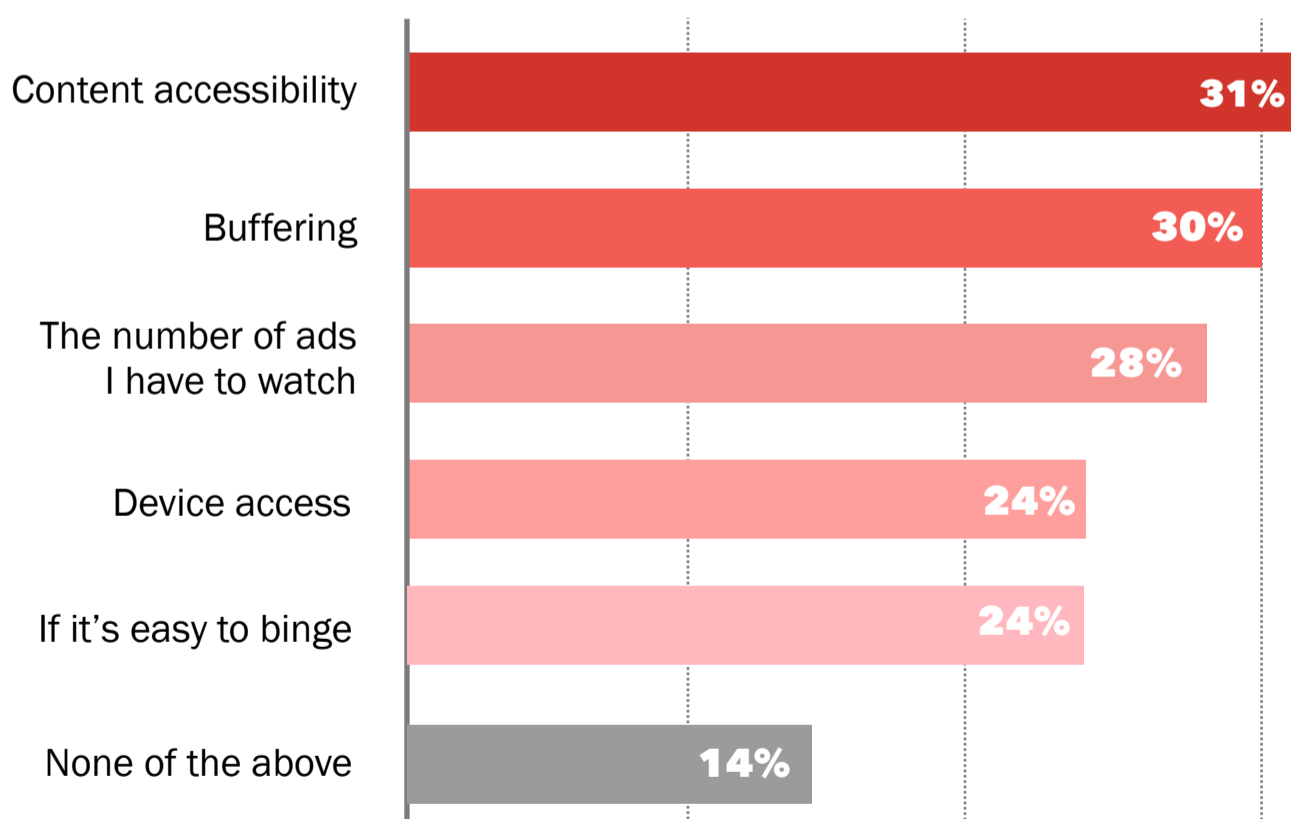
Their perceptions, we suspect, are in part a function of their user experience. Illegal streaming and downloading sites have evolved. They now look like legitimate services and are particularly deceptive for users. They are professionally produced, well designed websites with network logos and content prominently displayed. There is nothing to distinguish a pirate site from a legitimate content aggregator or to signal to the user that they are participating in something illegal.

In addition to taking legal action against these sites for content piracy, legitimate producers of content should aggressively go after the pirate sites for the unauthorized use of brand marks and trademarked images. Swiftly removing the visual trappings of legitimacy is an easy first step to disrupt and degrade the business models of illegitimate sites.

How do young millennials choose where to watch content?

In our survey, we asked our respondents to identify the most compelling reasons for choosing a streaming platform. Content accessibility was the most popularly cited reason (31%), followed by low buffering (30%) and a lower number of ads (28%).

Figure 9: Factors that influence how young millennials watch TV or movies.



SHARING STREAMING PASSWORDS



3 OUT OF 5

young millennials who stream content use a shared password or cable log-in.

In a 2016 ruling in the case of the United States v. Nosal, the US Ninth Circuit Court of Appeals upheld the conviction of the defendant for violating the Computer Fraud and Abuse Act (CFAA) when he used a former coworker's password to access confidential and proprietary information in his former employer's system. The dissenting judge on the three-judge panel pointed out in his opinion that the ruling criminalizes all password sharing and turns millions of people into criminals.

Despite this court ruling, but much like the dissenting justice, only 18% of millennials believe it is wrong to share passwords. Regardless of the law or the various terms of service that limit password usage, sharing streaming passwords with friends and family is a common behavior exhibited by young millennials.

Sixty-one percent of young millennials who stream content use a shared password to access it. Most sharing occurs within families (58%), but 42% of millennials share passwords with friends.

Most streaming platforms' terms of service outline who can stream (e.g., subscribers in good standing) and how many devices can simultaneously stream content. They also typically reserve the right to change this policy from time to time at their discretion. We ran a test of various streaming services and found that concurrent-streaming policies were generally enforced, but that the valid-subscriber piece of the equation was not monitored or enforced. The revenue implications of pervasive password sharing are clear.

Figure 10: Percentage of young millennials who use a shared streaming password or cable log-in.

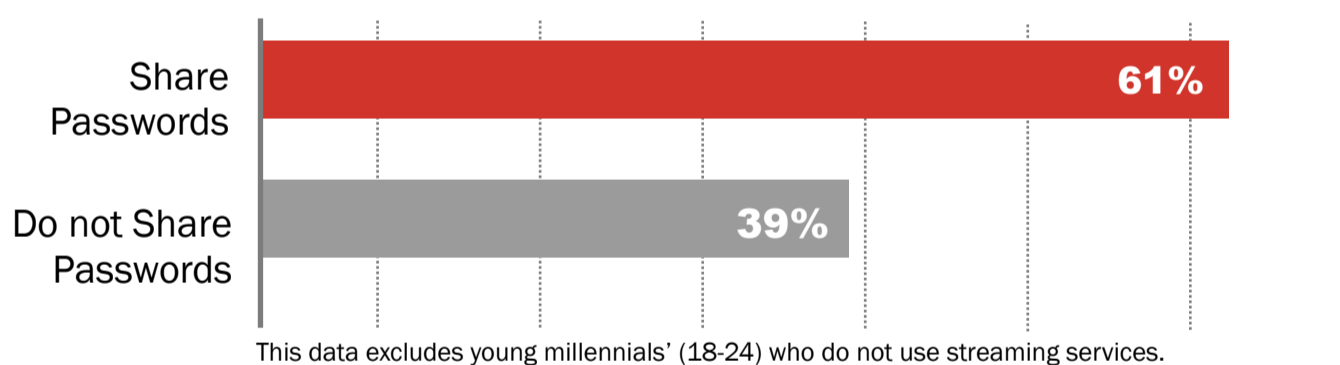
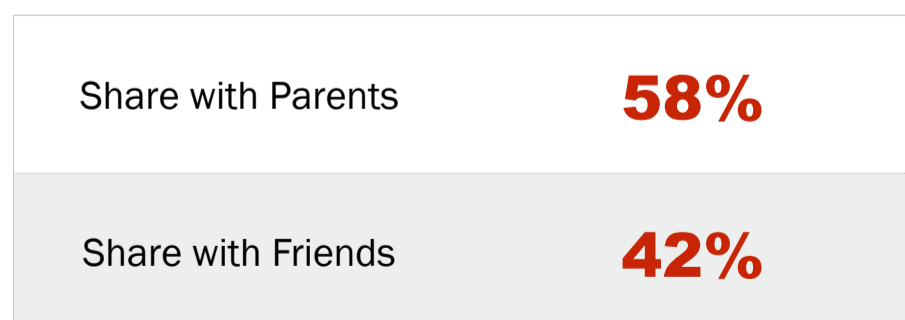


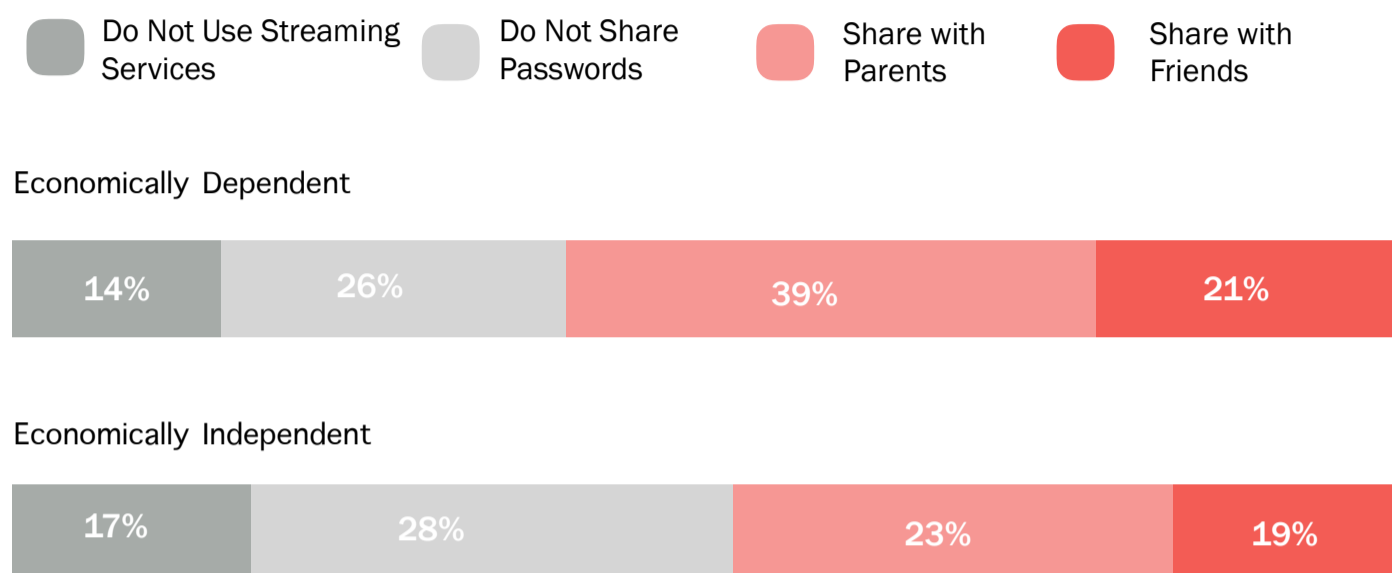
Figure 11: Who do young millennials share passwords with?

Percentage of young millennials who share streaming passwords with family or friends.



Young millennials' (18-24) economic dependence on their parents correlated with their password sharing.

Figure 12: Economic Dependence & Sharing Password Habits



Originally entertainment was tethered to a physical television. The arrival of cable, for all that it was revolutionary in other ways, didn't change that: viewing was still tied to the household rather than the individual. In one sense, this continues today. Cable packages are sold and viewership is measured by household, not individuals. However, things started to get a little muddy with the arrival of over-the-top (OTT) services (i.e., delivery not tied to a cable or satellite subscription). Consumers are used to purchasing their entertainment at the household level, but in today's untethered world, what defines a household? Is it a physical location, a familial relationship, or a sheer number of users that we can define in whatever way we want?

Earlier this year, a study conducted by Pew Research Center³ found that for the first time in the modern era, living with family is the most common living situation for 18 to 34 year-olds. Millennials, on average, get married and purchase their first homes later in life than their generational predecessors.

How does prolonged financial participation in the nuclear household of one's childhood affect password sharing?

We conducted a data analysis comparing young millennials' living situation with their streaming password-sharing habits. Young millennials who are economically dependent on their parents (i.e., they live with their parents or their parents pay their rent) were much more likely to use a password shared with their parents than young millennials who were economically independent (i.e., own their house or apartment or pay their own rent).

Interestingly, of our respondents who share passwords, 58% share passwords with family members, even though only 13% of those respondents live in the same physical household as the family member with whom they share.

³ "For the First Time in the Modern Era, Living with Parents Edges Out other living arrangements for 18 to 34 year olds" Pew Research Center.

AD BLOCKING & PIRACY



Ad Blocking and
Piracy are mutually
reinforcing behaviors.

Is ad blocking driven by piracy?

All of these payment avoidant behaviors — ad blocking and the various forms of piracy — are mutually reinforcing.

We began our study with the hypothesis that ad-blocking may, in part, be driven by piracy. We hypothesized that the invasive pop-up ads frequently present on piracy sites serve as a motivator for ad block adoption.

While it did not establish causality, our data analysis proved that there is indeed a statistically significant correlation between ad blocking and piracy. According to our analysis, there is a one in a million chance that the relationship between ad blocking and piracy is due to chance.

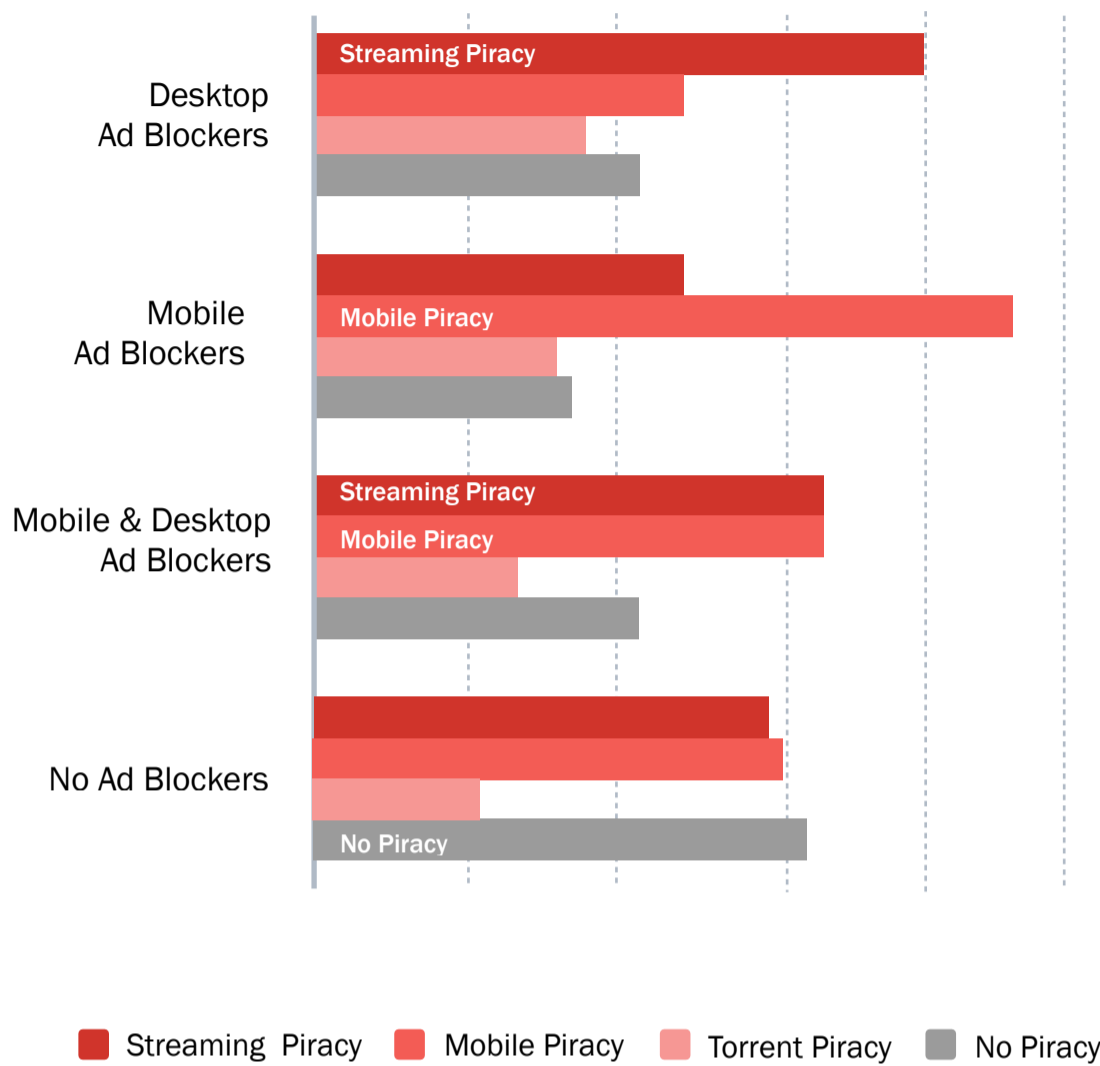
There is a statistically significant correlation between the method employed by a young millennial to block ads and the manner in which they stream unlicensed content.

Young millennials who use a desktop ad-blockers are most likely to stream unlicensed content, while millennials who use a mobile ad blocker are most likely to use a mobile app to do the same.

Unsurprisingly, those young millennials who use both types of ad blockers are most likely to engage in both types of piracy.

Further, young millennials who do not use an ad blocker are not likely to pirate any content.

Figure 13 & 14: Percentage of Ad Blockers who pirate content by method.



Piracy Method	Desktop Ad Blocker	Mobile Ad-blocker	Desktop + Mobile Ad Blockers	No Ad Blockers
Torrent Piracy	16%	15%	14%	9%
Stream Piracy	39%	24%	33%	29%
Mobile Piracy	24%	45%	33%	30%
No Piracy	22%	17%	20%	32%

For young millennials, TV is not TV.

Let's return to our original question: How do young millennials stream TV and movies?

We found that 69% of young millennials are “striminals” who pirate content in one way or another.

We studied ad blocking and discovered two-thirds of millennials use ad blockers and that avoidance of video advertising is the primary driver of their adoption.

And we found that millennials are using family passwords to access content even when they no longer live in the family home.

What can platforms and programmers do with this data?

Over the last two decades, networks have developed on-air strategies to retain and build live viewership including seamless break architecture, squeezing credits and other tactics to boost C3 and C7 ratings.

Now video publishers must monitor streaming viewership and structure the viewer experience with the same diligence. The entertainment consumption model is no longer one of central control and content push, but rather decentralized open access and pull.

Publishers are not only competing with each other, but with everything that it is possible for an individual to do in their free time. The definition of a premium user experience is always changing, and publishers must be vigilant in order to maintain their standing.

Young millennials' dissatisfaction with their viewer experience and their overwhelming adoption of ad blockers is a call-to-action to improve the viewer experience and review the nature of the digital ad experience.

Millennials will accept advertising as long as it is restrained, targeted and relevant.

Publishers need viewers to disable ad blockers by leveraging an ad block wall. However, hand in glove with this, ad-supported publishers must work to improve digital commercial advertising break architecture.

Everything that the user experiences influences their perception of the brand, and the very best, most wonderfully curated content can be ruined by repetitive, irrelevant advertising. With binge viewing being so prevalent—and so desirable, from the content provider's perspective—publishers must develop strategies to make a viewer's experience pleasant enough to stick around for three-plus episodes.

Additionally, best practices for tackling the changing environment should be shared within organizations.

CBS affiliates, for example, should benefit from CBS strategy for beating ad blocking. Organizational inefficiencies and lack of knowledge-sharing within an organization creates unnecessary duplication of effort and allows for pockets of needless revenue loss.

ANATOMY is a creative advertising agency specializing in entertainment marketing and promotion. ANATOMY activates brands with strategically-minded and thoughtfully-crafted video content, commercials, trailers and brand films. ANATOMY is the recipient of numerous industry awards.

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