GOOGLE

THE EVOLUTION OF VIDEO

BACKGROUND

Google commissioned a Nielsen study to tell the story of the Evolution of Video in the U.S. through historic and point in time data. The narrative focuses on core household and personal devices and means of video consumption in home and on the go. Broadly, the goal of this research is to paint a picture of how viewing video has evolved, what is most important to the consumer today.

1. From Novelty to Prime Source of Entertainment: TV Grows Up

In 1939, the Radio Corporation of America brought the black and white TV to the World's Fair, introducing the public to this wondrous new device. In the beginning, TV was little more than a novelty. Core production of television sets didn't ramp up until after WWII, and in 1950, less than 10% of American households had a television. However, by 1970 more than 95% of households in the U.S. had at least one television. While the rate of TV adoption skyrocketed, so too did the amount of time that the average American began dedicating to watching TV programming. In 1970, when the country witnessed this broad adoption, the average TV household was spending 6 hours per day watching. This steadily increased through the 20th century and by 2000 the average TV household was watching nearly 8 hours per day. On an individual basis, the average TV watching American (2+) was spending more than 4 hours per day viewing programs. In-home viewing had essentially become America's favorite past-time.

2. Demand for More Choices Led to an Expanding Programming Universe

As consumption increased, Americans weren't simply watching more of the same programming, but instead were exercising choice as they were offered many more viewing options. In 1950, broadcast TV was the only game in town. With the rise of cable, premium, independent, and public channels, the number of options available had increased dramatically. Viewers suddenly had an entire universe of programming choices as new channels catered to more and more niche audiences. As a result, cable TV, once considered the lowly step-child of broadcast TV, was thrust into the forefront of the industry. In fact, by 2002, all of cable TV surpassed broadcast for the first time (in terms of household ratings).

3. Viewers Take Control of Content Consumption

Decisions about what to watch, and how to watch video at home would continue to evolve - not only due to increased content creation, but because of technological advancements. VCRs were the first device to allow consumers the flexibility to watch a diverse library of video on their TVs whenever they wanted. Gaining control over what and when to watch programming proved irresistible to the public. Suddenly, the VCR remote control had become a super-powered tool, allowing the consumer to self-program their entertainment. In 1985, 14% of American TV households had a VCR and by 2000, 85% of households owned one. VCRs whet the consumer appetite for on-demand viewing, and paved the way for other devices that allowed for time-shifted viewing. DVR and DVDs began to rise in popularity through the early 21st century, giving consumers even more flexibility and access. The DVR specifically had a profound influence on how consumers watched TV. By 2014, 10% of all TV consumption was time-shifted (over 20% of Broadcast Primetime TV was time-shifted) and consumers gravitated toward a video experience they had complete control over.

4. The Internet: The New Hot Thing

In 2005, 70% of U.S. households had access to the Internet (up from 52% in 2000). Within 5 years the time spent watching video on computers was growing at a higher rate than the time spent browsing. Consumers were engaging with familiar TV network content on their PCs, as well as other video-first platforms, such as YouTube and Netflix. Consumers were given more choices on how and where to watch video and, as in the past with different types of TV networks, they exercised these choices with vigor.

5. Hello Smartphone

As mobility became ubiquitous across the country, viewing content on these devices quickly became a popular option, particularly for millennials who had been brought up with greater technology choices than any previous generation. Advancements in smartphones had finally begun to match download speeds and had surpassed the convenience of desktop computers. As a result, mobile devices rapidly superseded PCs as the digital device of choice. In the beginning of 2015 smartphone penetration for 18+ was up to 71%, while PC internet usage began to decrease.

6. Explosion of Devices

Over the years, entertainment technology has gone from being a novelty to a necessity. And today's digital devices have exploded in popularity and utility. Point in fact, as of March 2015, the average household had 6.7 devices (considering TVs, smartphones, PCs, tablets, and laptops), and in two years this average increased to 7.5 devices per household, driven by an increase in smartphones and tablets. This trend shows no signs of slowing down.

7. The Changing Face of Video Consumption

With the expanding adoption of digital devices, consumers have more outlets than ever before to choose from for their video viewing pleasure. The fact that video consumption had increased in the early part of the 21st century is not only due to the availability of more devices, but also the flexibility and on-demand nature of video. TV viewing has become more and more time-shifted, and on-demand is how digital first platforms came out of the gates. People have more devices than ever in which to watch video.

In a recent focus group, a participant from Chicago discussed the on-demand nature of video; "If it's [viewing] a Netflix or Amazon series, you binge and watch a whole season in a week. It's all there. It's all available and it's so easy to just push the button and keep watching it if you're sucked into it whereas before, you had to wait for the next one to come out."

8. Growing Trend: Content in the Palm of Your Hand

Similar to trends observed with PC usage, the time spent on smartphones was increasingly dedicated to video and continues to be. Considering how much time consumers spend on their phones, and how many additional capabilities are enabled on these devices seemingly every day, the fact that time spent on video keeps rising is once again indicative of how popular this medium is for all audiences. While the time spent on smartphone video is increasing across generations, millennials are watching the most smartphone video.

9. More Choices, Fewer Touchpoints

Considering that consumers have access to more devices and content options than ever before, one might assume that this would lead to a fracturing of time spent across many platforms. However, when the total number of touchpoints is examined across TV, smartphone, and PC within the same calendar month over the past two

years, the data shows that millennial consumers are actually going to fewer websites, fewer TV channels, and more apps, but overall are engaging with fewer media touchpoints. One important consideration is that within apps, there is likely more content diversification than before, but the fact remains that at a platform/channel level, diversification on the whole is down. With more and more options, why would consumers limit themselves?

10. With Greater Choice Than Ever, Consumers Buy Fewer Brands

As a parallel, over the past 5 years there has been an increase of over 10% in the number of brands available in the top 20 consumer packaged goods categories; however, consumers are actually buying fewer brands today versus at the turn of the century. As product and content offerings are becoming more specialized and available, consumers are able to access more appealing options.

11. Consumers No Longer Settling for Content That Doesn't Suit Them

Across focus groups, participants identified more purposeful engagement with on-demand video. According to one participant in Chicago: "With YouTube, you're actually targeting and searching for a specific song or show or tutorial on how to do [something]. You're zoning in, you're focusing, you're giving it all your attention because you want to see it or you want to hear it." Similar sentiment was heard from consumers regarding On Demand, Hulu and Netflix in terms of zoning in and focusing on content that is sought out. Because consumers are able to find exactly what they want when they want it, and don't have to settle for content that doesn't suit their interests, they are limiting the number of touchpoints they engage with as specific apps and platforms suit their needs. Essentially the sentiment is, why hunt around for something appealing when you can find exactly what you want in one place?

According to one Chicago study participant, "There are four of us in our house and five years ago everything we watched was a negotiation. Now we have three TVs and 5 devices. You don't have to sit there and try to find something everybody likes, my kids just get up because they have other options."

12. Striking While the Iron Is Hot: Finding the Right Time to Engage Consumers

Many opportunities present themselves to advertisers since consumers have access to video anywhere, anytime, and identifying the moments in which consumers may be engaging with content is valuable.

12.1 Rare Opportunity to Capture Undivided Attention

For instance, when analyzing what consumers do on their smartphones while using Uber, the biggest % increase in penetration when comparing app usage before the Uber app was opened to after was YouTube. While this is just one example of a 'moment' when consumers are choosing to watch video, it may be an indication of a trend. More and more consumers are using ride-sharing, delivery, and task related apps to free up and save time. As of March 2017, 35 million consumers were using some sort of convenience app, and if consumers are choosing to watch video with this free time, what is the implication for brands? It means that advertisers have an opportunity to engage with consumers in different moments, and perhaps in moments when their attention is high. Specifically, participants across focus groups mentioned that when watching video while traveling, they are very focused, especially because

there is little else to distract them, and having ear phones in even blocks out audio distractions. One participant in Chicago said that she watches movies on the go and is "so captive when on the train" as she rides it back and forth on the weekends.

12.2. Watching Network TV Content on Phones

For a society that's always on-the-go, it comes as little surprise that consumers are increasingly watching TV content on their phones. In fact, across generations nearly half the survey respondents list "catching up on TV shows" as the number one reason for watching mobile video according to the Millennials on Millennials report. This also corresponds to a trend that finds less reliance on traditional cable TV viewing. Across generations, consumers are increasingly cutting the cord, with millennial households leading the charge at 25%. While cutting the cord may be on the rise, viewership of TV content is not on the wane.

12.3 A Generation Not Averse to Ads

In addition to being able to reach consumers in different viewing environments, given the affinity for video on-the-go, advertisers should also consider that some consumers seem to be open to ads, especially if there is a benefit. Seventy-five percent of millennials are not bothered by ads, as long as the content is free (according to the Millennials on Millennials report). This generation recognizes the benefits of ads. In addition, consumers across focus groups said that ads on digital have become much more relevant to them. As one participant put it, "I can just watch some ads because they really make sense to me. Some of them are straight to the point like what I want to learn about specific movies. I cannot say it was like that a couple of years ago because I was always hitting the skip button. Only recently, like last year, I started to actually watch ads because some of them are targeted so well."

12.4 Consumers customize their video experience and choose to engage on what's truly relevant As video has evolved since 1950, the American consumer has benefited. Platform diversification and new devices have allowed them to customize their experience and find content and advertisements that are relevant and truly engaging. Customized experiences are now an expectation that consumers have. Both content creators and advertisers have an opportunity to identify the moments and platforms in which consumers are most engaged. The market, however, will continue to evolve as consumers adopt new video platforms such as virtual reality. Given the plethora of options available, it is more important than ever to understand where the consumer gravitates toward in order to help drive the next innovations. By understanding

the evolving market, content

creators and brands can engage

continue to deliver customized experiences that viewers will devote

their attention to.

most effectively with consumers and

13. Capturing the total audience

Nielsen is at the forefront of measuring the evolving media landscape. As the consumer has shifted to more customized experiences, Nielsen has delivered a total audience product framework to provide independent measurement of both video and static content. Nielsen's Total Audience is designed to measure media wherever the consumer is, no matter when or how content is being consumed.

This holistic approach to audience measurement has underscored the importance of time shifted, digital, and on demand viewing as necessary platforms for TV content measurement, effectively extending a network's audience. For some networks time shifted TV is the primary way in which millennials engage with content, while digital and on demand viewing bring in even more incremental viewers. The millennial digital audience for specific programs can surpass the live TV audience as early as five days after the live airing. Understanding specific dynamics across genres, demographics, and platforms can help content creators and advertisers optimize their strategies. These are crucial tools to understanding when, where, and who an audience is, as consumer behavior and video delivery continues to evolve.

METHODOLOGY

Nielsen panels used in this research: NPM (TV panel, inclusive of measurement of devices connected to the TV), Computer Panel, Electronic Mobile Metering Panels (smartphone and tablet), and Homescan Panel (household purchases). The media/device panels employ passive measurement of time spent and watch-time trends across devices and video platforms and allow for reach projections to the U.S. population. Trended data across devices and platforms was analyzed and used to build life-cycle models based on Nielsen's historical data. Other data sources included Fusion data for cross-platform measurement, RMS (retail measurement data), survey data from the Millennials on Millennials report, and focus group research. Third-party data sources were leveraged as well to calibrate trend breaks.