Economic Impact of Big Tech Platforms on the Viability of Local Broadcast News

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Executive Summary

Radio and television stations' local content – particularly news – provides great value for audiences on the major technology platforms. However, broadcasters are not fairly compensated for this valuable content because of the way the markets currently operate. The reason for that is simple – these tech platforms have substantial market power in their provision of services, and they use that power for advancing their own growth and benefit to the detriment of local broadcast journalism.

Local news produced by local broadcast stations continues to be the most trusted, highly consumed and valued news source. Local news is very costly to produce, and yet its consumption and the advertising dollars that support it are shifting to technology platforms where broadcasters cannot fully recoup their investment or earn the economic benefits they create for the platforms because of unequal bargaining power. This competitive imbalance puts a severe strain on the economics of local broadcasters and threatens their continued investment in local journalism.

- Based on our qualitative research interviewing broadcast group executives and our economic modeling of just a few high economic impact practices of the major tech platforms, we conclude:

    - **No Technology Platform Currently Offers a Viable Economic Model for Broadcast News:** There is no viable revenue model from the technology platforms that pays or enables broadcasters to earn equitable revenue, as shown in our economic models for Google Search and Facebook News Feeds, under their current practices.

    - **Algorithms Do Not Properly Weight Local Broadcast News Value:** The platforms exercise great control of content "reach" and how content is exposed and discovered. Unfortunately, this can result in amplifying misinformation and controversial content.

    - **Broadcast News is Not Properly Identified:** Homogenization in the presentation of broadcaster content is a core issue for stations. Broadcasters invest heavily in their local news brands only to see their premium content surface in search returns and news feeds alongside non-professional journalism, or worse, sites with disinformation.

    - **Under the Guise of User Privacy, Google Gains Even More Market Power:** While Google has recently sought praise for changing their user tracking practices, a deeper dive demonstrates that this is not as clear cut as it seems. Google has announced plans to restrict sharing data with third parties, including other advertisers. They do not intend to cut the use of their own data about consumers, however. This move will make them even more powerful in comparison, consolidating their dominance in interactive advertising to the detriment of broadcasters and other ad-dependent local media.

- **BIA’s Economic Models Estimate Significant Loss for Broadcasters**

  - Based on BIA’s economic models for the value that local broadcasters create for tech platform users but are not able to monetize themselves, examining just Google Search and Facebook News Feed, ***we estimate a total annual loss of value equal to $1.873 billion.***

  - Facebook News Feed lost value: $455 million with a range of between $325 million to $585 million.

  - Google Search – zero click lost value: $1,289 million with a range of between $921.1 million to $1,658 million.

  - Google Search – improper local news algorithm weighting: $128.6 million with a range of between $91.9 million to $183.8 million.

  - The immediate impacts on local broadcasters from other platforms, namely Apple and Amazon, are not yet as dire, but the potential for future harm is likely as these platforms also have immense market power.

Introduction

The rise of the major tech platforms has shifted the paradigm for how local audiences organize, discover and consume the local news they value. This shift creates a market distortion for broadcasters producing local news that limits their ability to fully capture the economic benefits of the content they provide to the tech platforms. Given the market power that these tech platforms enjoy, this creates a severe problem for local broadcasters and challenges the economic foundation for their continued provision of local news and information.

The Pew Research Center produces respected and authoritative trend studies of audience relationships with news media. A consistent finding is that local TV and radio stations remain leading sources of news for viewers and listeners.[1] Local audiences also trust local broadcast outlets more than any other platform. For example, a TVB-sponsored survey of registered voters in ten battleground states following the 2020 election found that 73 percent of respondents trusted local broadcast TV news, making it the most trusted news source, with only 33 percent saying they trusted social media.[2]

The economic structure of the media industry overall and in the distribution and consumption of local news specifically is being restructured with secular shifts by audiences towards more digital media consumption and by advertisers targeting their spending to reach local audiences. Local newspapers have been particularly hard hit with newspapers failing, cutting news staff and losing readership.

Nonetheless, nearly three-quarters (71 percent) of Americans think their "local news media do well financially" even though most do not pay for it themselves. This misperception has been damaging to the local news industry, especially for local newspapers. The tech platforms' negative impacts on journalism has now reached broadcasting, as the platforms leverage stations' premium news content without providing commensurate economic benefits that can help sustain local broadcast news.

Recent research from Pew shows that Americans increasingly prefer digital devices for getting their news.[3] Nearly nine in ten Americans (86 percent) get their news from "a smartphone, computer or tablet," as compared to 68 percent from TV and 50 percent from radio. Print trails at 32 percent. Advertising spending has followed news audiences from traditional to digital platforms.

According to BIA Advisory Services, in 2021 local TV and local radio stations will generate $15.7 billion and $12.6 billion respectively in advertising revenue.[4] However, mobile ($23.4 billion) and online ($23.3 billion) platforms collectively will generate over $46 billion in advertising spending targeting local audiences. The shift toward increased advertising spending on digital platforms will continue through 2024, according to BIA.

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[1] https://www.journalism.org/2019/03/26/for-local-news-americans-embrace-digital-but-still-want-strong-community-connection/

[2] "The 2020 Voter Funnel Study," TVB, https://www.tvb.org/Public/Political/TheVoterFunnel.aspx. Press release issued December 8, 2020.

[3] https://www.pewresearch.org/fact-tank/2021/01/12/more-than-eight-in-ten-americans-get-news-from-digital-devices/

[4] http://www.biakelsey.com/bias-u-s-local-advertising-forecast-2021-reveals-little-growth-across-media-even-without-political-advertising/

Google (a unit of Alphabet), Facebook, Apple and Amazon are the largest tech platforms in terms of market capitalization and annual revenue. Beyond the economics, these tech platforms also have outsized roles in determining what connections are made between publisher content and audiences. The four leading tech platforms have substantial market power in the relationships they create and mediate between publishers and their audiences.

In this report, we focus on the value that radio and television broadcasters' news and other local content creates for audiences on these platforms that is not fully recognized due to the way these markets currently operate. The tech platforms have restructured the news ecosystem in ways that threaten the viability of local broadcast news.

Major Tech Platform Business Practices Harm Local Broadcasters

The primary goal of this research is to provide estimates of lost revenue or economic harm (direct and indirect) to broadcasters from the business practices of the major tech platform providers. Where feasible, we estimate direct and indirect monetary harm to local broadcasters from the platforms' practices.

The four major tech platforms we examine in this study are **Google** and **Facebook,** along with **Apple** and **Amazon,** because of their market dominance in setting the terms for distributing and monetizing digital content over the Internet.

The Rise of the Tech Platforms is Hurting Local News Ecosystems

Tech Platforms Create Marketplaces

Tech platforms create economic value for producers and consumers by hosting and supporting a distribution pipeline in a two-sided marketplace. At their best, tech platforms bring efficiency and support value creation for both producers and consumers while providing a neutral transactional venue. However, the current tech platforms have created a less than ideal environment for promoting competition or enhancing consumer value.

To get a sense for how tech platforms operate, consider this conclusion based on the Geoffrey Parker et al. study of network effects and the rise of the tech platforms, Platform Revolution[5]:

> *When platforms grow big enough, they have the potential to cease being mere participants – serving to match existing supply with existing demand – and actually begin manipulating individual users and even entire markets through their great size and reach.*[6]

[5] Geoffrey G. Parker, et al., *Platform Revolution: How Networked Markets are Transforming the Economy and How to Make Them Work for You.* W.W. Norton & Company. 2016, page 5.
[6] Parker et al., *Platform Revolution*, page 251.

How Tech Platforms Hurt Competition

What has transpired with the four tech platforms considered in this study – Google, Facebook, Apple and Amazon – is that they have become more than neutral platforms and distribution pipelines. They have grown beyond their roles of "enabling value-creating interactions between *external producers* and consumers"[7] by becoming their own *internal producers*.

This changing role enables the tech platforms to increase their own value by controlling participants in their platform marketplaces where they control the governance and resulting value creation and capture in ways opaque and harmful to external producers. More specifically, the tech platforms enable and compete with other producers for audience and advertising dollars and do so based on terms they create to favor themselves, such as with their use of local broadcasters' news content. In short, the tech platforms are using unfair data and technology advantages from their own platforms to outcompete the other players they host on their platforms, including local TV and radio stations.

The big tech platforms essentially have restructured the media and news functions in society. They have hit local broadcasting where it hurts most, in its ability to produce and serve audiences with quality journalism and generate advertising revenue to maintain viability and competitiveness in the market.

The Tow Center for Digital Journalism issued results from its continuing research into the evolving relationship between news publishers and the tech platforms. Publishers need the tech platforms to get to market. The tech platforms need the quality journalism provided by publishers to attract and engage users to their platforms and services.

The Tow Center's report, FRIEND & FOE: The Platform Press at the Heart of Journalism concluded that: "This evolving publisher-platform partnership is unequal, however.[8] Platforms wield more power over formats and data and earn significantly more advertising dollars in aggregate than publishers, even as platform choices increasingly inform publishers' editorial strategies, distribution strategies and workflows."

Advertising revenue is the lifeblood of local broadcasting and supports local news production, both on-air and in digital forms. The pandemic accelerated an already growing trend towards more advertising on digital platforms, with over half of all U.S. ad spending being spent on digital ads in 2020 (and with nearly two-thirds of all digital advertising dollars being spent on Google, Facebook and Amazon alone).[9]

According to the *Wall Street Journal,* this milestone is "just the latest proof of digital advertising's meteoric rise, a development that has concentrated ad spending with several tech giants at the expense of other platforms, including newspapers, local television and magazines.[10] And an analysis by major ad agency GroupM similarly concluded that, "The growth in online advertising last year came as every other kind of ad spending shrank, with double-digit declines in television, newspapers and billboards.

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[7] Parker et al*., Platform Revolution*, page 5.
[8] https://academiccommons.columbia.edu/doi/10.7916/d8-15pq-x415
[9] https://www.wsj.com/articles/google-facebook-and-amazon-gain-as-coronavirus-reshapes-ad-spending-11606831201.
[10] Google, Facebook and Amazon Gain as Coronavirus Reshapes Ad Spending," *Wall Street Journal*, December 1, 2020. https://www.wsj.com/articles/google-facebook-and-amazon-gain-as-coronavirus-reshapes-ad-spending-11606831201.

And those online gains flowed heavily to the tech giants rather than to digital media sites and publishers that sell online ads."[11]

The *Wall Street Journal* also has noted that the "Internet platforms have long been interested in news as a way to engage users,"[12] but have been less eager, especially in the absence of regulatory pressure, to compensate news publishers for using their content. The platforms' use of broadcasters' and other local media's news content is in fact disrupting the provision of local news and information. Market disruptions in local journalism can have outsized consequences for American society and democracy.

This all adds up to an urgent problem for policymakers to consider as they weigh the paradigm shifts in the local news ecosystem and its ability to continue producing and distributing highly valued content.[13]

Sizing the Tech Platforms

Of the four tech platforms we studied, only Facebook falls just short of reaching a trillion-dollar market capitalization (Figure 1). Each company has its core strength: Google in search, Facebook in social, Apple in devices and apps, and Amazon in ecommerce and video.

The most recent earnings reports from these companies boasted revenue, growth and profit numbers that greatly exceeded Wall Street's expectations, leading one media business report to conclude that the "tech giants show no sign of slowing down."[14]

By comparison, the local broadcast industry is much smaller than the four big tech platforms. When comparing these platform companies to four of the largest pure-play local TV groups in terms of market cap (April 30, 2021 market close) we can see the figures and comparative bubble chart in Table 1.

For the bubble chart, ***the combined market cap of these four TV groups is the size of the period at the end of this sentence and does not even appear in the data plot.***

[11] https://www.wsj.com/articles/how-covid-19-supercharged-the-advertising-triopoly-of-google-facebook-and-amazon-11616163738.

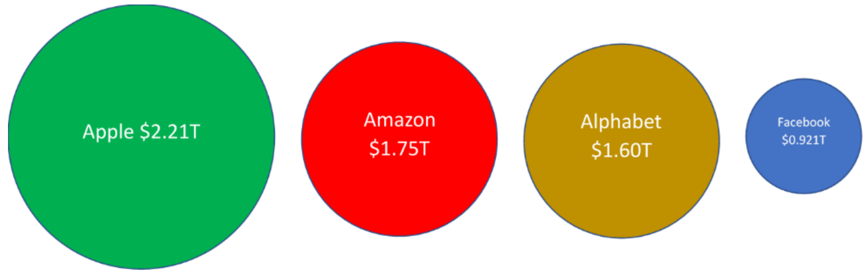
[12] "Google, Facebook, Amazon, Apple and Microsoft. Call Them Tech Frenemies for Life." Wall Street Journal, April 1, 2021. https://www.wsj.com/articles/tech-giants-cooperate-while-competing-frenemies-for-life-11617293819.

[13] For example, a 2018 Notre Dame-UIC study examined the relationship between the loss of print news and municipal bond ratings, due in part to lack of coverage and exposure of local government inefficiencies.

[14] Sara Fisher, "Tech Giants Show No Sign of Slowing Down," Axios, April 30, 2021. https://www.axios.com/big-tech-earnings-apple-facebook-microsoft-amazon-4f0c98fd-28ab-497a-91f8-bdc61fb6c3de.html?utm_source=newsletter&utm_medium=email&utm_campaign=newsletter_axioslogin&stream=top.

Table 1. Comparing Market Caps of Big Tech and Local TV Groups

Company	**Market Cap ($Billion)**
Google	$1,595,552
Facebook	$923,772
Amazon	$1,747,984
Apple	$2,206,963
Nexstar	$6,395
TEGNA	$4,425
Gray TV	$1,927
Sinclair	$2,402



Source: BIA Advisory Services and market caps as of market closing on April 30, 2021.

In search of higher user satisfaction and engagement, and revenue growth from ad-supported and premium digital news services, each of these tech platforms has become a significant player in the digital news ecosystem.

Existing news publishers, including local broadcasters, have been forced by practical circumstances to adapt to the business models used by the tech platforms due to the market power of these platforms. The platforms are simply too big to just walk away from or try to ignore. These business models are changing the face and the economics of the digital news marketplace. For broadcasters, the tech platforms' reshaping of the news marketplace imposes hefty penalties that impedes their abilities to produce high quality local news.

Figure 1. Tech Platforms Market Cap and News Services

Google	Facebook	Apple	Amazon
Mkt Cap: $1.60T 28.9% digital ad share News Services: -Google Search -Google News -YouTube -News Initiative -Play Store	Mkt Cap: $923B 25.2% digital ad share News Services: -News Feed -Instant Articles -Facebook News -Facebook Live	Mkt Cap: $2.21T News Services: -App Store -Apple News -Apple News Plus	Mkt Cap: $1.75T 10.3% digital ad share News Services: -Amazon News -Fire TV News -Appstore for Android

Sources: BIA compilations, digital ad shares from eMarketer, April 2021. Market caps are as of 4/30/2021.

These tech platforms also play both sides. The operate as massive gateway *platforms* hosting two-sided markets for content discovery and distribution, and they operate as *participant* publishers with their own aggregations of third-party content.

For broadcasters seeking to reach and serve audiences in the digital domain, agreeing to terms to distribute and monetize premium broadcast news content across these platforms is a business necessity.

Each of the major tech platforms has its own business models for dealing with broadcasters and their news content. In each case, the primary path to monetization for broadcasters is generating referred traffic to their websites and apps where they can serve ads. Some of that advertising revenue could be shared between broadcasters and the tech platforms according to varying, often complicated and typically non-negotiable terms.

For example, broadcasters can directly sell ads on their websites and keep 100 percent of the gross revenue but must pay ad tech fees from those proceeds. If broadcasters have ad inventory sold on Google AdX ad exchange, Google keeps 10 percent of the gross revenue in addition to the ad tech fee for platform services.

An analysis of Google ad tech fees across its ad platforms including DV360, Google Ads and Google Ad Manager concluded that, "When an advertiser's $1 in media spend starts and ends with Google, publishers receive 69 percent of every dollar. Google takes the other 31 percent, according to 2019 aggregate data…The ad network charges advertisers on a cost-per-outcome basis but pays publishers on a CPM basis, so the average varies."[15]

During 2020, the key impact year of the pandemic and a major political election year, news consumption rose dramatically. According to research from the Pew Research Center, 18 percent of U.S. adults said the "most common way they get their political and election news" is from social media such as Facebook and YouTube, compared to 16 percent for local TV and 8 percent for radio.[16] A quarter (25 percent) of U.S. adults got their political and election news most commonly from news websites or apps.

The tech platforms including Facebook and Google's YouTube do not produce local news, but they do serve vital market functions in the discovery and distribution of news content served to their audiences along with revenue producing ads they sell.

When considering the value of broadcast news content to the tech platforms and their users, quality matters significantly, and broadcasters adhere to high standards of journalistic integrity. This quality in broadcast news content results in value creation for the tech platforms that is not fully captured in user traffic and advertising metrics.

Broadcasters and other news publishers go to great lengths to produce premium quality news content. Further, original reporting often comes at great peril to the physical well-being of reporters. According to recent research from the Radio Television Digital News Association, "20% of television news directors said that their employees experienced attacks in 2020. 86% of these directors said that they had taken

[15] https://www.adexchanger.com/platforms/google-opens-its-black-box-and-shares-fees-across-dv360-google-ads-and-google-ad-manager/.
[16] https://www.journalism.org/2021/02/22/americans-who-mainly-got-news-via-social-media-knew-less-about-politics-and-current-events-heard-more-about-some-unproven-stories/

steps to protect employees, including purchasing bulletproof vests and gas masks and sending security teams with reporters."[17]

Recently, there has been much consideration of these tech platforms and local news issues around the world. The U.S. can learn from these initiatives. For example, the Digital Platforms Inquiry report from the Australian Competition and Consumer Commission (ACCC) highlighted that, "The content produced by news media businesses is also important to digital platforms.[18] For example, between 8 and 14 per cent of Google search results trigger a 'Top Stories' result, which typically includes reports from news media websites including niche publications or blogs."

With such broad use of tech platforms' social media, news sites and apps, broadcasters cannot rely solely on their over-the-air platforms for providing news to their audiences. They must go to where audiences are and provide digital news services. And to get the broadest distribution and largest opportunities to monetize their news content, broadcasters must come to terms with the tech platforms to access their user bases.

Tech platforms offer both vital distribution scale and monetization options for broadcasters seeking to serve audiences and recoup their deep investments in high quality journalism. Because of the terms with which they must comply, and how frequently those terms change, broadcasters often feel their ROI (return on investment) from their collaborations with tech platforms does not reflect their true value to users.

Local Broadcast Digital News Content and Maintaining Viability

Broadcasters make their ad-supported digital news content available for free to audiences who visit their stations' websites or use their mobile applications (apps). These websites and mobile apps often are referred to as owned and operated (O&O) digital assets, as they are under the direct control of the stations. The ad revenue local broadcasters can achieve for their digital news content is critical to the viability of these services.

Local broadcasters offer premium content, and when audiences opt in through broadcast news websites and mobile apps, the content and ads can be tailored more appropriately. Broadcasters also publish their proprietary content on third-party websites and apps including Google Accelerated Mobile Pages (AMP), Facebook sponsored pages, Facebook Instant Articles, Amazon Fire News and Apple News.

Stations' digital news content includes video, audio and text. The digital news may have been broadcast in whole or part over the stations' airwaves. In some cases, the digital news content may be unique to digital distribution channels as more broadcast news operations adopt "digital first" news strategies for best serving the needs of their audiences.

[17] https://www.poynter.org/business-work/2021/1-in-5-local-tv-stations-reports-attacks-on-journalists-in-2020-survey-finds/
[18] https://www.accc.gov.au/system/files/Digital%20platforms%20inquiry%20-%20final%20report.pdf

Tech Platform Terms to Broadcasters Often Are Not Negotiable

To do business with the tech platforms and the range of services they offer on their platforms, broadcasters must comply with a myriad of terms before they can distribute their local news products. The tech platforms have a collection of services that broadcasters may opt into. Some of these services offer revenue share opportunities. Each service has a set of terms and conditions with which broadcasters must comply.

The range and diversity of tech platform services and associated terms, conditions and business models are both complicated and evolving. We summarize a range of platform services, terms and revenue sharing available to publishers including local broadcasters in Appendix A: Tech Platform Terms and Revenue Share Policies.

Broadcasters have three basic models to develop paths to revenue for their news content with the tech platforms: distribution agreements or licensing, subscription and advertising.

- *Distribution Agreements*: The Amazon news app on Fire TV is an example of a distribution agreement this tech platform has with several major TV groups. Google recently announced $1 billion in distribution deals with over 600 publishers globally to be part of their Google News Showcase platform.[19]
- *Paid Subscriptions*: Apple News Plus and Google News are examples of how news publishers can collaborate with the tech platform to monetize content via paid subscriptions from which there is a revenue share between the platforms and publishers. For example, Apple News Plus typically shares 70 percent of subscription revenue with news publishers but in some cases that rises to 85 percent.
- *Direct Sold and Remnant Ad Inventory*: The third content revenue model is monetization via advertising. “Ad inventory” basically refers to some measure of user traffic or engagement associated with publisher content. For example, using a cost per thousand (CPM) model, publishers charge for ads based on the thousands of user impressions they deliver to an ad buyer. If a publisher charges a $10.00 CPM, every time they deliver 1,000 impressions to an advertiser, they earn $10.00. In other ad models the currency metric could be Click-Through Rate (CTR), Call-To-Action (CTA), or several other options. For CPM models, ad buyers are charged for impressions served to the user on their screen. For CTR, the user must click on the ad for the publisher to earn revenue. And for CTA, the user must do something, such as fill out a form, for the publisher to generate revenue. Publishers generate ad revenue from their digital news assets (websites and mobile apps) either by directly selling that ad inventory with their own efforts or allowing the tech platforms to fill publishers’ remnant (i.e., unsold) ad inventory with their programmatic exchanges.

In addition to revenue-sharing terms with the tech platforms, as we highlight below, news publishers must agree to a range of terms including journalistic content policies; formatting requirements for news and ad content; and producing or hosting content on the tech platform servers versus publisher services

[19] https://brandequity.economictimes.indiatimes.com/news/digital/google-says-not-up-to-us-to-dictate-how-news-companies-spend-its-1-billion/81814988

for superior user experiences in faster content loading and rendering, particularly for mobile users (e.g., Google AMP and Facebook Instant Articles). In some cases the tech platform terms demand that the broadcaster use that tech platform's ad server. These terms are take it or leave it with no negotiation, where the broadcaster only has the option of "click to accept" on a standardized publisher agreement.

Focusing on Google and Facebook

At this writing, Google and Facebook are the most consequential of the big four tech platforms for assessing the continued viability of local broadcast news in today's digital environment. Based on BIA's broadcast group executive interviews, it quickly became clear that Google and Facebook occupy much of these executives' current focus in terms of producing and monetizing their digital news content. Thus, for our purposes of investigating how major tech platforms are disrupting the local news ecosystem and distorting how local broadcasters create value versus their ability to monetize that value and maintain on-going viable news operations, focusing on Google and Facebook is a priority.

It is also clear, particularly with recent initiatives such as Apple News, Apples News Plus and Amazon's Fire TV News platforms, that Amazon and Apple will have increasingly strong impacts on the economics of local broadcast journalism in the near future.

Apple News and the Apple Search Ads (ASA) platforms will see strong growth, according to equity analyst firm Cowen & Company. Cowen concludes, "Apple News+ had about 11 million paid subscribers in 2020, generating revenue of about $550 million."[20] Going forward, Sankar believes that "Apple News+ could reach 19 million subscribers by 2023. That could rake in $1.14 billion in subscription revenue and $1.02 billion in digital ad revenue from ad impressions, resulting in a total of $2.2 billion.[21]

Sandeep Gupta, vice president of Amazon Fire TV, recently said, "Adding access to local news is the latest step in our commitment to helping our customers stay informed. We've been amazed by the popularity of Amazon's news app and view local news as the next indispensable piece for our customers."[22] As of March 18, 2021, Fire TV provided local news from 88 markets based on distribution agreements with leading local TV station groups.[23]

Google

Google is a dominant actor in the digital advertising market at all levels including participating in the demand, supply and content aggregation components of the ecosystem. Google's primary revenue comes from Search and Display advertising networks.

[20] https://appleinsider.com/articles/21/04/06/apple-news-could-reach-19m-subscribers-22b-in-revenue-by-2023-analyst-says
[21] https://appleinsider.com/articles/21/04/06/apple-news-could-reach-19m-subscribers-22b-in-revenue-by-2023-analyst-says
[22] https://mspoweruser.com/amazon-local-news-channels-to-news-app-on-fire-tv/
[23] https://www.theverge.com/2021/3/18/22337922/amazon-fire-tv-free-local-news-streaming-app

Google operates on both the "buy-side" and "sell-side" of the advertising market. Given its buy-side and sell-side data, or what is called in the industry "bidstream data," Google has the means, motive, and opportunity to manipulate ad bid pricing. Bidstream data is used by ad buyers and sellers to negotiate and settle on terms in real-time auctions using Google and other ad platforms.

Given the outsized role of Google's advertising platforms, broadcasters must source demand for their ad inventory through Google's ad platforms or risk their access to a huge source of demand and resulting substantial loss of revenue. In other words, if broadcasters do not expose their ad inventory on the Google ad exchange, they will miss access to a significant number of advertisers (i.e., Supply Side Platform – SSP) demand and likely receive lower prices for their ads. Nexstar's experience as reported in the Wall Street Journal highlighted what happens when broadcasters opt out of participating in Google's AdX – an immediate and severe revenue decline.[24]

Another way Google can punish publishers is by ranking them lower in search results. As reported by the Wall Street Journal, a recent antitrust suit by the Daily Mail against Google's parent (Alphabet) alleges that "the tech giant manipulates search results and advertising auctions in ways that harm online publishers…Google punishes publishers in search rankings if they don't sell enough advertising space through Google's marketplace."[25]

In an antitrust suit filed by Texas against Google, it was alleged that "Google used its access to data from publishers' ad servers—where more than 90% of large publishers use Google to sell their digital ad space—to guide advertisers toward the price they would have to bid to secure an ad placement."[26] The complaint concluded that Texas charges Google's "Project Bernanke" allowed it to "unfairly compete against rival ad-buying tools and *pay publishers less on its winning bids for ad inventory*."[27]

For broadcasters to have their content discovered, the Google search platform is unquestionably where their digital news must be accessible and prioritized in Search Engine Results Pages (SERPs). Once users click on a link in a search return that brings them to the broadcaster's site, broadcasters can place display ads in their news content which they may sell through Google's ad exchange.

The three major Google programs for publishers are Ad Manager, AdSense and AdMob. Details for each program can be found here.[28]

Here is a summary of how Google describes each solution:

- **AdSense**: "AdSense acts as an ad network, providing you access to demand from advertisers and helping you set up your ad inventory. AdSense is best for publishers who want more automation for their ad solutions, and have a small, dedicated ad management team."

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[24] https://www.wsj.com/articles/how-google-edged-out-rivals-and-built-the-worlds-dominant-ad-machine-a-visual-guide-11573142071?mod=article_inline
[25] https://www.wsj.com/articles/daily-mail-owner-files-antitrust-suit-against-google-11618925778
[26] https://www.wsj.com/articles/googles-secret-project-bernanke-revealed-in-texas-antitrust-case-11618097760
[27] https://www.wsj.com/articles/googles-secret-project-bernanke-revealed-in-texas-antitrust-case-11618097760
[28] https://support.google.com/admanager/answer/9234653

- **AdMob**: "AdMob is a mobile ad network and monetization platform for mobile developers who want to earn money from ads, gain actionable insights, and grow their app business. As a network, AdMob allows you to monetize your mobile apps by helping you serve ads globally. As a monetization platform for developers who work with multiple ad networks, AdMob helps you maximize ad revenue across all of your third-party network partners."
- **Ad Manager**: "Google Ad Manager is an ad management platform for large publishers who have significant direct sales. Ad Manager provides granular controls and supports multiple ad exchanges and networks, including AdSense, Ad Exchange, third-party networks, and third-party exchanges."

Beyond these advertising revenue terms and policies, broadcasters collaborating with Google must agree to other terms as publishers including:

- Google News Policies[29] speaks to how Google strives "to make it easy for users to find news from publishers that consistently produce independent and original work, containing a significant source of fresh, original and purposeful content." Publishers are referred to Google's Webmaster Guidelines[30] and other news policies with which they must comply to be on Google's news platforms and surfaces.
- Google for Publishers[31] provides an overview for how publishers can earn money from their online content. The programs include AdSense, Google Ad Manager and AdMob.
- Another document for publishers is Google's Understand the Google Publisher Policies and Google Publisher Restrictions.[32] This document covers Google's publisher policies and restrictions, including advertising program policies for its AdSense product.
- Google AMP[33] is a Google component framework to which broadcasters can create content according to AMP specifications for hosting on Google's servers. The benefit is much faster rendering of content and AMP-specific features in search results, such as higher ratings in mobile SERPs. But broadcasters lose the direct relationship with the news consumer they would have when hosting their own sites, and instead give that over to Google.

Facebook

Facebook is by far the dominant social platform in the U.S., accounting for two-thirds (65.84 percent) of social media traffic before including its other properties such as Instagram.[34] This rises to 70.74 percent of social media traffic on smartphones. Most users access Facebook from their mobile devices, and mobile advertising sales are Facebook's dominant revenue engine.

[29] https://support.google.com/news/publisher-center/answer/6204050?hl=en
[30] https://developers.google.com/search/docs/advanced/guidelines/webmaster-guidelines?visit_id=637535738292957499-2217624352&rd=1
[31] https://www.google.com/ads/publisher/
[32] https://support.google.com/adsense/answer/10008391?hl=en
[33] https://developers.google.com/amp
[34] https://gs.statcounter.com/social-media-stats/all/united-states-of-america

Facebook has two monetization platforms: (1) selling ads served in their own News Feeds and other services they offer and (2) sourcing demand from third-parties and placing Facebook ads into those websites and apps via the Facebook Audience Network.

To gain access to the Facebook platform services, broadcast partners must comply with Facebook Monetization Policies[35] and Content Monetization Policies.[36]

The Facebook Audience Network is the dominant social advertising platform for accessing advertising spending on both Facebook's own feeds and in third-party websites and apps looking to sell ads through Facebook's ad exchange. As Facebook describes this platform service, "Audience Network extends Facebook's people-based advertising beyond the Facebook platform. With Audience Network, publishers can make money by showing ads from Facebook advertisers in their apps." The Facebook Audience Network terms for publishers are presented here.[37]

Based on our executive interviews with broadcasters, other Facebook distribution opportunities such as Instant Articles and Facebook News are not popular because broadcasters cannot see a viable path forward for their news business models.

Interviews with Local Broadcast Executives About Tech Platforms

Before presenting our estimates of the economic harm to broadcasters due to the market power of the tech platforms, it is important to review the circumstances broadcasters face when dealing with these platforms. Through numerous interviews with broadcasters specifically involved in the delivery and monetization of their digital content, we were able to determine some of the key issues they face.

Here is a summary of representative comments we obtained in our executive interviews across several topic areas.

Tech Platforms Terms – Fair Market and Negotiability

- **Fair Market and Negotiability:** "Here's the high-level point. The vast majority of our interaction with the tech platforms is whether or not to click on a checkbox on a page. There is no paper between us and Google. Just a click on some dashboard that gives Google the right to use our content."
- **Platforms Dominate in Scale and Scope, Broadcasters Must Play:** "Google is so integrated, they have it all. We can't afford not doing business with them." One digital broadcast executive called out that Google has Google News, YouTube and a programmatic ad business that runs on both the DSP (Demand Side Platform) and SSP (Supply Side Platform), all at massive scale.
- **Platforms' Attitude Is that Broadcasters Do Not Matter, Users Do:** "The only way for broadcasters to work with Facebook and Google is with government action. Broadcasters do not matter to Google and Facebook."

[35] https://www.facebook.com/business/help/169845596919485?id=2520940424820218
[36] https://www.facebook.com/business/help/1348682518563619?id=2520940424820218
[37] https://www.facebook.com/ads/manage/audience_network/publisher_tos/

- **Broadcasters Have Trouble Getting Heard by Tech Platforms:** A major group digital leader pointed out that while groups and their local stations are major players in the media ecosystem, they are like mom-and-pop businesses to the tech platforms. Even top broadcast groups do not seem to be big enough to warrant serious attention.
- **Platform Terms Are a Mixed Bag:** Given the scale at which the platforms operate in terms of generating referred audience traffic and ad revenue, all the broadcasters we interviewed concluded that to remain competitive in the marketplace, they had to accept the terms offered by the platforms. Broadcasters must enter deals with the platforms to achieve audience development goals and remain viable as local news operations. Referred traffic from Google and Facebook can often reach 50 percent or more of total traffic to broadcast sites and apps.
- **Appeals Process Is Unilateral and Not Transparent**: Platform terms and conditions are complicated, changing and violations can be immediate and harsh. Broadcast executives told us that their stations sometimes get flagged and penalized by the platforms. The ability to appeal is going to a web page and completing a form. There is no negotiation or understanding of exceptions.
- **Platform Terms Create Higher Cost Structures for Broadcasters**: The terms set forth by the tech platforms to broadcasters include content rendering and hosting, ownership and access to key data, programmatic ad exchanges and pricing, policies related to acceptable editorial and advertising content, and a variety of other special terms and conditions.
- **Algorithms Are Complex, Opaque, Change Constantly and Can Cause Negative Value Impacts:** "Algorithms are black boxes and changes are not communicated to us but often have negative consequences." "Algorithm changes lead to less referral traffic for us. That means less targetable impressions, less to sell and we become less competitive." Broadcasters are forced to live and die by algorithms they cannot see or influence.

Tech Platform Versus Broadcaster Valuation Metrics and Performance

- **We Only Make Money from Links Back to Our Sites, Not the Platforms:** "Our number one grievance is that we are getting paid only for links to our sites and apps where we can serve ads. We don't get fair credit for the value we create for the platforms."
- **Zero Clicks Mean Platforms Get Value but Broadcasters Do Not:** Often a Google search return or a Facebook shared link can contain enough content from a broadcast news item that the user feels adequately informed by the search return or social post without clicking through to the station's web site or mobile app where that user could be served ads and monetized. This phenomenon is known in the industry as "zero click."
- **Facebook Click-Through-Rate:** "We went through a third-party vendor to analyze link clicks from Facebook. We looked only at Linked Posts. Based on 1-month of data, the assumed CTR came out to be 3.5 percent." This means that most of the broadcaster content appearing in Facebook News Feeds has no chance of being monetized even though users find local news to be valuable.
- **Video Has High Value but No Monetization:** "We have to have video to get ranked high. But the monetization for our most valuable content isn't there." "We put video on Facebook. We have to or lose rank. But there is no monetization for us."

- **Video Publishers Are Not Making Money with the Platforms:** Under non-disclosure, BIA was informed that a major consulting firm was hired to meet with publishers to analyze relationships and economics with one of the major video platforms. Confirming the publishers' suspicion, the study concluded it was a losing proposition to produce and try to monetize video on the tech platform. Not one of the publishers was earning a profit given the expenses required to participate.
- **Broadcast News Providers Are Key Part to the Digital Ecosystem:** "We are digital news providers - a key part of the digital ecosystem. We create awareness but don't get the benefit. Google and Facebook do. We might be the news source, but the traffic flows to Google and Facebook."
- **Local Broadcasters Enhance Value of Tech Platforms with Local News:** "We are a premium local news publisher bringing reliable and reputable news. We are a trusted brand in the community. That brand helps build value for the tech platforms."
- **Does Facebook Know We Are a TV News Station?** "We're trying to find out if Facebook knows, and appropriately ranks, content from our stations when they use branding other than their call letters."
- **Broadcasters Need Google AdX to Create Ad Inventory Value on Their Own Sites and Apps:** Google's Ad Exchange (AdX) is a predominant advertising marketplace where digital ad inventory is bought and sold and creates demand and sets pricing for third-party sites.
- **Facebook Instant Articles, News Tab Have Low Value to Broadcasters:** "Most of our stations don't do Instant Articles. It's extra work and the costs aren't worth it." "No one uses the Facebook News Tab. It's a waste of our time. It's the News Feed that gets all the use." "Facebook is a lost cause for us, just wasted effort. We spent a lot of time analyzing data and trying to figure out the algorithm."
- **We Make No Money on Apple:** "For Apple, we make no money. We get no referrals. We get no data from the App Store." "A lot of stations do development with Apple but for no return. Apple doesn't see the value." "Apple News is minimal. We're not doing anything." "I tell my local stations to do nothing with Apple News. Nothing there for us, they get all the value."
- **Amazon Alexa Can't Be Monetized:** "We can't monetize Alexa. We build apps for smart speakers but there's no revenue."

Economic Model: Tech Platforms' Monetization of Broadcaster Content

As part of the value-producing ecosystem of these platforms, broadcasters provide news and information content to platform users typically in the form of search results (Search Engine Results Pages – SERPs) in Google's case and links provided in Facebook's News Feeds.

The core value of this content is it enables the tech platforms provide relevant and timely information to their users using artificial intelligence, machine learning and data science. This content is prioritized and selectively served to users based on highly complex and constantly changing proprietary and opaque algorithms.

The tech platforms surface relevant information to users with brief content summaries and links to deeper content either on their own assets (i.e., Google AMP, Facebook Instant Pages) or via external referral links to third-party sites such as those operated by broadcasters. When users click on these external links and land on broadcasters' websites and apps, broadcasters benefit from generating advertising revenue from these user sessions.

Unfortunately, the CTRs are not high, as many users find the information provided with the links on these platforms sufficient. Hence, almost all the value and revenue generated from this broadcaster content on these tech platforms is not realized by broadcasters, but is retained by the platforms.

Data obtained from several top broadcast groups, along with other publicly available information, enables us to estimate the amount of revenue generated by these tech platforms from this broadcaster content. In the models that follow some numbers are rounded.

We then analyzed a reasonable payment to the broadcasters for this content, depending on the appropriate allocation between the tech platforms and the originator of that content (i.e., the broadcasters).

Facebook News Feed Value Model

- Facebook utilizes the content from local broadcasters through its News Feed service. Links to the broadcaster websites include information that the broadcaster has created on local news items. Facebook sells advertising accompanying that news feed that includes that broadcaster content.
- To estimate the amount of advertising revenue, we obtained information from several of the top broadcast groups as to the number of times their content is seen on Facebook and the number of times that Facebook users click through to the stations' websites and apps. Along with publicly available information on the rates that Facebook charges, we can estimate an appropriate amount that Facebook should be paying broadcasters for their content which generates revenues for Facebook. That model is shown in the table below.

Table 2. Estimation of Facebook Revenue from Broadcaster Content

Facebook Model Steps	
1. Station Monthly Impressions from Facebook per Person 18+	0.5138
2. Assumed CTR from Facebook	3.5%
3. Monthly Facebook Impressions Just Reading User Feed Content per Person 18+	14.17
4. Average Facebook CPM	$ 8.85
5. Average Number of Posts in News Feed Between Sponsored Posts	3
6. Facebook Monthly Revenue from Station Content in News Feed per Person 18+	$ 0.04
7. Facebook Yearly Revenue from Station Content in News Feed per Person 18+	$ 0.50
8. Number of News Producing TV and radio stations Per Market	5
9. Total 18+ Population	259,249
10. Facebook Yearly Revenue from Station Content in News Feed ($000s)	$ 650,000
11. Distribution of Attributable News Feed Revenue to Stations	70%
12. Missing payment for News Feed Content to Stations ($000s)	$ 455,000

Explanation of Facebook Model by Step:

1. Using the actual number of impressions various broadcasters receive from Facebook reported to us, we estimate the number of impressions per month for the 18 and older populations served by these broadcasters.
2. This Click-Through-Rate (CTR) was provided by the broadcasters and was quite similar between the various broadcasters that provided us with information.
3. This number of impressions are the estimated number of News Feed impressions from broadcasters that the user did NOT click through to the station website (Step 1 divided by Step 2 minus Step 1).
4. This is the average for Facebook CPMs across the four quarters of 2019. (Source: "Paid Media Q1 2021 Benchmark Report," ADStage, p.7).
5. This is an average number of posts between sponsored posts in the News Feed.
6. This is a calculated value of the monthly revenue that Facebook is generating from the broadcaster content included in the News Feed that the user does NOT click through to the stations' websites. (Step 3 is multiplied by Step 4, divided by 1,000, and then divided by Step 5).
7. This is a calculated value of the annual revenue that Facebook is generating from the broadcaster content included in the News Feed that the user does not click through to the stations' websites. (Step 6 is multiplied by 12).
8. This is the number of local TV stations within each market providing news content. This varies by market (e.g., large markets have more than 5 stations, smaller markets have less than 5) and includes the local television stations with news operations as well as the local radio stations airing news,[38] talk,[39] and sports[40] and other formats that include local news and information.
9. Total 18+ Population for 2019. (Source: Woods Poole Economics).
10. This is a calculated amount of the estimated annual amount that Facebook is generating from the broadcasters' content included in the News Feed that the users do NOT click through to the stations' websites. (Step 7 is multiplied by Step 8 multiplied by Step 9).
11. Assumed distribution between Facebook and broadcasters for the revenues generated by Facebook from broadcaster content.
12. This is a calculated amount of the amount that Facebook would remit to broadcasters for the use of their content. (Step 10 is multiplied by Step 11).

As shown in the model above, Facebook generates a considerable amount of user value and revenue from the content that broadcasters provide. The exact amount of revenue depends on the number of factors mentioned above (e.g., number of posts between sponsored posts in the News Feed, share of revenue distribution between Facebook and the broadcasters, etc.). Changing some of those inputs leads to a range of between $325 million to $585 million, with the $455 million shown above in the middle of that range.

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[38] According to BIA's Media Access Pro database of all radio stations, there are 929 radio stations airing news programming in the U.S.

[39] According to BIA's Media Access Pro database of all radio stations, there are 316 radio stations airing a talk format.

[40] According to BIA's Media Access Pro database of all radio stations, there are 686 radio stations airing a Sports format in the U.S.

Google Search and Zero Click Value Model

Google Search is another important platform which utilizes broadcaster content. Much like Facebook's News Feed, broadcaster content appears with short summaries in Google search results. These summaries provide substantial value for users looking for relevant search returns to the point that many do not click through to the stations' websites as a result.

In the search industry, this phenomenon of Google search returns providing enough information so that users do not click through are called, "Zero Click" searches. According to one study by SimilarWeb in 2020, two-thirds (64.82 percent) of Google searches were zero click searches, i.e., a search that "ended without a click to another web property."

As SimilarWeb concludes, "Zero-click searches may mean that users' queries are resolved right on the results page. By displaying ads or its own products, Google can extract value from zero-click searches, while other sites might not. This can be especially troublesome considering Google sources much of the content that appears on its results pages from publishers, and as the proportion of zero-click searches increase, publishers may be losing out on traffic."

For broadcasters we can estimate the value lost due to the zero click problem in news search results, even as Google gains a substantial benefit from that content through advertising revenue.

We estimate that revenue in the model shown in the table below.

Table 3. Estimation of Google Search Revenue from Broadcaster Content

Google Search Model Steps	Average
1. Station Monthly Referrals from Google Text Search per Person 18+ Per Station	0.655
2. Assumed CTR from Google Text Search	7.83%
3. Total Number of Monthly Station Search Zero Click Results Listings per Person 18+ Per Station	7.71
4. Total Number of Yearly Station Search Zero Click Results Listings per Person 18+ Per Station	92.53
5. Total U.S. 18+ Population (000s)	259,249
6. Total U.S. Yearly Number of Station Search Zero Click Results Listings 18+ Population (000s)	23,989,281
7. Total Number of Google Searches 2020 Daily (000s)	3,500,000
8. Total Number of Google Searches 2020 Yearly (000s)	1,277,500,000
9. % Broadcaster News Zero Click Search Result Listings	1.88%
10. Google Search Revenue 2019	$ 98,100,000
11. Broadcasters Related Content Revenue	$ 1,842,151
12. Distribution of Google Search Revenue to Stations	70%
13. Payment for Station Content to Stations ($000s)	$1,289,506

Explanation of Google Search Model by Step:

1. Using actual number of referrals impressions provided to us by various broadcasters that they receive from Google Search, we estimate the number of impressions per month for the 18 and older populations served by these broadcasters.
2. This CTR from a search results page was provided by some broadcasters and was quite similar to other publishers' CTRs, which tend to be higher than non-search results page CTRs due to the users specifying a particular topic/issue in their search query.
3. This number of Google Search Results are the estimated number of search results from broadcaster content that the user did NOT click through to the station website (Step 1 divided by Step 2 minus Step 1).
4. This is a calculated annual amount of the annual number of search results from broadcaster content that the user did NOT click through to the stations' websites. (Step 3 is multiplied by 12)
5. Total 18+ Population for 2019. (Source: Woods Poole Economics)
6. This is a calculated amount of the annual nationwide total of search results from broadcaster content that the user did NOT click through to the stations' websites. (Step 4 is multiplied by Step 5).
7. This is an average number of daily Google searches (Source: https://www.internetlivestats.com/google-search-statistics/).
8. This is a calculated amount of the annual number of Google searches. (Step 7 is multiplied by 365).
9. This is a calculated amount of the percentage of all Google searches attributable to broadcaster content that were NOT clicked through. (Step 6 is divided by Step 8).
10. This is the 2019 value of the revenue generated by Google search (Source: https://abc.xyz/investor/static/pdf/2019Q4_alphabet_earnings_release.pdf?cache=79552b8).
11. This is a calculated amount estimating the value of broadcaster content to Google search revenue total (Step 9 multiplied by Step 10).
12. Assumed distribution between Google and broadcasters for the revenues generated by Google from broadcaster content.
13. This is a calculated amount of the amount that Google would remit to broadcasters for the use of their content. (Step 11 is multiplied by Step 12).

Much like Facebook, Google generates a considerable amount of revenue from the content that broadcasters provide. The exact amount of revenue depends on the number of factors mentioned above (i.e., CTRs of broadcaster content in search results feeds, share of revenue distribution between Google and the broadcasters).

Changing some of those inputs leads to a range of between $921.1 million to $1,658 million, with the $1,289 million shown above in the middle of that range.

Google Search Algorithm and Local News Weighting Value Model

While broadcasters do generate revenue from click throughs in Google Search, many times their search results are ranked very low in the Search Engine Results Pages, and thus, are not clicked through.

This lower ranking is especially disturbing to broadcasters on search topics of local interest (e.g., local weather emergencies, other local news events) because they invest heavily to produce a premium local news product they conclude is not sufficiently recognized and prioritized by Google's search algorithms.[41]

If Google would adjust their algorithm when users search on local topics, users would benefit from the localness of the results, and broadcasters would generate more click throughs.

Broadcasters understand that their search rankings are influenced in part by their own Search Engine Optimization (SEO) strategies and therefore devote significant resources to the SEO initiatives to drive high search listing results.

However, Google's search algorithms are numerous, complicated and fast changing. As Google describes it, "these ranking systems are made up of not one but a whole series of algorithms."[42] These algorithms and a "rigorous" standards process are described in a 175-page document produced by Google.[43]

For broadcasters and others in the SEO business, it is nearly impossible to keep pace with the hundreds of changes Google makes each year to its search algorithms.

The algorithm changes can be very consequential with devasting economic impact to broadcasters. In our broadcast group executive interviews, many referred to a specific period in August-September 2020 where an apparent change in Google's search algorithms led to a roughly 50 percent decline in referred search traffic.

The model below shows the potential impact of a change in Google algorithms that would more appropriately weight the value of local broadcaster produced news in search queries.

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[41] A recent study showed that national news outlets tend to dominate SERPs. The authors of that study conclude, "This likely diversion away from local news has the possibility of shrinking the local information environment, which in turn can produce normatively undesirable effects on political and civic behaviour." https://www.nature.com/articles/s41562-020-00954-0.epdf?sharing_token=MfPYk01P7EPTsmYvgsa58dRgN0jAjWel9jnR3ZoTv0MimfX8OANCMb6lxjJSl-oZO3jLNvOa3cj5hFy4zBHVaKa8ULpeJ5DoMekQC9zu8BSuEt-y2sNm4qWvG2b49cMw9tB51sH4d3pHy1verRBpG--22SD0BjFXc7fq9YYbKY-01AxcW4AHEIoMDMSGgp9jMwz1EVB7WbUKkEPlfuST92zKXcVMXP9IdPpsZW4X4TB5v5YRyHqJ2DDIRpTOJ2xB1hSaD7SxPc6QQDfRxcw_URgPWfDkT4OJarsq7mY9trS8fkYauw8-KThIqq7mR--kqaAyXP0PdXkBjoC72MkWdQ%3D%3D&tracking_referrer=www.washingtonpost.com

[42] https://www.google.com/search/howsearchworks/algorithms/

[43] https://static.googleusercontent.com/media/guidelines.raterhub.com/en/searchqualityevaluatorguidelines.pdf

Table 4. Estimation of Additional Revenue from Improvement in Google Algorithm Content

1. Station Existing Yearly Referrals from Google per Person 18+	7.15
2. Average Station User Session Revenue	$0.01984
3. Yearly Advertising Revenue per Person 18+	$0.14
4. Assumed CTR improvement in from Local Emphasis Algorithm	70%
5. Yearly Advertising Revenue per Person with Improved Local News Weighting in Search Algorithms	$.24
6. Total 18+ Population	259,249
7. Average Number of Stations Per Market	5
8. Yearly Increase in Revenue from Algorithm Improvements ($000s)	$128,646

Explanation of Improved Google Algorithm Model by Step:

1. Using actual number of referrals impressions various broadcasters receive from Google Search, we estimate the number of impressions per year for the 18 and older populations served by these broadcasters.
2. Using actual revenues generated by visits to broadcasters' websites reported to us, we calculate the average revenue per session.
3. This calculated amount is the annual amount broadcasters are generating per population age 18 and over. (Step 2 is multiplied by step 1).
4. This is an assumed increase in the Google search algorithm that would improve the listing of local publishers on local search topics.
5. This is the calculated yearly advertising revenue per person with improved local news weighting in search algorithms (Step 3 is multiplied by Step 4 and added to Step 3).
6. Total 18+ Population for 2019. (Source: Woods Poole Economics)
7. This is the number of local broadcasters within each market providing news content. This varies by market (e.g., large markets have more than 5 stations, smaller markets have less than 5) and includes the local television stations with news operations as well as the local radio stations airing news, news/talk, and sports and other formats that include local news.
8. This is the calculated amount that broadcasters would benefit from an improved Google algorithm that would emphasize local publishers with local search topics. (Step 6 * Step 7 * (Step 5 – Step 3)

The exact amount of increased revenue depends on the improvement in the algorithm. Changing that improvement to either 50% to 100% leads to a range of between $91.9 million to $183.8 million, with the $128.6 million shown above in the middle of that range.

Conclusions

Based on our qualitative research interviewing broadcast group executives and our economic modeling of just a few high economic impact practices of the major tech platforms, we conclude:

- **BIA's Economic Models Estimate Significant Loss for Broadcasters.** Based on BIA's economic models for value that local broadcasters create for tech platform users but are not able to monetize themselves for just the examples of Google Search and Facebook News, we ***estimate a total annual loss of value equal to $1.873 billion.***
    - Facebook News Feed lost value: $455 million with a range of between $325 million to $585 million.
    - Google Search – zero click lost value: $1,289 million with a range of between $921.1 million to $1,658 million.
    - Google Search – improper local news algorithm weighting: $129 million with a range of between $91.9 million to $183.8 million.
- **No Platform Currently Offers a Viable Economic Model for Broadcast News:** There is no viable revenue model from the platforms that pays or enables broadcasters to earn equitable revenue as shown in our economic models for Google Search and Facebook News Feeds under their current practices.
- **Algorithms Do Not Properly Weight Local Broadcast News Value:** The platforms exercise great control of content "reach" and how content is exposed and discovered. Broadcasters imperatively rely on the tech platforms to reach and serve their audiences with premium local news content. However, the discovery and presentation of valued local broadcast news content summaries and referred links is subjugated by complex, opaque and rapidly changing tech platform algorithms that are not optimized to properly weight the value of local news content. A MIT Technology Review article reported that Facebook's algorithms are designed to increase user engagement including logging in regularly, posting things and viewing, commenting, liking or sharing items in their news feed. The issue is, as the article concludes, "The models that maximize engagement also favor controversy, misinformation and extremism: put simply, people just like outrageous stuff."[44]
- **Broadcast News is Not Properly Branded:** Homogenization in the presentation of broadcaster content is a core issue for broadcasters. They invest heavily in their local news brands only to see their premium content surface in search returns and news feeds alongside non-professional journalism or even worse, disinformation sites.
- **Under the Guise of User Privacy, Google Gains Even More Market Power:** Broadcasters rely on referred (i.e., in-bound from Google, Facebook) and direct (i.e., users navigating directly to local station websites and apps) for audience development and content monetization. Once on their owned sites and apps, broadcasters optimize users' news experience to deepen engagement and station loyalty encouraging users to return. Google, Facebook and the other platforms are imposing restrictions on data sharing with third parties, including advertisers, allegedly in the name of privacy, but presumably for competitive reasons. Loyalty conversion and the inability to move audiences from the platform to a place where monetization does occur is severely curtailed by the "zero click" problem that Google and Facebook practices cause for broadcasters.

[44] Karen Hao, "How Facebook Got Addicted to Spreading Misinformation," MIT Technology Review, March 11, 2021. https://www.technologyreview.com/2021/03/11/1020600/facebook-responsible-ai-misinformation/.

- **Tip of the Iceberg**: In this study, we limited our detailed investigation and quantitative economic model to just three areas where Google and Facebook impact the ability of local broadcasters to produce and earn fair value for their local news. The roles of Amazon and Apple in the local news ecosystem also are increasingly impactful. And even though we looked at Google and Facebook in terms of major and quantifiable impact areas, many of their services and terms beyond the scope of this study have major impacts on local news media. This influence will only grow in the future unless these tech platforms are constrained, most likely by government action.

Appendix A: Tech Platform Terms and Revenue Share Policies

Table 5. Google Platform Services and Broadcaster Revenue Share

Google Platform Service	Broadcaster Revenue Share	Terms
Search Network	No	• Broadcasters are not compensated by Google when their content appears in the search results. • Google sells Google Ads as a source of revenue in Search Engine Results Pages. • Google argues that its search returns refer valuable direct traffic to broadcasters' digital news websites and apps where then can monetize these audiences. • Broadcasters are challenged by the "zero click" problem with Google Search. This refers to the situation that a Google Search return includes enough publisher content that the user is satisfied without clicking ("zero click") on the Search link to be referred to the publisher site where the publisher's ads can be served from its own site to monetize its content.

AdSense	Yes	• AdSense is a service that uses Google's contextual content algorithms to insert ads in publisher webpages.
		• Google has two types of revenue shares available to publishers:
		  ○ For displaying ads with AdSense for content, publishers receive 68% of the revenue recognized by Google in connection with the service.
		  ○ For AdSense for search, publishers receive 51% of the revenue recognized by Google.

AdMob	Yes	• AdMob is a Google-owned mobile app ad network that allows broadcasters to monetize their station owned mobile apps. • Google shares 60 percent of AdMob revenue with publishers and retains 40 percent.
Ad Manager	Yes	• Ad Manager: Google describes Ad Manager as an ad management platform for large publishers who have significant direct sales. Ad Manager provides granular controls and supports multiple ad exchanges and networks, including AdSense, Ad Exchange, third-party networks, and third-party exchanges.
Google News	Yes	• The Publisher Center for Google News allows broadcasters to generate ad revenue or to monetize their content directly (i.e., subscriptions).
Google News Showcase	Yes	• Google licenses curated content from publishers to provide to Google users for free.
Google News Initiative	Yes	• The Google News Initiative provides funding and other support to encourage publisher participation on its platforms.
Google Play	Yes	• Effective July 2021, publishers receive 85% for first $1M in sales, then 70% of subsequent sales.
Google AMP	Yes	• Google Accelerated Mobile Pages (AMP) refers not to an ad channel that publishers can monetize but rather to an open web component framework initiative that Google helped initiate and support. Publishers can produce mobile web pages using the AMP framework so that content loads faster and creates a better user experience. • Publishers can monetize their AMP pages including Google or other ad exchanges. There are pros and cons with AMP pages for publishers to consider.

Source: Compiled by BIA Advisory Services from Google and other sources, April 2021.

Table 6. Facebook Platforms and Broadcaster Revenue Share

Facebook Platform Service	Broadcaster Revenue Share	Terms
Facebook News Feed	No	• The Facebook News Feed is the main feed Facebook provides to users based on its proprietary and changing content ranking algorithms. • Broadcaster content can appear in the News Feed based on a user's social graph, e.g., what sources they follow, friends and family recommendations or if it is content Facebook algorithms rank as likely to be interesting to the user. • Publishers are not allowed to serve ads in users' News Feeds. • Users may click on News Feed links to go directly to the publishers' sites, or to Facebook Instant Articles that are publisher content optimized by Facebook for mobile users. • Publishers can purchase sponsored posts in the News Feed.
Facebook Instant Articles	Yes	• Broadcasters may sell ads in Instant Articles and keep 100 percent of their direct sold ads. • Remnant inventory can be monetized via the Facebook Audience Network. • Instant Articles are publisher produced content produced to Facebook standards to optimize the experience for Facebook mobile users.
Facebook Audience Network	Yes	• Broadcasters have a variable revenue share with Facebook Audience Network. • Facebook's position is, "We believe that the Audience Network provides a mobile advertising experience that will better help publishers and developers monetize their apps, but we cannot commit to a specific revenue share at this point. Real-time reporting and expected payout are available in the "Audience Network" section in your app settings page." • Facebook Audience Network serves Facebook ads to third-party apps and content.
Facebook News	Yes	• Facebook in the past has licensed content from news publishers it qualifies for the program. More recently, Facebook has begun striking news deal such as the licensing arrangement with News Corp to license media content in Australia.
Facebook Watch	Yes	• Video creators keep 55 percent of Watch revenue, Facebook keeps 45 percent.
Facebook Live	Yes	• Fan subscriptions. In-stream video ads.

Source: Compiled by BIA Advisory Services from Facebook and other sources, April 2021.

Table 7. Apple Platforms and Broadcaster Revenue Share

Apple Platform Service	Broadcaster Revenue Share	Terms
Apple News	Yes	• Apple shares 100 percent of ad revenues with broadcasters from their direct sold and 30 percent of "back fill" ad inventory Apple sells. Publisher may also earn 50 percent of "pooled" ad revenue sold outside but near publisher content. • Apple News is organized by channels (publications) and assigned to topics that users can follow. • The Today feed in the app is based on an algorithm for matching channels and topics to user interests. • Broadcasters apply to be accepted to Apple News and submit content in Apple News Format so it renders on Mac, iPhones, and iPad devices. • Publishers must follow Apple News Ad Guidelines and Apple News Ad Guidelines

Apple News Plus	Yes	• Apple News Plus is a news subscription for users to access publisher content behind a paywall. This is most typical for print publishers not broadcasters. • Apple's standard fee is 30 percent of the publisher's subscription fees. • Beginning in December 2020, Apple introduced a new program for smaller businesses and reduced its revenue split to 15 percent for those qualifying.
Apple App Store	Yes	• There are four typical App Store revenue models: Free (ad-supported), Freemium (free with ads with options to upgrade with in-app purchases), Subscription, Paid App (pay once). • Publishers receive 70 percent of App Store revenue in most cases, but some smaller publishers may be eligible to receive 85 percent. For subscriptions, Apple's revenue share to publishers increases in subsequent years.
Apple Search Ads	Yes	• Apple Search Ads promote iOS apps in the App Store. • App publishers keep 100 percent of the ad revenue they produce.

Source: Compiled by BIA Advisory Services from Apple and other sources, April 2021.

Table 8. Amazon Platforms and Broadcaster Revenue Share

Amazon Platform Service	Broadcaster Revenue Share	Terms
Amazon News	Yes	• Publishers monetize their content in Amazon News via Amazon Publisher Services (APS). (See Amazon Publisher Services row in this chart).
Fire TV News App	Yes	• Broadcasters may license content via a distribution agreement for Amazon News. • Amazon News is a free ad-supported service offered on Amazon's Fire TV platform. • Fire TV users access the "Local News" tab within their Fire TV news app. Fire TV will automatically detect the closest metro area and add the local news station (or stations) within the tab. • Amazon has done distribution deals with ABC O&O Stations, CBSN, Tegna, Cox, and The E.W. Scripps Company. • Revenue share to stations is 55 percent.
Amazon Publisher Services	Yes	• Amazon Publisher Services (APS) comprises a suite of cloud-based publisher platform services including Transparent Ad Marketplace, Unified Ad Marketplace, and Shopping Insights Service. • The APS terms and conditions are presented here. • APS provides publishers access to Amazon's web and mobile app programmatic ad marketplace and services. • Amazon Publishers Services does not charge publishers a revenue share or monthly fees. SSPs pay a nominal $0.01 CPM per impression served.
Amazon Appstore	Yes	• Amazon Developer Services revenue opportunities vary according to specific publisher agreements with Amazon, e.g., for Alexa Voice Services, Mobile Ad Network, etc.

Source: Compiled by BIA Advisory Services from Amazon and other sources, April 2021.