

THE FACTS

Creative industries have embraced new digital models to expand audience access to creative works.

- More and more content is being made available online legally through a variety of distribution platforms – offering audiences content when, where, and how they want it.
 - Video streaming accounts for a large and growing share of content industry revenues – indeed, there are more than 500 licensed online video portals worldwide and, as of 2018, more video streaming subscribers than pay-TV subscribers.¹
 - Creative industries are working with popular, freestanding platforms – some with acquisition budgets of billions of dollars per year – like Amazon Prime, Hulu, Netflix, iTunes, Apple Music, Pandora, and Spotify.
 - Streaming has become the most prevalent and significant format in the modern music industry. More than 100 million users subscribe to paid music streaming services like Spotify and Apple Music, which now account for 50% of total recorded music revenues.²
 - Each year, content spending increases for many streaming services. In 2017, Netflix spent \$6.3 billion on original and acquired programming, while Amazon spent \$4.5 billion, Hulu spent \$2.5 billion, and Apple spent \$1B.³ In 2019, Netflix is expected to spend \$15 billion and Amazon to spend up to \$6 billion. Hulu is expected to increase spending as well and Apple is expected to spend more than \$4 billion in 2022.⁴
 - In recent years, numerous broadcasters and television channels have launched stand-alone streaming services that do not require consumers to have a cable subscription – examples include CBS All Access,⁵ HBO Now,⁶ Showtime, StarzPlay, DirectTV Now, NatGeo TV, FOXNOW, Fox Sports Go, Watch HGTV, and Disney Plus⁷.
 - In January 2019, Netflix reached 139 million subscribers worldwide.⁸ As of April 2019, Netflix users collectively stream 164.8 million hours of video per day⁹ and the service is available in nearly 200 countries and territories around the world.¹⁰
 - In 2018, Netflix put out nearly 1,500 hours of new original series, movies, and other productions.¹¹
 - Hulu offers hundreds of thousands of hours of current season programming, premium original content, films, and full seasons of hit television series to subscribers.¹² According to Hulu, its users streamed more than 26 million hours of content per day in 2018.¹³

¹ [Impacts of Digital Video Piracy on the U.S. Economy](#), GIPC, June 2019

² [Global Music Report 2017](#), 4.28.17

³ [Netflix spends more on content than anyone else on the internet — and many TV networks, too](#), 2.26.18

⁴ [How the epic ‘Lord of the Rings’ deal explains Amazon’s slow-burning media strategy](#), 3.8.19

⁵ [CBS launches expansive digital subscription service](#), 10.16.14

⁶ [HBO Now launches on Apple TV](#), 4.7.15

⁷ [Disney Plus streaming service: Release date, price, shows and movies to expect](#), 4.6.19

⁸ [Netflix now has 139 million subscribers](#), 1.17.19

⁹ [Netflix Users Collectively Stream 164.8 Million Hours of Video Using Nearly 500 Million GB of Data Every Day](#), 4.2.19

¹⁰ [Where Is Netflix available?](#) 2019

¹¹ [Keeping up with Netflix originals is basically a part-time job now](#), 1.1.19

¹² [About Hulu](#), 10.11.19

¹³ [Hulu Says Viewers Streamed 26M hours of content per day in 2018](#), 12.14.18

- Amazon Prime has over 100 million subscribers globally who get access to thousands of movies, television shows, songs, and books.¹⁴ Amazon’s streaming success is driven by three factors: the growth of its Fire TV streaming device, the roll-out of a standalone streaming video service, and increased investment in both original content – with Amazon reportedly on pace to spend \$7 billion on video and music content in 2019.¹⁵
- Cable and satellite providers increasingly offer expansive online, anytime access to programming through their own websites and apps (such as Xfinity, DirecTV, Sling TV, and TWC TV) and through standalone apps such as HBO Go, Showtime Anytime, WatchESPN, CBS All Access, Bravo Now, FXNow, and the NBC app.
 - Comcast subscribers watched more than 6 billion hours of Xfinity On Demand content in 2018.¹⁶
 - Verizon’s FiOS service offers more than 190,000 titles through Video On Demand (VOD).¹⁷
 - In 2009, entertainment companies began collaborating with cable companies on TV Everywhere – an initiative that allows cable subscribers to access all their video programming online outside the home on any device, providing anytime, anywhere access to live and On Demand content.¹⁸ Today, NBC, ABC, FOX, ESPN, HBO, Disney, Discovery Networks, and many others participate in delivering their content via the web to a multitude of personal devices.¹⁹
 - 53% of pay-TV households have used a TV Everywhere service, up from 43% in 2012.²⁰
- Digital retailers are also expanding access to legitimate content.
 - Walmart acquired content delivery and media company VUDU, which allows customers to access digital versions of Blu-ray and DVD films purchased through the retailer.²¹
- Streaming media players (Amazon Fire, AppleTV, Google Chromecast, and Roku), game consoles (PlayStation and Xbox), and other devices are expanding access to easy, affordable, and legal streaming.
- Searching for legitimate film and television content is easier than ever before.
 - U.S. services that help audiences find legitimate content include [CanIStream.it](#), [Decider](#), [GoWatchit.com](#), [fan.TV](#), [FindAnyFilm.com](#), [ReelGood](#), and [JustWatch](#).
- In a 2016 study, the research firm SNL Kagan²² selected 857 film titles and 933 television titles (a sample representing the most popular and most critically acclaimed works) and analyzed their availability across 47 legitimate online video-on-demand services.
 - 98% of premium films and 94% of premium television series were digitally available on at least one of the online services.
 - 100% of 2014 U.S. top 100 box office hits were available on at least one service in 2015.
 - 100% of U.S. top 20 box office hits each year from 2002-2012 were available legally.
 - 99% of U.S. top 100 popular television series hits from each year 2013 to 2015 were available legally.

¹⁴ [Amazon Has More Than 100 Million Prime Subscribers, Jeff Bezos Discloses](#), 4.18.18

¹⁵ [Amazon on pace to spend \\$7 billion on video and music content this year, according to new disclosure](#), 4.26.19

¹⁶ [Comcast Debuts Xfinity Flex Streaming Service For Internet-Only Customers](#), 3.21.19

¹⁷ [Verizon Fios TV Guide, Channel Lineup and Listings](#), 2019

¹⁸ [Comcast expands online video to all cable+Internet customers](#), 12.15.09

¹⁹ [Discovery Bows TV Everywhere App](#), 12.01.15

²⁰ [TV Everywhere Unknown But Being Used More](#), 12.22.15

²¹ [TECHSPOT: Walmart announces disc-to-digital service for DVD and Blu-ray discs](#), 3.14.12

²² [MPAA/SNL Kagan Report: Film and TV Title Availability in the Digital Age](#), 2016

- 98% of the “AFI Top 100 Films” are legally available online in the U.S.
- Of the 60 top indie film hits from 2013-2015, 98% were legally available online in the U.S.
- There has been an increase in the number of the most popular and critically-acclaimed digital films and television series made available when compared to a similar study carried out by KPMG two years ago.²³ 97% of premium films were digitally available on at least one of the online VOD services we reviewed – up from 94% in 2013. We also found that 93% of premium television series were digitally available on at least one of the online VOD services we reviewed – up from 85% in 2013.

The creative industries contribute substantially to the U.S. economy.

- According to a report released in December 2018 by the International Intellectual Property Alliance (IIPA), the core copyright industries (film, television, music, radio, books, photography, newspapers, and software in all formats) added more than \$1.3 trillion of value to the U.S. GDP in 2017, accounting for 6.85% of the U.S. economy. The value added to the U.S. GDP by the total copyright industries approached \$2.2 trillion, accounting for 11.59% of the U.S. economy.²⁴
 - From 2014 to 2017, core copyright industries grew at an aggregate annual rate of 5.23%, while the average growth rate of the entire U.S. economy during the same period was only 2.21%.²⁵ This means core copyright industries grew 137% more than the remainder of the U.S. economy.
 - U.S. copyright products sold overseas amounted to \$191 billion in sales for 2017. The international sales of selected copyright industry sectors exceed global sales of other major U.S. industries, including electronic equipment, appliances, and components (\$174.2 billion); agricultural products (\$138.2 billion); chemicals (excluding pharmaceuticals & medicines) (\$137.0 billion); aerospace products and parts (\$134.4 billion); and pharmaceuticals and medicines (\$55.8 billion).
 - Over a three-year period, spanning 2014 through 2016, the average annual growth rate for key arts-and-culture fields, including broadcasting, movies, streaming, publishing, and the performing arts, was 4.2%, compared to a 2.2% growth rate for the entire American economy.²⁶
 - Core copyright industries employed over 5.7 million people in 2017, while total copyright industries employed nearly 11.6 million workers.²⁷
 - In 2016, arts-and-culture employment generated nearly \$400 billion in wages.²⁸
 - The national average salary for core copyright workers was \$98,336 in 2017.²⁹

²³ [KPMG Report: Film and TV Title Availability in the Digital Age](#), 9.25.14

²⁴ [Copyright Industries in the U.S. Economy](#), 2018

²⁵ [Copyright Industries in the U.S. Economy](#), 2018

²⁶ [The U.S. Arts and Cultural Production Satellite Account](#), 1998-2016

²⁷ [Copyright Industries in the U.S. Economy](#), 2018

²⁸ [The U.S. Arts and Cultural Production Satellite Account](#), 1998-2016

²⁹ [Copyright Industries in the U.S. Economy](#), 2018

- The national average annual salary for production employees is well above the national private-sector average at \$70,498.³⁰
- The contribution of the creative arts to America’s economy is equivalent to nearly half of Canada’s total GDP, and bigger than the [economic output](#) of Sweden or Switzerland.³¹
- In 2018, movie theaters drew more than twice as many people as all theme parks and major U.S. sports combined (baseball, basketball, hockey, and football).³²
- In 2017, the film and television sector generated \$17.2 billion in exports worldwide and a trade surplus of \$10.3 billion – larger than other major sectors, including telecommunication, transportation, mining, legal, insurance, information, and health-related services.³³
- The nonprofit arts industry:
 - Generates \$135 billion in revenue
 - Employs 4.1 million people
 - Returns \$9.6 billion in tax revenue³⁴
- The U.S. motion picture industry is dominated by small businesses with 87% of entertainment companies employing fewer than 10 people.³⁵
- The positive impact of movie and television production reaches every state.³⁶
 - Arizona: Film and television directly supports 10,176 jobs and \$390.90 million in wages annually.³⁷
 - California: The film and digital media industry accounts for 6.1% of jobs in Los Angeles County.³⁸ In 2016, the film and television industry directly employed 218,452 workers, with \$22.24 billion paid out in wages.³⁹ The total value added to the California economy by the industry was \$49.1 billion in 2015.⁴⁰
 - Florida: Film and television directly supports 31,245 jobs and \$2.02 billion in wages annually.⁴¹
 - Georgia: Georgia outpaced the previous frontrunner, California, as the top location for feature film production in 2016.⁴² The film and television industry had a statewide economic impact of more than \$7 billion during the 2016 fiscal year.⁴³ The industry supports 28,472 jobs in Georgia and \$2.15 billion in wages annually.⁴⁴

³⁰ [Copyright Industries in the U.S. Economy](#), 2018

³¹ [The U.S. Arts and Cultural Production Satellite Account](#), 1998-2016

³² [MPAA 2018 THEME Report, 2019](#)

³³ [The Economic Contribution of the Motion Picture & Television Industry to the United States](#), derived from U.S. Bureau of Labor Statistics (BLS), 2018

³⁴ [Americans for the Arts](#), 2017

³⁵ [The Economic Contribution of the Motion Picture & Television Industry to the United States](#), derived from U.S. Bureau of Labor Statistics (BLS), 2018

³⁶ [The Economic Contribution of the Motion Picture & Television Industry to the United States](#), derived from U.S. Bureau of Labor Statistics (BLS), 2018

³⁷ [Film & Television Contribution by State](#), 2017

³⁸ [Film and Digital Media Industry: Los Angeles County Perspective](#), 2018

³⁹ [Film & Television Contribution by State](#), 2017

⁴⁰ [The Film Industry’s Contributions to National and State Economies](#), 2018

⁴¹ [Film & Television Contribution by State](#), 2017

⁴² [2016 Feature Film Study](#), 2017

⁴³ [2016 Feature Film Study](#), 2017

⁴⁴ [Film & Television Contribution by State](#), 2017

- Georgia has become the third largest film and television production center after California and New York with a reported \$2 billion in direct production spending in fiscal year 2016, according to the Georgia Department of Economic Development. Furthermore, Georgia's IATSE Local 479's membership grew almost 10x more in 2015 than it did in 2005. Film and television productions that benefitted from the state's 30% tax credit had an economic impact of over \$9 billion in 2017 alone and represented \$2.7 billion in direct spending for the state.⁴⁵
- Illinois: Film and television supports 21,006 jobs and \$1.09 billion in wages annually.⁴⁶ The film and television money spent on goods and services, which includes wages paid to Illinois residents, was an estimated \$473 million in 2018.⁴⁷
 - Louisiana: The Louisiana entertainment tax credit programs resulted in an additional \$488 million in new indirect sales in 2018, adding a total of nearly \$946 million in new spending. This new spending supported over 7,400 jobs (2,588 direct and 4,876 indirect) as well as \$331 million in annual earnings.⁴⁸
 - Massachusetts: From 2006 to 2014, the state disbursed nearly \$550 million in tax credits to production companies. In return, the state generated approximately \$77 million in new revenue.⁴⁹
 - Minnesota: Film and television supports 7,826 jobs and \$302.72 million in wages annually.⁵⁰
 - New Mexico: According to the Governor, the film industry invested nearly \$390 million into New Mexico's economy in 2016. A total of 63 film and television productions were filmed in New Mexico that year.⁵¹ Netflix has chosen New Mexico as the site of a new U.S. production hub and is forecast to spend over \$1 billion in the state over the next decade.⁵²
 - New York: Film and television supports more than 300 productions, 86,275 jobs, and \$9.88 billion in wages annually.⁵³ Since January 1, 2011, 1,541 applications have been accepted to the Film Production Tax Credit program, generating an estimated \$24.9 billion in spending and 1,490,217 hires.⁵⁴
 - North Carolina: Film and television supports 12,741 jobs and more than \$762.36 million in wages annually.⁵⁵
 - Ohio: The film and television industry has filmed over 100 projects in the state over the past decade, pumping more than \$500 million into the local economy and creating the equivalent of 3,000 full-time jobs.⁵⁶
 - Tennessee: Jobs in the entertainment industry have grown by 8% since 2010, with nearly 4,400 Tennesseans earning an average salary of \$59,800 before benefits. That figure ranks

⁴⁵ [Georgia Film Industry Means Big Boost for Micro-Niche Businesses](#) 9.4.18

⁴⁶ [Film & Television Contribution by State](#), 2017

⁴⁷ [Illinois film industry generated \\$473M in 2018](#), 3.5.2019

⁴⁸ [Economic and Fiscal Impact of Louisiana Entertainment Tax Credits](#), 2019

⁴⁹ [ACTION! Film workers make their case to keep industry tax credit](#), 2.17.17

⁵⁰ [Film & Television Contribution by State](#), 2017

⁵¹ [FACT SHEET ON THE NEW MEXICO FILM INDUSTRY](#), 2017

⁵² [Netflix to create production hub in Albuquerque, spend \\$1 billion over next 10 years](#) 10.9.18

⁵³ [Film & Television Contribution by State](#), 2017

⁵⁴ [From Montauk to Buffalo, New York State is camera-ready and film-friendly](#), 2019

⁵⁵ [Film & Television Contribution by State](#), 2017

⁵⁶ [Cleveland's film industry could be an economic blockbuster](#) 10.4.18

21.3% higher than the average wage of all industries in Tennessee. The state also ranks seventh in the country in employment by the entertainment industry.⁵⁷

- Utah: The Sundance Institute spent over \$17 million putting on its 2017 film festival, generating an economic impact of over \$150 million and contributing an estimated \$14 million in state and local tax revenue. Every year, the festival creates around 2,800 jobs for Utah residents, generating nearly \$80 million in earnings for its employees.⁵⁸

Specifically, each film and television production significantly impacts local economies.

California:

- California’s expanded Film & Television Tax Credit Program 2.0 is on track to generate \$6.0 billion in direct in-state spending, including \$2.25 billion in qualified wages, \$1.89 billion in qualified vendor expenditures, and another \$1.85 billion in other expenditures, which do not qualify for tax credits.⁵⁹
- Collectively, Program 2.0 productions are hiring more than 18,000 cast and 29,000 crew members, and, enacted in August 2018, Program 3.0 will extend the tax credit through 2025.⁶⁰
- The hours worked by members of California’s below-the-line unions rose 15.6% for 2017 compared to 2014, the year before Program 2.0 began. Furthermore, SAG-AFTRA employment data indicates that the number of background actors working in scripted film and television increased 22.4% in 2017 compared to 2014.⁶¹
- California’s IATSE Local 44 has not experienced substantial membership growth since the mid-1990s. However, the first quarter of 2016 saw a 4.9% growth in membership – breaking the previous trend.⁶²
- FilmL.A., the not-for-profit film office serving the Greater Los Angeles region, reported a 12% increase in on-location feature film production and a 4.6% increase in on-location television shoots in 2016 compared to the same period in 2015.⁶³
- Under Program 2.0, 15 television series have moved to California. Collectively, these projects are contributing more than \$1.2 billion in direct spending in California.⁶⁴
- Since Program 2.0 has been in effect, California has attracted 10 big-budget feature films (budgets over \$75 million), which have received \$157 million in tax credits and spent \$437 million in qualified wages.⁶⁵
- California’s updated tax credit program encourages productions to take advantage of locations throughout the state. Data show that when productions film on-location outside the Los Angeles area, they typically spend \$50,000 to \$100,000 per day in the local region. This benefits many small businesses, including grocery stores, hardware stores, gas stations,

⁵⁷ [Tennessee’s film industry experiencing significant growth](#), 2.19.17

⁵⁸ [The Sundance Economy: How Robert Redford’s Film Festival Remakes Utah Every Year](#), 6.14.17

⁵⁹ [Film and Television Tax Credit Programs](#), 2018

⁶⁰ [Film and Television Tax Credit Programs](#), 2018

⁶¹ [Film and Television Tax Credit Programs](#), 2018

⁶² [Film and Television Tax Credit Programs](#), 2018

⁶³ [Los Angeles Location Film and TV Shoots Jump](#), 2017

⁶⁴ [Film and Television Tax Credit Programs](#), 2018

⁶⁵ [Film and Television Tax Credit Programs](#), 2018

hotels, and many other retail businesses. Film and television projects also create local hires for service-focused businesses like food catering and construction. In addition, such spending impacts local governments directly with payments to local police and fire departments, as well as revenue from local permit fees.⁶⁶

- In California, the average one-hour drama pilot can directly employ 150-750+ people. FilmL.A. estimates that approximately \$303 million was spent on television pilot production in Los Angeles during the 2016-17 development cycle.⁶⁷
- An average \$70 million feature film generates \$10.6 million in California state sales and income taxes.⁶⁸
- The second season of *The Orville* accounted for \$80 million of direct production spending in California and employed nearly 300 crew members.⁶⁹
- Netflix's show *13 Reasons Why* spent more than \$37.5 million in California's Alameda, Contra Costa, Marin, Napa, San Francisco, Solano, and Sonoma counties over the course of its first two seasons.⁷⁰
- *Ballers*, *CHiPs*, *Magic Camp*, *Rosewood*, *Suburbicon*, and *This Is Us* contributed to \$1.8 million in location spending in Orange County from 2015 to 2018.⁷¹
- HBO's *Westworld 2* spent \$107 million on production in California and employed 265 cast and crew members, according to data from the California Film Commission.⁷²
- Production of ABC's *The Rookie* generated more than \$65 million for the local state economy, including more than \$25 million in wages to over 3,000 local workers.⁷³
- The production of Paramount's *Bumblebee* contributed more than \$84.8 million to the California economy. The production hired more than 2,800 local workers, who took home nearly \$50.5 million in wages. The production also supported 1,250 local vendors.⁷⁴

Georgia:

- In Georgia, the film and television industry directly employs 28,000 people and pays more than \$2.15 billion in wages. There are over 2,700 motion picture and television industry businesses in the state, including 1,822 production-related companies.⁷⁵
- The production of *Diary of a Wimpy Kid: The Long Haul* spent over 200 days filming in Georgia and generated over \$14 million in local economic activity. Nearly 2,000 people worked on the film, bringing home more than \$7.8 million in wages.⁷⁶
- The production of *Rampage* spent over \$8 million on in-state set decoration purchases, hardware, lumber, and other supplies in Georgia.⁷⁷

⁶⁶ [Film and Television Tax Credit Programs](#), 2018

⁶⁷ [2017 Pilot Production Report](#), 2017

⁶⁸ [Film and Television Tax Credit Programs](#), 2018

⁶⁹ [The Orville's Space Adventures Via Los Angeles](#), 11.13.18

⁷⁰ [Film and Television Tax Credit Programs](#), 2018

⁷¹ [Film and Television Tax Credit Programs](#), 2018

⁷² [2017 Pilot Production Report](#), 2017

⁷³ [ABC's The Rookie Reports for Duty with \\$65 Million Pumped into the Golden State Economy](#) 10.17.18

⁷⁴ [Paramount's Bumblebee Injects more than \\$84.8 Million into California Economy](#) 12.21.18

⁷⁵ [Film & Television Contribution by State](#), 2017

⁷⁶ [Production of 20th Century Fox's Diary of a Wimpy Kid: The Long Haul Contributed Over \\$14 Million to the Georgia Economy](#), 5.19.17

⁷⁷ [Dwayne Johnson's "Rampage" contributed almost \\$50 million to Georgia economy](#), 4.12.18

- During its nearly 200 days of production in the state of Georgia, *The Fate of the Furious* contributed over \$65 million to the local economy and employed over 1,600 local workers, who took home more than \$25 million in wages. The production spent over \$17.6 million on local rentals and purchases; over \$4.3 million on hardware and lumber supplies; more than \$3.2 million on lodging; over \$2 million on catering, bakery goods, and other food items; and more than \$2.7 million on transportation, including truck and car rentals.⁷⁸
- Popular television shows like *The Walking Dead* attract tourists to Georgia when fans flock to see filming sites.⁷⁹
- *First Man* generated \$33 million for Georgia’s economy, employing more than 3,600 men and women. Businesses across Georgia also benefited from more than \$20 million spent on various in-state expenses.⁸⁰

New York:

- In 2016, New York was home to more than 150 television series and over 100 movies. The state’s film and television industry directly employs nearly 90,000 people and pays nearly \$10 billion in wages.⁸¹
- FX’s *The Americans*, Season 5, generated more than \$60 million for New York’s economy.⁸²
 - For Season 5, the show also employed nearly 3,000 workers and actors.⁸³
- Post-production contributes meaningfully to the New York State economy, with nearly 20% of all U.S.-based post-production firms calling New York home. Post-production in the state generates 24,050 jobs, with the average income for post-production workers being \$83,400.⁸⁴

The United States government’s lack of support for the arts does not occur in other countries, nor is it reflected in the creative industry’s economic impact here at home.

- The U.S. invested \$153 million in its artists through the National Endowment for the Arts (NEA) in 2018.⁸⁵
- The European Union will invest \$1.8 billion in supporting more than 300,000 artists in Europe in 2018.⁸⁶
- More than 80% of schools in the U.S. have seen their arts education budgets cut since 2008.⁸⁷

Despite the availability of legitimate streaming options, the piracy ecosystem is enormous in scope and has global financial repercussions for all creative industries and threatens the viability of these services.

- Piracy is a for-profit criminal industry with a significant negative impact on the creative economy.
 - There is a direct link between piracy and organized crime.

⁷⁸ [Production of The Fate of the Furious press release \(MPAA\)](#), 4.13.17

⁷⁹ [Entertainment industry brings \\$9.5 billion to Georgia](#), 2.21.18

⁸⁰ [Universal’s Lunar Drama *First Man* Blasts Off With Major Payload for Georgia Economy](#) 10.12.18

⁸¹ [Film & Television Contribution by State](#), 2017

⁸² [TV Productions Provide Boost To Local Economies \(MPAA\)](#), 9.17.17

⁸³ [Empire State Development, “Film Tax Credit – Quarterly Report”, 12.31.18](#)

⁸⁴ [PNYA Newsletter Volume 6, Issue 1](#), February 2019

⁸⁵ [National Endowment for the Arts](#), 2018

⁸⁶ European Commission, 2018

⁸⁷ [U.S. News & World Report](#), 2014

- Piracy is theft that is orchestrated by for-profit criminal enterprises, representing hundreds of millions of stolen dollars in business.⁸⁸
- A 2009 RAND Corporation study found that “[t]here is compelling evidence of a broad and continuing connection between film piracy and organized crime.”⁸⁹
- A 2010 Congressional Research Service study found that “organized criminals are becoming increasingly involved” in piracy and counterfeiting crimes.⁹⁰
- Pirated products finance organized crime without much public backlash: It generates billions in profits but is not perceived as a threat.⁹¹
- In Australia, 21% of adults, ages 18 – 64, have admitted to some form of piracy.⁹²
- The economic harm from piracy is large and demonstrable.
 - In a 2019 report from the U.S. Chamber’s Global Innovation Policy Center, they found that global piracy cost the U.S. economy at least \$29.2 billion in lost revenue every year, and as much as \$71 billion in losses.⁹³
 - An academic review of the empirical literature on piracy’s impact by professors at Carnegie Mellon University concluded: “The vast majority of the literature (particularly the literature published in top peer-reviewed journals) finds evidence that piracy harms media sales.”⁹⁴
 - A joint study by professors at Carnegie Mellon and Wellesley College found that legitimate digital sales of major films increased by 6.5-8.5% in the four months after the illegal website Megaupload was shut down.⁹⁵
 - Digital TV Research, a British media consultancy, estimated that piracy cost the global movie and television business \$37.4 billion in lost revenue in 2018 – an 18% increase from 2017.⁹⁶
- The volume of online piracy is enormous.
 - As streaming has become the preferred means of consuming content, pirate sites have followed suit, with visits to film and television piracy streaming sites growing by 34% from 2015⁹⁷ to 2016.⁹⁸
 - The cost of piracy to Netflix, Amazon, and their streaming peers will top \$50 billion between 2016 and 2022.⁹⁹
 - In 2018, the United States suffered the biggest piracy losses, followed by China, Brazil, India, the U.K., South Korea, and Mexico.¹⁰⁰
- Streaming piracy devices and apps facilitate access to millions of pieces of content.
 - Expensive equipment is no longer needed and bulky machines have been replaced by much smaller HDMI-capable devices.¹⁰¹

⁸⁸ [Good Money Still Going Bad: Digital Thieves and the Hijacking of the Online Ad Business](#), 2015

⁸⁹ [Film Piracy and Its Connection to Organized Crime and Terrorism](#), 2009

⁹⁰ [Organized Crime in the United States: Trends and Issues for Congress](#), 12.22.10

⁹¹ [A Victimless Act? How Organized Crime Profits from Pirated Goods](#), 1.23.19

⁹² [Creative Content Australia 2017 Piracy Research Study](#), 12.1.17

⁹³ [Impact of Digital Piracy on the U.S. Economy](#), 6.18.19

⁹⁴ [Assessing the Academic Literature Regarding the Impact of Media Piracy on Sales](#), 8.19.12

⁹⁵ [Gone in 60 Seconds](#), March 2013

⁹⁶ [Digital TV Research](#), October 2017

⁹⁷ [MUSO’s Global Film & Television Piracy Insights Report 2016 Released](#), 2016

⁹⁸ [MUSO’s Global Film & Television Piracy Insights Report 2017 Released](#), 2017

⁹⁹ [Piracy Set to Cost Streaming Players More Than \\$50 Billion, Study Says](#) 11.14.17

¹⁰⁰ [Piracy Set to Cost Streaming Players More Than \\$50 Billion, Study Says](#) 11.14.17

¹⁰¹ [Police Conducting “World’s Largest” Pirate Box Crackdown](#), 5.28.16

- Nearly 95% of television piracy traffic is driven by streaming piracy devices and apps.¹⁰²
- Typically, in small set-top or dongle format, these products can be loaded with media software from Google’s Play Store or invariably “side-loaded” with more unofficial products such as customized versions of Kodi, Showbox, and Popcorn Time.¹⁰³
- Some sell so-called “fully-loaded Kodi boxes”, which are preloaded with third-party add-ons that can access pirated content.¹⁰⁴
- Nearly 9% of North American households have, within the home, a device that is running Kodi software that may be used to stream piracy applications.¹⁰⁵
- A recent report from Sandvine found that more than 75% of users who access pirated content were using streaming piracy devices and apps.¹⁰⁶
- In 2019, the criminal enterprises that stole live TV feeds and resold them online generated about \$1 billion in sales in the U.S. alone, according to a [report](#) from nonprofit group Digital Citizens Alliance and Nagra, a unit of antipiracy consulting firm Kudelski Group.¹⁰⁷
- Research has shown that 31% of Australians, ages 12 – 64, watch movies or television shows through an illicit set top box. One in four teens use streaming piracy devices to access pirated content. Amongst adults, that figure is one in five.¹⁰⁸
- In addition to peer-to-peer file sharing and streaming pirate sites, cyberlockers are another piece of the piracy ecosystem.
 - A cyberlocker is a third-party online service that supports the large-scale peer-to-peer distribution of files around the world, placing few limits on who can download or stream a file.
 - Visitors to the top 10 streaming cyberlocker sites increased by 15.8%, from 86 million visitors at the end of Q3 2016 to 99.6 million at the end of Q4 2016. Visitors to the top 10 direct download cyberlocker sites increased by 6% unique monthly visitors from 68.7 million at the end of Q3 2016 to 72.8 million at the end of Q4 2016.¹⁰⁹
 - In 2016, there were 191 billion visits to film and television piracy sites.¹¹⁰
 - The top 30 cyberlockers make nearly \$100 million per year from stolen creative works.¹¹¹
 - The most profitable direct download cyberlocker made an annual profit of \$15.2 million with an 86.1% profit margin, according to a study conducted by the Digital Citizens Alliance and NetNames.¹¹²
 - On average, premium direct download accounts cost \$10.57/month with discounts for users who sign up for six months or a year. Premium streaming accounts are less expensive, averaging \$8.25/month.¹¹³

¹⁰² [Global Internet Phenomena Spotlight: Subscription Television Piracy](#), 2017

¹⁰³ [Police Conducting “World’s Largest” Pirate Box Crackdown](#) 5.28.16

¹⁰⁴ [Piracy Fighters Battle Kodi ‘Epidemic’](#) 9.29.16

¹⁰⁵ [Global Internet Phenomena Spotlight: Subscription Television Piracy](#), 2017

¹⁰⁶ [Video and Television Piracy: Ecosystem and Impact](#), 2017

¹⁰⁷ [Money for Nothing: The Billion Dollar Pirate Subscription IPTV Business](#), August 2020

¹⁰⁸ [Creative Content Australia 2017 Piracy Research Study](#), 12.1.17

¹⁰⁹ [NetNames’ Piracy Trends: Fourth Quarter 2016](#), 3.10.17

¹¹⁰ [Global Film and TV Piracy Insight Report, MUSO](#), 2017

¹¹¹ [Behind the Cyberlocker Door](#), 9.18.2014

¹¹² [Behind the Cyberlocker Door](#), 9.18.2014

¹¹³ [Behind the Cyberlocker Door](#), 9.18.2014

- Cyberlockers set up incentives for users to upload unauthorized content files and then encourage others to download them, making money by selling advertisements around the content or premium access subscriptions.¹¹⁴
 - Cyberlocker sites made \$96.2 million in total annual revenue across 30 sites, or \$3.2 million per site. One site made \$17.6 million.¹¹⁵
 - Profit margins for cyberlockers can reach as high as 86% because there is a high demand for stolen content and little to no overhead since their content is stolen.¹¹⁶
 - The overwhelming use of cyberlockers is for content theft. Analysis of a sample of the files from the cyberlocker sites found that at least 78.6% of files on direct download sites and 83.7% of files on streaming sites were unauthorized copies of books, films, television shows, and games.¹¹⁷
 - In several instances, cyberlockers have generated more internet traffic than the most popular sites. For example, two of the most popular cyberlockers, 4Shared and Putlocker, have a higher Alexa Ranking than [WSJ.com](#), [USAToday.com](#), [Target.com](#), or [Nike.com](#).¹¹⁸
- Globally, 38% of internet users consume music through copyright infringement. 32% of all consumers download music through stream ripping. 23% of all consumers download music through cyberlockers or P2P. 17% of all consumers use search engines to locate infringing content. Stream ripping users are more likely to say that they rip music so they have music to listen to offline. This means they can avoid paying for a premium streaming subscription.¹¹⁹
 - Research from market analyst firm Ovum estimated that 13% of television revenues would be lost to piracy in 2018, with the most impacted segments being premium sports and entertainment.¹²⁰
 - Piracy is now a sophisticated, industrial-scale problem, with more than 3,000 black market pirate services. Recent estimates show the top 600 pirate sites generating \$260 million of advertising revenue.¹²¹

Piracy affects every creative industry. Here are statistics for film, television, music, and book publishing:

- Film
 - In 2019, 94% of all Oscar-nominated films were available illegally by the night of the ceremony.¹²²
 - The most pirated film of 2015, according to Tecxipio, was *Interstellar*, which was downloaded illegally 47 million times – a 55% increase from 2014’s most pirated film, *The Wolf of Wall Street*.¹²³

¹¹⁴ [Behind the Cyberlocker Door](#), 9.18.2014

¹¹⁵ [Behind the Cyberlocker Door](#), 9.18.2014

¹¹⁶ [Behind the Cyberlocker Door](#), 9.18.2014

¹¹⁷ [Behind the Cyberlocker Door](#), 9.18.2014

¹¹⁸ [Alexa Rankings](#), 2017

¹¹⁹ [Music Consumer Insight Report 2018](#)

¹²⁰ [Friend MTS: ‘Piracy an industrial scale problem’](#), 5.1.19

¹²¹ [Friend MTS: ‘Piracy an industrial scale problem’](#), 5.1.19

¹²² [Oscars Screener Leaks Drop to All-Time Low](#), 2.26.19

¹²³ [No, Piracy Is Not the Sincerest Form of Flattery](#), 1.14.16

- A pirated version of *Deadpool* was watched by more than 5 million people after being leaked on Facebook eight days before its release date.¹²⁴
- *Moonlight* grossed \$65 million worldwide theatrically, which, at an average global ticket price of \$7.00, translates to approximately 9 million tickets sold.¹²⁵ During *Moonlight*'s theatrical release, there were roughly 60 million piracy transactions¹²⁶ – over 650% higher than paid ticket sales. If even 5% of those pirated transactions had been paid theatrical sales at the \$7.00 ticket price, the film would have earned an additional \$21 million. Or, if that 5% had been just paid rental streams at the conservative average price of \$3.99 per stream, the film would have earned an additional \$12 million. Those are sums that can mean life or death for an independent film.
- *Three Billboards Outside Ebbing, Missouri* was released on November 10, 2017, grossing more than \$160 million worldwide theatrically – at an average ticket price of \$7.00, this translates to 22.7 million tickets sold.¹²⁷ Between its release and April 13, 2018, the film was viewed from pirate sources 24.8 million times – more than three times its ticket sales. If we very conservatively assume that only 5% of these views from pirate sources might have resulted not in a theater ticket sale but rather in a streaming rental (which averages \$4.00), we can estimate \$4.96 million in lost revenue on a film that cost \$15 million to produce... or about one third of its budget.
- *Lady Bird* grossed \$71 million in theaters – at an average global ticket price of \$7.00, 10 million tickets were sold. During its worldwide theatrical release, it was illegally downloaded over 16 million times – meaning that the piracy number were over 50% higher than legal ticket sales.
- Piracy impacts the amount of films released and the type of movies being made:
 - In recent years, a focus on globalization has further reduced each studio's slate as major studios have prioritized global tentpoles – high-budget films meant to ensure high box office profits with mass promotion. In 2002, the six major studios released an average of 23 movies each. In 2017, that number dropped to 14. Indeed, as Disney grew to be the largest studio in terms of global box office, their slate dropped from 23 films in 2002 to just eight in 2017.¹²⁸
 - **The number of films released in 2018** was 758, down by 3% when compared to 2017. MPA member studios released 127 films, down 2% from 2017.¹²⁹
 - Studios are increasingly turning to sequels and remakes with built-in audiences, rather than taking risks on new projects without built-in audiences.¹³⁰
 - Independent films are often a gateway for new and young talent to launch their careers, propelling them into the studio system. A decrease in profit for independent films limits these opportunities. Here are a few current blockbuster directors who started in independent film:
 - ❖ Kathryn Bigelow (*Blue Steel*, *Zero Dark Thirty*)
 - ❖ Alfonso Cuarón (*Y Tu Mama Tambien*, *Gravity*)

¹²⁴ ['Deadpool' Pirate Arrested; Illegal Copy Of Fox/Marvel Movie Watched By 5M On Facebook](#), 6.14.17

¹²⁵ [Box Office Mojo: *Moonlight*](#)

¹²⁶ [ALLvanza, "Strong IP Protections Support All Creators and Protect All Consumers"](#)

¹²⁷ [Box Office Mojo: *Three Billboards Outside of Ebbing Missouri*](#)

¹²⁸ [Paramount Consent Decree Review Public Comments 2018: National Association of Theatre Owners](#), 10.1.18

¹²⁹ [Global entertainment revenue hits \\$97bn in 2018, fuelled by digital spending](#) 3.21.19

¹³⁰ [Development Slates Shrinking As Film Remakes, Sequels Dominate](#), 6.27.13

- ❖ Paul Greengrass (*Bloody Sunday, Jason Bourne*)
- ❖ James Gunn (*Super, Guardians of the Galaxy*)
- ❖ Doug Liman (*Swingers, The Bourne Identity*)
- ❖ Christopher Nolan (*Memento, Interstellar*)
- ❖ David O. Russell (*Spanking the Monkey, Silver Linings Playbook*)
- ❖ Steven Soderbergh (*Sex, Lies, and Videotape, Oceans Eleven*)
- ❖ Colin Trevorrow (*Safety Not Guaranteed, Jurassic World*)
- ❖ Ryan Coogler (*Fruitvale Station, Creed, Black Panther*)
- The average initial piracy-free window for English-language film releases is shortening. In Q4 2016, the window was 8.5 days, which is five days shorter than the 13.5-day piracy-free window of Q4 2015. Furthermore, the average initial piracy-free window for a release in any language was five days in Q4 2016, which is four days shorter than the nine-day equivalent piracy-free window in Q4 2014.¹³¹
- The window between the worldwide theatrical release and the earliest pirated release sourced from a digital copy was 65.5 days in Q4 2016, 11.5 days longer than the 54-day window in Q4 2015.¹³²
- Television:
 - Approximately 5.5% of North American households access pirated live television services.¹³³
 - The threat to legitimate business models comes from a comprehensive piracy economy that addresses/enables three consumer “use cases”: video on demand, catch-up, and live video.¹³⁴
 - *Game of Thrones* Season 8 was pirated 54 million times around the world, breaking several piracy records in the process. According to a report by Nielsen, around 17.4 million people watched *Game of Thrones* legally, which is three times less than illegal views, making it the most pirated TV show of the year.¹³⁵
 - The week after *Breaking Bad* won the 2014 Emmy® for Best Drama Series, the number of users illegally downloading the show grew fivefold, despite the fact that the entire series was legally available to stream on Netflix.¹³⁶
 - 55 million people illegally downloaded the final season premiere of *Game of Thrones* within 24 hours of its original airing, compared to 17.4 million viewers who watched it legally. Of those 55 million pirated views, MUSO says that the vast majority (76.6%) came from unofficial streams of the episode.¹³⁷
 - In 2017, *Game of Thrones* was the most pirated show in the world, despite the entire series being legally available to stream on HBO NOW at the same time. The television show’s Season 7 premiere alone was illegally downloaded 90 million times in just three days.¹³⁸

¹³¹ [NetNames’ Piracy Trends: Fourth Quarter 2016](#), 3.10.17

¹³² [NetNames’ Piracy Trends: Fourth Quarter 2016](#), 3.10.17

¹³³ [Global Internet Phenomena Spotlight: Video Piracy in North America](#), 12.13.18

¹³⁴ [Video and Television Piracy: Ecosystem and Impact](#), 2017

¹³⁵ [The Game of Thrones season premiere was pirated 54 million times in 24 hours](#), 4.17.19

¹³⁶ [Breaking Bad Piracy Rates Soar Five Fold After 2014 Emmy Wins](#), 9.2.14

¹³⁷ [Game of Thrones’ season 8 premiere was pirated almost 55 million times in the first 24 hours](#), 4.17.19

¹³⁸ [The ‘Game of Thrones’ Premiere Has Been Pirated 90 Million Times](#), 7.21.17

- The Season 7 premiere of *The Walking Dead* was illegally downloaded 600,544 times in the first 24-hours after it was aired. This number was up from the Season 6 premiere, which amassed 569,722 downloads in the 24-hour period after it aired.¹³⁹
- Legal subscription pay television streaming providers will lose an estimated \$550 million this year from password sharing, according to an analysis by Parks Associates.¹⁴⁰
- MUSO research revealed that TV was by far the most popular content for piracy, with almost half (49.38%) of all activity focused on sites providing access to television programmes throughout 2018.¹⁴¹

➤ Music:

- Seventeen million people illegally downloaded music licensed for streaming in the U.S. in 2018, according to the MusicWatch Annual Music Study. That is up from 15 million in 2017, an increase of 13%.¹⁴²
- Nielsen's U.S. music mid-year 2019 report shows that total on-demand streams exceeded 507.7 billion -- 333.5 billion of which were audio streams and 174.2 billion were video plays, up 27.8% and 39.6% from 2018, respectively.¹⁴³
- Despite three years of consecutive growth, music industry revenues in 2017 were still just 68.4% of those in 1999.¹⁴⁴
- For music, the dollar amount of digital piracy in 2015 was estimated at \$29 billion according to economics consultancy, Frontier Economics, and is projected to reach \$53 to \$117 billion by 2022.¹⁴⁵
- A study by MUSO, a content protection and market analytics company, has shown a 14.7% increase in music-based piracy in 2017 from the year before, with 73.9 billion visits to music piracy sites made worldwide.¹⁴⁶
 - In the same study, MUSO found that the United States ranked number one in visitor traffic to pirate sites to download music illegally with 27.9 billion visits.¹⁴⁷
 - The study also found that the U.S. represented 10% of global traffic to piracy sites for illegal music downloads.¹⁴⁸
- Stream ripping, which involves turning a song played on a streaming service into a permanent download, has become the most common way people illegally download music. According to research conducted by MusicWatch in 2019, there were 17 million stream-rippers in the U.S. during 2018, up from 15 million in 2017, which represents a 13% increase.¹⁴⁹
 - Unlicensed stream ripping companies profit from advertising whilst paying nothing to artists or record companies.¹⁵⁰

¹³⁹ [Walking Dead Piracy on the Rise Since Last Season](#), 10.25.16

¹⁴⁰ [Netflix price hike may spur growth in illegal password sharing](#), 1.31.19

¹⁴¹ [Global piracy nears 190bn visits in 2018](#), 3.22.19

¹⁴² [Stream-Ripping Music Piracy Up 13% Annually, Says MusicWatch Report](#), 5.30.19

¹⁴³ [Five Takeaways From Nielsen Music's Mid-Year 2019 Report](#), 6.27.19

¹⁴⁴ [Global Music Report 2018](#)

¹⁴⁵ [Will piracy make us walk the plank?](#), 2017

¹⁴⁶ [Music piracy grew in 2017 and is now "more popular than ever"](#), 3.22.18

¹⁴⁷ [The U.S. Remains Top Traffic Source For Pirate Sites, Research Shows](#), 3.23.19

¹⁴⁸ [Music Business Worldwide](#), 1.21.16

¹⁴⁹ [Thanks to Stream-Ripping, Music Piracy Still a Scourge](#), 5.30.19

¹⁵⁰ [Global Music Report 2018](#)

- IFPI runs a 24/7 alert and takedown site for members and national groups that monitors popular copyright-infringing sites and social networks. In 2017, 11 million URLs were identified as hosting infringing content and actioned for removal by IFPI and national group programmes.¹⁵¹
- According to the Nashville Songwriters Association International, the number of full-time songwriters in Nashville has dropped 80% since 2000. This was a new low point since data tracking began in 1991.¹⁵²
- According to the Bureau of Labor Statistics, there were 38,900 people in the United States classified as “Musicians and Singers” in 2014. This was down 28% from 53,940 in 2002.¹⁵³
- The global recording industry is experiencing modest growth after more than a decade of significant decline. In 2016, the global recorded music market grew by 5.9%, the fastest rate of growth since IFPI began tracking the market in 1997.¹⁵⁴
- Record companies are the primary investors in music, spending over \$4.5 billion annually, or about 27% of their revenues, on artists and repertoire (A&R) and marketing. This is a larger share of revenues invested in A&R than most other sectors invest in their own research and development.¹⁵⁵
- A new report establishes New York as one of the largest, if not the largest, music ecosystem in the world. In New York City, the industry supports 60,000 jobs, \$5 billion in wages, and \$21 billion in economic output. The music sector is growing faster than the rest of the local economy – with music-related jobs and wages growing at annual rates of 4% and 7% respectively, compared to 3% and 5% in the city overall.¹⁵⁶
- With over 70 digital music startups, New York City has twice as many digital music companies as San Francisco and Los Angeles.¹⁵⁷
- \$400-500 million of tourism spending can be directly attributed to attending music-related events in New York.¹⁵⁸

¹⁵¹ [Global Music Report 2018](#)

¹⁵² [Nashville's musical middle class collapses](#), 1.28.15

¹⁵³ [US Bureau of Labor Statistics \(BLS\): Occupational Employment and Wages](#), 2002/2014

¹⁵⁴ [Global Music Report 2017](#), 4.25.17

¹⁵⁵ [Global Music Report 2017](#), 4.25.17

¹⁵⁶ [New York Claims to be the Center of the Music Industry Universe](#), 3.8.17

¹⁵⁷ [New York Claims to be the Center of the Music Industry Universe](#), 3.8.17

¹⁵⁸ [New York Claims to be the Center of the Music Industry Universe](#), 3.8.17

- **Book and E-book Publishing:**
 - One-third of publisher revenues now come from digital sales, but the rise of the digital market means more cases of online infringement.
 - Although books on tape and, later CDs, were an established, if cumbersome feature of publishing, downloaded audio has become the fastest growing format, with U.S. sales growing 29% in 2017 compared with the year before.¹⁵⁹
 - \$300 million in publisher income is lost annually as a result of online piracy, according to data from the Authors Guild presented [during Book Expo 2019](#).¹⁶⁰
 - A 2017 Nielsen consumer survey covering e-book piracy found [\\$315 million](#) in U.S. book sales was lost annually due to piracy.¹⁶¹
 - The International Publishers Association says over one billion dollars is lost worldwide to e-book piracy.¹⁶²
 - From 2018 to August 25, 2019, the Publishers Association requested Google take down approximately 1.84 million URLs linking to copyright protected material from its search results, according to Google’s Transparency Report.¹⁶³
 - An investigation conducted by the Publishers Association revealed that over 80% (and in some cases over 90%) of the material on seven overseas sample pirate websites infringed copyright.¹⁶⁴ From 2009 to 2013, the number of e-book Internet piracy alerts that the Authors Guild of America received from their membership increased by 300%.¹⁶⁵
 - Since 2009, when e-books and book piracy became a phenomenon, income for authors has declined 42%, according to [a 2018 Authors Guild income survey](#), with the median income from writing now so low — just \$6,080 a year — that “poverty level looks like the mountaintop.”¹⁶⁶

Pirate websites spread malware, spyware, and viruses.

- Baiting internet users by stealing their personal information with malware is an estimated \$70 million per year business that costs consumers \$2.3 billion, according to consumer reports.¹⁶⁷
- The U.S. Department of Justice reported 17.7 million cases of identity theft in 2016, with financial losses totaling over \$17.5 billion.¹⁶⁸
- The “Digital Bait” study, commissioned by Digital Citizens Alliance and conducted by RiskIQ, found that one out of every three pirate sites contains malware. Visitors to content theft sites were 28 times more likely to get malware from these sites than from mainstream websites or licensed content providers.¹⁶⁹

¹⁵⁹ [Retail: how bookshops survived the Amazon onslaught](#), 6.10.19

¹⁶⁰ [U.S. Publishers Are Still Losing \\$300 Million Annually To Ebook Piracy](#), 7.28.19

¹⁶¹ [U.S. Publishers Are Still Losing \\$300 Million Annually To Ebook Piracy](#), 7.28.19

¹⁶² [eBook Piracy is on the rise in 2019](#), 8.13.19

¹⁶³ [Google Transparency Report](#), 2019

¹⁶⁴ [Intellectual Property Office’s Crime Report](#), 2014/2015

¹⁶⁵ [Publicist of the Year for Online Book Piracy Awareness Leads Crusade](#), 3.22.16

¹⁶⁶ [Steal This Book? There's a Price](#), 9.15.19

¹⁶⁷ [Digital Bait](#), 2015

¹⁶⁸ [Bureau of Justice Statistics: Victims of Identity Theft](#), 2016

¹⁶⁹ [Piracy Sites Collect \\$70 Million a Year by Installing Malware](#), 12.9.15

- RiskIQ estimated that on a monthly basis 12 million U.S. users were exposed to malware from pirate sites. They concluded that these operators each generate around \$3.3 million per year.¹⁷⁰
- Merely visiting a pirate site can put computers at risk. According to the same “Digital Bait” study, 45% of the malware is delivered via “drive-by downloads” – secretly downloading to the user’s computer.¹⁷¹
- Research from Australia shows that amongst persistent pirates, 47% of teens and 59% of adults have contracted a virus or malware by clicking on an ad or pop-up, or from streaming or downloading movies or television from a pirate site.¹⁷²
- In 2019, Digital Citizens Alliance asked Americans if they had experienced issues with malware in the last 18 months. Of those without a piracy device in their home, only 7% reported an issue. Of those with a piracy device, 44% reported an issue with malware.¹⁷³

Legitimate American businesses also play key roles in the global piracy ecosystem.

Advertisers, ad agencies, and online ad networks support and enable online piracy.

- Advertising funds two-thirds of television live-streaming pirate sites.¹⁷⁴
 - A 2014 study found that nearly 600 pirate sites generated an estimated \$209 million in revenue from advertising alone – a significant portion coming from major brands.¹⁷⁵
 - Advertising provides about 86% of the revenues for file-sharing sites featuring illegally distributed content.¹⁷⁶
 - Megaupload earned over \$25 million from online advertising during its operation.¹⁷⁷
 - A report from Incopro analyzed the revenue sources for the 250 most popular pirate sites in the European Union and found that advertising is a key source of funding for 88% of them.¹⁷⁸
 - A NetNames report that examined the top 30 cyberlocker sites found that all but one profited from advertising, in addition to subscription payments.¹⁷⁹ On average, each direct download cyberlocker generated more than \$100,000 per month in advertising revenue, while streaming cyberlockers brought in 27% more revenue.¹⁸⁰
 - Seventeen of the NetNames report’s 30 investigated cyberlocker sites profited from advertising facilitated by just one advertising network – Propeller Ads Media.¹⁸¹

¹⁷⁰ [Digital Bait](#), 2015

¹⁷¹ [Digital Bait](#), 2015

¹⁷² [Creative Content Australia 2017 Piracy Research Study](#), 12.1.17

¹⁷³ [Digital Citizens Alliance, Fishing in the Piracy Stream](#), 4.25.19

¹⁷⁴ [The Six Business Models of Copyright Infringement](#), 6.27.12

¹⁷⁵ [Good Money Still Going Bad: Digital Thieves and the Hijacking of the Online Ad Business](#), 5.1.15

¹⁷⁶ [Report links Google, Yahoo to internet piracy sites](#), 1.2.13

¹⁷⁷ [Megaupload Indictment](#), 1.5.12

¹⁷⁸ [Revenue Sources for Websites Making Available Copyright Content Without Consent in the EU](#), March 2015

¹⁷⁹ [Behind the Cyberlocker Door: A Report on the Cyberlocker Business and how Cyberlockers use Credit Card Companies to Make Millions](#), 9.18.14

¹⁸⁰ [Behind the Cyberlocker Door: A Report on the Cyberlocker Business and how Cyberlockers use Credit Card Companies to Make Millions](#), 9.18.14

¹⁸¹ [Behind the Cyberlocker Door: A Report on the Cyberlocker Business and how Cyberlockers use Credit Card Companies to Make Millions](#), 9.18.14

- Media companies and their advertisers are shortchanged \$8 billion a year because of scams, or more than the estimated combined revenue of Lionsgate, Paramount Pictures, and MGM Studios. The set-up is siphoning potential revenue from legitimate media companies to shady ones. And it is enabling hucksters to profit in fake newswriting and piracy thanks to ad views.¹⁸²
- Leading advertisers and agencies have acknowledged that they have a role to play in stopping piracy and have undertaken initial first steps.
 - The CEO of the Association of National Advertisers wrote in *Ad Age* magazine that “marketers must become more involved in the piracy issue [and] cannot allow our businesses and brands to supply financial life-blood or lend an air of legitimacy to illicit business models that threaten the well-being of creative industries worldwide.”¹⁸³
 - In May 2012, the Association of National Advertisers and the American Association of Advertising Agencies called for industry action to reduce advertiser support for piracy.¹⁸⁴
 - In July 2013, eight large digital ad networks agreed to take down individual ads after being notified they had appeared on pirate sites.¹⁸⁵
 - The Internet Advertising Bureau has also called upon advertisers to address the matter in their Quality Assurance Guidelines, although the Bureau does not punish piracy violations as it does those involving child pornography or illegal pharmaceuticals.¹⁸⁶
 - In 2015, the advertising community’s Trustworthy Accountability Group (TAG) announced that more than 30 major global brands – including American Express, Colgate-Palmolive, and Wal-Mart – had taken TAG’s Anti-Piracy Pledge and committed to taking commercially reasonable measures to keep their ads off pirate sites. They were joined by 22 leading ad agencies and groups – including OMD, Rocket Fuel, GroupM, and Starcom Mediavest Group – all pledging to take steps to keep their clients’ ads off pirate sites.
 - ❖ TAG was created by the American Association of Advertising Agencies (4A’s), the Association of National Advertisers (ANA), and the Interactive Advertising Bureau (IAB). As one of its main initiatives, TAG focuses on fighting internet piracy by encouraging brands and agencies to work with vendors that will certify that their advertising is not supporting the digital theft of creative work.

¹⁸² [The online ad industry is rallying to fight piracy, fraud, extremists and fake news. Does it stand a chance?](#) 4.10.17

¹⁸³ [Are You Protecting Your Marketing Investments From The Threat of Online Piracy?](#) 8.6.13

¹⁸⁴ [Statement of Best Practices to Address Online Piracy and Counterfeiting](#), May 2012

¹⁸⁵ [MPAA Scoffs at New Anti Piracy Plan](#), 7.15.13

¹⁸⁶ [IAB Quality Assurance Guidelines](#), 7.25.13

Credit card companies are already blocking payments to online piracy sites.

- MasterCard has worked with Interpol to block transactions that involve intellectual property theft. Recent efforts covered 100 countries, resulted in 79 arrests, and shut down 18,000 illegal websites.¹⁸⁷
- Visa has set up a procedure that allows creatives to report websites that are infringing on their intellectual property rights. Alongside law enforcement and copyright owners, Visa is working to block websites that use their payment platform to facilitate piracy.¹⁸⁸

The existing American legal framework for the internet is broken, directly impacting the proliferation of bad actors online.

- In the mid-to-late '90s, the internet was just beginning to enter American homes with the promise of bringing us closer together. Internet companies were still relatively new and entirely unprofitable. It was during this era of the “new and fragile” internet that Congress passed two laws attempting to balance growth and regulation for a nascent industry: The Communications Decency Act (CDA) of 1996 and the Digital Millennium Copyright Act (DMCA) of 1998. To put this in perspective, in 1998, Google was still in beta; Facebook, Twitter, Instagram, and YouTube did not yet exist.
- At the time, there was a valid concern that *any* form of restriction or regulation would hinder the growth of this fledgling industry. So, through Section 230 of the CDA, internet platforms received wholesale immunity from the illegal actions of their users. Section 230 guaranteed that these platforms could not be held responsible for criminal activities or the spreading of disinformation as long as they were not “the source” of the illegal acts.
- Similarly, the DMCA provides a “safe harbor” from copyright infringement – immunity from liability stemming from their users’ infringements. Under the law, internet companies are required to remove infringing content only when notified by the copyright owner with a “takedown notice” – a web 1.0 notion crafted in the days of online bulletin boards, FTP servers, and personal web page hosting.
- These laws were designed to promote the growth of the internet while also encouraging online intermediaries to act responsibly in addressing abusive conduct. Instead, companies have built entire businesses on the back of infringement using these safe harbors – most notably, the streaming powerhouse YouTube.
- While the power of the internet was once dispersed among a decentralized network of academics, government researchers, and small technology startups, today that power rests with these monopoly platforms that are now some of the world’s biggest companies.
- Why would these platforms want to facilitate an illegal black market of copyrighted content? Because this “free” web is a massive advertising venue and money-generating engine. And these internet monopolies have grown to be the largest companies in the world by exploiting loopholes in the law that allow them to use this free content without permission or the obligation to pay for it.

¹⁸⁷ [MasterCard Anti-Piracy Policy](#)

¹⁸⁸ [Visa – Intellectual Property](#)

Search engines directly support and enable online piracy.

- Search engines are the main gateway to pirate websites.
 - Google processed over three million piracy removal requests per day in March 2016 — over 100,000 per hour.¹⁸⁹
 - Each month, Google receives around 75 million DMCA takedown requests, which amount to 900 million DMCA requests per year.¹⁹⁰
 - In May 2015, the British Phonographic Industry and the Recording Industry Association of America (RIAA) notified Google of their 200 millionth infringing URL, up from 100 million a little over a year earlier.¹⁹¹
 - 74% of consumers surveyed said they had used a search engine the first time they arrived at a pirate website.¹⁹²
 - 58% of individuals who found pirated movies and television shows online did so through apparently innocent searches, such as entering a film or television show title or a generic phrase like “watch TV.”¹⁹³
- Research has shown that search results affect consumers' legitimate viewing behavior.
 - In a controlled experiment, researchers from Carnegie Mellon University showed that users are more likely to purchase legally when legal sites are prioritized over pirate sites in search results – and they are more likely to pirate when pirate links are promoted.¹⁹⁴
 - A report from Carnegie Mellon University looked at site-blocking efforts in the U.K. to determine if the court-ordered measure had any effect on the behavior of consumers and piracy.
 - When 19 sites were blocked simultaneously, former users of these sites increased their usage of paid legal streaming sites by 12% on average, relative to the control group.¹⁹⁵
 - “Light” users of blocked sites were redirected to paid streaming services at a rate of 3.5%.¹⁹⁶
 - “Heavy” users of blocked sites saw an increase of 23.6% to paid streaming services.¹⁹⁷
 - The Carnegie Mellon study suggests that if pirate sites can effectively be blocked, consumers will be more likely to seek legitimate sources for their content.
 - In the U.K., the Police Intellectual Property Crime Unit (PIPCU) diverted over 11 million views from pirate sites to an official police warning page.¹⁹⁸
 - In Australia, search engines, including Google, are most mentioned by adults as the means to find illegal content online, and seem to be facilitating new means to reach alternate infringing sites and proxies when users encounter blocked sites.¹⁹⁹

¹⁸⁹ [Google Transparency Report](#), 6.9.16

¹⁹⁰ [Google Had Over 75 Million Takedown Requests Last Month](#), 3.7.16

¹⁹¹ [Music Industry Reports 200 Millionth Pirate Link to Google](#), 5.7.15

¹⁹² [Understanding the Role of Search in Online Piracy](#), 9.18.13

¹⁹³ [Understanding the Role of Search in Online Piracy](#), 9.18.13

¹⁹⁴ [Do Search Engines Influence Media Piracy? Evidence from a Randomized Field Study](#), 9.12.14

¹⁹⁵ [The Effectiveness of Site Blocking as an Anti-Piracy Strategy](#), 6.3.15

¹⁹⁶ [The Effectiveness of Site Blocking as an Anti-Piracy Strategy](#), 6.3.15

¹⁹⁷ [The Effectiveness of Site Blocking as an Anti-Piracy Strategy](#), 6.3.15

¹⁹⁸ [Intellectual Property Office's Crime Report](#), 2014/2015

¹⁹⁹ [Creative Content Australia 2017 Piracy Research Study](#), 12.1.17

- Online search engines are the gateway to discovering illegal, infringing, and malware-infected “free” content online. Google has more than a 90% market share of search.
 - 30% of all piracy in the United States is facilitated through the Google search engine.
 - Thanks to Google’s algorithms, the cheaper the content, the higher the search result.
- Because search engines contribute to the problem, they should play a constructive role in solutions.
- Search engines have admitted that for-profit pirate websites are a problem. However, so far, they have not acknowledged the crucial role that search plays in driving millions of users and billions of page views to these pirate sites. The traffic generated by search engines increases advertising revenue and subscriptions for pirate sites, which allows them to profit and thrive.²⁰⁰
 - In 2017, Google and Facebook – the Big Two in internet advertising – accounted for half of all digital ad revenue worldwide, and more than 60% in the United States.²⁰¹ In the U.S., no other online advertising entity has more than a 5% market share.
 - These tech giants have unprecedented influence over access to information and content online, and the power to control and disseminate it as they see fit – with zero responsibility or oversight.

Legitimate internet platforms like Facebook and Google have also become hosts of hateful, injurious, democracy-subverting, and otherwise socially damaging and reprehensible conduct.

- According to the most recent statistics, more than 51% of the world’s population is online²⁰² – that is more than 3.8 BILLION people who are all connected to the same web of information – and 2 billion of those people are Facebook users.²⁰³ This is truly a worldwide web of its own, where one small adjustment to an algorithm or advertising model can affect almost 4 billion people.
- In the last few months of the 2016 presidential campaign, the top fake news stories on Facebook generated more engagement than the top stories from legitimate news outlets.²⁰⁴
- In 2017, just one website, Backpage.com, accounted for 73% of all child sex trafficking in the U.S.²⁰⁵
 - For several years, attorneys general from across the U.S. tried to hold Backpage.com accountable. But judges ruled that they could not hold them liable because of Section 230 of the Communication Decency Act, which grants immunity to internet service providers from the actions of users on their platforms.
 - So, the Senate sought a different legislative solution, introducing the Stop Enabling Sex Traffickers Act (SESTA) in 2017.
 - SESTA, and its sister Bill, FOSTA (Fight Online Sex Trafficking Act), passed the House and Senate with an overwhelming, bipartisan majority in early 2018.

²⁰⁰ [Understanding the Role of Search in Online Piracy](#), 9.18.13

²⁰¹ ["Google and Facebook Tighten Grip on U.S. Digital Ad Market," Emarketer.com](#), 09.21.17

²⁰² [Internet Users in the World by Region](#), 06.30.17

²⁰³ ["Facebook now has 2 billion monthly users... and responsibility," Techcrunch.com](#), 06.27.17

²⁰⁴ ["This Analysis Shows How Viral Fake Election News Stories Outperformed Real News On Facebook," BuzzFeed.com](#), 11.16.16

²⁰⁵ ["Backpage.com’s Knowing Facilitation of Online Sex Trafficking," Humantraffickingsearch.org](#), 2017

- Later that year, the Electronic Frontier Foundation, a pro-internet rights organization that is largely funded by Google, sued the government claiming that FOSTA is unconstitutional because it violates free speech.²⁰⁶ The case was dismissed in federal court.²⁰⁷
- In December of 2019, Rep. Ro Khanna introduced the SAFE SEX Workers Study Act, a bill enabling the National Institute of Health to study how FOSTA-SESTA has impacted sex workers' safety, health, and proximity to violence, among other issues. The bill is being cosponsored by Senator Elizabeth Warren.²⁰⁸
- In January of 2020, the lawsuit challenging the constitutionality of FOSTA was reinstated in the U.S. Court of Appeals.²⁰⁹

Regulations exist or are in process in many other countries, and the internet is still in one piece.

- Site blocking, which allows content owners to request that internet service providers (ISPs) block access to copyright infringing websites, is already in place in at least 42 countries around the world, as of 2018.²¹⁰
 - In 2016 alone, over 800 pirate sites were blocked across the European Union.²¹¹
- In June of 2017, the European Union took the lead in pursuing antitrust charges against internet monopolies, fining Google U.S. \$2.7 billion for favoring its own shopping services in Google search.²¹²
- In July of 2018, the European Union fined Google an additional U.S. \$5 billion in relation to an antitrust case against their Android operating system.²¹³
- In April of 2019, the Council of the European Union approved the Copyright Directive, an agreement that mandates EU Member States update their copyright rules for the digital age, guaranteeing fair remuneration for creators, strong rights for users, and responsibility for platforms.²¹⁴

²⁰⁶ ["EFF Sues to Invalidate FOSTA, an Unconstitutional Internet Censorship Law," EFF.org](#) 06.28.18

²⁰⁷ ["FOSTA Case Update: Court Dismisses Lawsuit Without Ruling on Whether the Statute is Unconstitutional," EFF.org](#), 09.25.18

²⁰⁸ ["Sex Workers Warned Everyone About Fosta-Sesta — Now Lawmakers Are Beginning To Listen," MTV.com](#), 12.17.20

²⁰⁹ ["Victory! Lawsuit Challenging FOSTA Reinstated by Court," EFF.org](#), 01.24.20

²¹⁰ ["The Normalization of Website Blocking Around the World in the Fight Against Piracy Online," ITIF.org](#), 06.12.18

²¹¹ ["Europe Blocked Access to 845 Piracy Sites in 2016, MPAA's Chris Dodd Says," Variety.com](#), 06.05.17

²¹² ["EU fines Google record \\$2.7 billion in first antitrust case," Reuters](#), 06.27.17

²¹³ ["Google Is Fined \\$5 Billion by EU in Android Antitrust Case," The Wall Street Journal](#), 07.18.18

²¹⁴ ["Copyright reform clears final hurdle: Commission welcomes approval of modernised rules fit for digital age," European Commission Press Release](#), 04.15.19