Internet Pornography without Intellectual Property

A Study of the Online Adult Entertainment Industry

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The Internet is for porn.

—U.S. House Congressional Hearing on the Stop Online Piracy Act¹

The magnitude and prevalence of adult entertainment as a business is undeniable. For decades, even centuries, the industry has flourished despite considerable social and legal obstacles. It is often on the forefront of new media adoption, from paperback books to photography, cable television, and home video. Market demand for adult entertainment drives the success and failure of new technologies, and at the same time, technology helps to proliferate adult content. When the World Wide Web launched in the 1990s, there were about ninety adult magazine publications in the United States.³ By 1997 there were an estimated nine hundred adult websites on the Internet. 4 Today, there are millions. The largest sites dwarf comparable mainstream media websites, hosting more than 100 terabytes of content and clocking in excess of 100 million page views per day.⁵ Value estimates for the industry are in the billions. Although no reliable data exist on the exact size, it's evident that the online adult entertainment industry carries considerable economic weight.

While the Internet has created a new world of business for adult entertainment, it has been a double-edged sword for the traditional model of producing and selling content. On the one hand, adult content producers have capitalized on the increased privacy and convenience for consumers, perhaps even more so than their mainstream counterparts in film and music. On the other hand, an Internet archi-

tecture specifically designed for copying and sharing digital files has ushered in an era of unprecedented copyright infringement. From individual use, to file-sharing systems, to content aggregation websites, the unauthorized sharing of adult content has become increasingly widespread and difficult to prevent. Content ownership, while protected in theory through the legal system, can often no longer be enforced in a cost-effective way.

For any industry that deals in easily replicated goods, this should pose a problem. Copyright enables content producers to recoup production costs by letting them sell their product exclusively. Economics predicts that without this mechanism, there will be no incentive to produce content. This theory seems to be supported by the stories in the news media that forecast the death of the adult entertainment industry.⁷ And there's no doubt that adult content producers are struggling and have taken a substantial financial hit. But is the industry really dying? To this day, content production persists, numerous companies remain in business, and new ones are entering the market. If there is no effective copyright protection for the traditional content of the industry, how is it still being produced? Why do adult entertainment businesses continue to survive in the face of these difficulties?

This study addresses two questions. First, it investigates the hypothesis that copyright enforcement in the online adult entertainment industry is prohibitively difficult. Second, it explores whether and how adult content producers are recouping their investments. Based on qualitative interviews with industry specialists, lawyers, adult entertainment workers, and content producers,8 it concludes that copyright enforcement is generally not an effective method of recouping costs. As a result, the industry has shifted toward new business models. Rather than focusing only on selling content, the industry is increasingly moving into services and experiences, which are inherently difficult to copy. The production of standard content continues, both as a basis for this secondary market, as well as for marketing purposes.

This chapter also discusses what we can learn from this exploration and to what extent the study's findings may be industry-specific. Given the adult entertainment industry's similarities to mainstream film and music production, it is a particularly useful area of research. The insights from norms-based creative communities are greatly valuable, but close-knit communities are not necessarily comparable to larger, more complex industries. This study is an analysis of a billion-dollar market for entertainment goods with strong parallels to the industries at the center of the copyright debate.

Copyright Infringement of Adult Content

Adult content is loosely defined as the depiction of sexual acts or sexual subject matter through writing or visuals, such as photography, film, and other media, that is specifically designed to arouse sexual interest. So long as this content is an original work and fixed in a tangible medium of expression, it is protected under the United States Copyright Act. While some would argue that certain types of adult entertainment should not be granted copyright protection because they do not promote "progress," U.S. courts have repeatedly determined that copyright law does not discriminate according to the nature of the content. The question of whether or not it is legal to produce or distribute the content is a separate question from whether or not it is copyrightable. If a work meets the very low bar of originality, the Copyright Act grants it the same protection as any other type of copyrightable expression.

When adult entertainment companies first began to distribute content over the Internet, they profited from the increased privacy and convenience for consumers. Making content available online meant that consumers could purchase adult entertainment without leaving the four walls of their homes or dealing with physical objects like magazines, videocassettes, and DVDs. It also meant circumventing local resistance to brick-and-mortar retailers and making content accessible to far more people both domestically and internationally.

The downside to the vast distribution network of the Internet is that it simultaneously facilitates unauthorized use of content. Digital files are easy to copy and share, allowing for copyright infringement on an unprecedented scale. Despite this, the adult industry continued to thrive on selling content for quite some time. In the early days, online copyright infringers were individual users who captured content through scanning or downloading and made it available to others on websites. Industry specialists claim that this type of unauthorized use, while widespread, generally did not negatively impact business. Some companies even

used it as a branding opportunity. It wasn't until later that increasing broadband access made peer-to-peer file sharing an efficient and popular way to share and distribute digital content, often without permission from the copyright holder. In 2008, more than 150 million people were using peer-to-peer networks and an estimated 35% of downloads were adult-related material.11

While file sharing played a role in undermining the sale of content, the real game changer happened with the development of the video platform YouTube, which ushered in an era of user-uploaded content aggregators ("tube sites"). Similar in design to YouTube, tube sites allow users to view and upload videos. In most cases, unregistered users can access and watch the videos, while only registered users can upload content. But registration is usually anonymous and uploads are unlimited. There is little to prevent anonymous users from uploading content without authorization from the rights holder. Adult industry specialists and producers attribute the death of the copyright business model to the increasing popularity of these sites after 2006.

For adult entertainment consumers, these platforms offer advantages over file-sharing networks because no files are downloaded, and they allow for easy previewing and switching between videos. Compared to other entertainment, adult content consumers may be unique in that their browsing experience is often part of the consumption. While music consumers might visit an online music store to purchase a specific album by the Swiss glam-rock band Bitch Queens, consumers of adult material often prefer to peruse a variety of content. Furthermore, consumers can be comparatively impatient and driven to purchase for immediate use. These factors, plus the anonymity, and finally the lower legal risk of watching user-uploaded and remotely hosted videos make the tube sites an attractive choice for consumers looking for free content.

Free access via file sharing or tube sites also means that no credit card transaction takes place. Online payments are traceable, and users may prefer to create as few records as possible of their consumption. Because unauthorized content is often free, it also protected consumers during the wave of identity theft and scams that plagued the industry in the early days of the Web. When the floodgates to selling adult content online first opened, the lack of regulation and low barriers to entry

meant the emergence of scam sites, rife with pop-up ads, "mousetrapping," browser hijacking, and malware. Some adult marketing partners used unlawful practices to promote content. Two popular schemes for subscription websites were credit card "banging"—using a customer's credit card for unauthorized purchases, often only charging a multitude of small amounts—and pre-checked cross sales. Pre-checked cross sales would coax users to sign up for website memberships at a low price or for a free trial version, but include an automatic subscription in the fine print unless cancelled, and additionally include sign-ups to multiple affiliate websites "for free," many of which renewed the subscriptions automatically for a fee after the trial period. Some did not honor customers' subscription cancellations, continuing to charge their credit cards until a potentially embarrassing call was made to the card company. One producer insisted that copyright infringement was far less of a problem than the fact that "the industry destroyed its own business models."

With the bad apples spoiling the bunch, accessing unauthorized content became a more attractive option for consumers worried about becoming victims of scams, having their personal data stolen, and facing potential embarrassment. At the same time that barriers to entry changed and the unsustainable scam businesses began to die out, content was becoming available on the tube sites and could now be consumed both legally and anonymously, leading consumers to flock to the free platforms.

Compared to the less socially stigmatized mainstream entertainment industries, consumers of adult content may display less loyalty toward creators, making it harder for producers to guilt users into financially supporting the content they consume. Industry specialists also pointed out that they are dealing with a new generation of Internet users who are accustomed to an abundance of free material online. In what interviewees described as "the perfect storm," the crash of the economy, a general cultural shift in consumer expectations, users' privacy preferences, a lack of loyalty toward creators, and the erosion of trust through scam proliferation all came together to drive users to file-sharing and tube sites, encouraging pervasive copyright infringement. But since creators are protected from unauthorized uses by law, why aren't the content owners enforcing their legally granted rights?

Copyright Enforcement Difficulties

U.S. copyright law grants authors protection against unauthorized reproduction and distribution of copyrighted content. Adult content owners are thus entitled to legal action against infringers. But the effectiveness of the methods at their disposal is limited. Litigating cases against individual infringers is often economically prohibitive and carries few prospects of recovery. With regard to file sharers, copyright owners first need to identify unauthorized versions of their files and then the Internet Service Provider (ISP) of the infringing user. The ISP is required to hand over the name and address of the individual account owner, but only if subpoenaed by the copyright owner. This requires a so-called John Doe lawsuit to be filed with a court and the subpoena to be approved by a judge. Once the copyright owner has the name and address of the account holder from the ISP, it can pursue a civil lawsuit against the alleged infringer.

In practice, copyright owners will then instead contact the account owner and ask for a settlement amount under the threat of taking them to court. Given the large number of file sharers and the minor scale of infringement, copyright owners have started bundling multiple users into one court action instead of seeking subpoenas in each individual case. Both of these strategies are technically permissible. In fact, they are economically necessary to keep the cost of litigation within an affordable range. If content owners weren't able to collect settlements or bundle their targets, the costs of enforcing their copyrights would be prohibitively high. But these two strategies have posed difficulties for adult content owners.

First of all, courts have not looked kindly on the settlement demands given the sensitive nature of the content. Users may often be overly willing to settle and pay, just to prevent the knowledge of their adult content consumption from becoming public in court. Account owners may even pay up if they are mistakenly targeted, simply to protect their personal reputation. In fact, some lawyers have been accused of using shaming tactics to extort settlements from users. 12 While not all litigants intentionally extort users and some may consciously target large-scale file sharers and ask for reasonable settlements, the fact that people have a privacy incentive to pay up makes it difficult to determine the boundaries of an efficient settlement system. As a result, courts have started to dismiss the cases.¹³

Courts have also been unfriendly toward the bundling model, denying subpoena requests when the file sharers were from different jurisdictions, from different swarms and times, or had potentially different defenses.14 They have also found that identifying an account owner is not enough evidence to determine who was actually sharing the file over the network. 15 Generally, some of the interviewed lawyers suggested that courts tend to be unsupportive based on the nature of the content. They also suspected that courts were fed up with mass end-user lawsuits, which require significant judicial resources. Weary of the paperwork that the John Doe litigation brings without ever actually reaching a trial, lawyers say that the courts will find any reason within their power to dismiss the cases. A few players have further hindered the cause by falling into bad graces with judges through their tactics, earning themselves hefty fines and negative publicity.¹⁶

In interviews, both producers and industry lawyers were divided on whether end-user litigation could be an effective part of a business strategy. At the time of this study, only eight companies in the U.S.-based adult entertainment production industry had engaged in legal action against file sharers. Of those interviewed, all of them said they undertook it for some compensation through settlements. But they also stated that it was part of a larger strategy and by no means enough on its own to effectively prevent copyright infringement and recoup costs.

Interestingly, while some industry lawyers encourage their clients to proceed with end-user litigation, which is arguably in the lawyers' financial interests, others have advised their clients against it.¹⁷ Of the producers that do not litigate, most said that they would never go after file sharers as part of their business model. The stated reasons were manifold. Particularly small producers said that it was too expensive. Even if they could afford to hire legal counsel and pay court fees, they felt that the returns were too low and that litigation would never be cost-effective. Others said that they did not believe in "suing customers," claiming that file sharing had expanded their audience and with it the number of potential paying users. They said that some file sharers occasionally purchase content, and that the companies who were fighting the current social norms of file sharing would lose customers

as a result. Relatedly, some felt that litigating against this technological disruption was not a long-term solution, stating that they preferred to apply their efforts and resources elsewhere. Finally, some simply said that file sharers could not be convinced to buy content through legal threats, since they were not going to pay for content either way. Rather than try to "go after students who are just going to go get stuff from the tube sites if they can't download it," they thought that companies should focus their efforts on marketing to their actual customers, "people with disposable income."

While the companies that litigate tend to be the larger ones, not all large companies in the business litigate. As mentioned above, producers generally feel that the crux of the copyright infringement problems is the free content on the tube sites. Even if file sharing were completely eliminated, this free material still undermines producers' ability to sell copyrighted content. The individual users who upload stolen content to tube sites are anonymous and prohibitively difficult to track down. But what about the intermediaries, the tube site operators themselves?

Section 512 of the Digital Millennium Copyright Act (DMCA) exempts certain service providers from liability, granting them a "safe harbor" in exchange for their removal of infringing content at the request of copyright holders.¹⁸ This provision protects the tube site owners from being held responsible for copyright infringement through their users.

If a copyright owner notifies the tube site of infringing material, the platform operator must respond "expeditiously" to comply with the takedown notice and remove the content. In practice, "expeditiously" will usually mean within a period of about 24-48 hours, which for the adult tube sites means that the content may have already been viewed millions of times. Furthermore, once the content has been taken down, it will often quickly reappear. While repeat infringers are required to be banned from posting to the site, the content can be uploaded under a different user account, leading to a continuous circle of takedown notices and uploads that producers likened to "cat and mouse games" or "whack-a-mole."

Most producers expressed frustration with the safe harbor provision because it requires right holders to locate all unauthorized uses of their material and to alert the intermediary in order to trigger the law's takedown procedure. Because not all firms have the time and resources to monitor the sites for their material and send notices, some have outsourced this to a cottage industry of external companies that specialize in the task. Others are working on technological solutions to automatically identify their content and send notifications. Both of these solutions are costly and limited in effectiveness. For this reason, many producers are instead exploring partnerships and revenue-sharing models with the tube sites.

Because of the obstacles in copyright enforcement, producers and industry specialists confirm that the industry cannot rely on copyright protection as it is intended to function. In the absence of the economic incentives provided by copyright, the traditional business model of creating and selling content has become a losing strategy.

You know, in this industry, when we started, you made a movie and you put it out on DVD and that was your income. And anybody that just stuck with that model? They're not around anymore.

According to conventional copyright theory, production will suffer if there are no legal barriers to copying. While underproduction is difficult to measure in practice, industry members do believe that production of adult content has decreased in recent years as a result of copyright infringement. But the interesting question is whether that's the whole story.

Looking at how the industry has weathered previous changes, technological disruptions are always times of struggle. Many companies go out of business, but they clear the way for new market entrants. The companies that have survived and stayed profitable in the long term have been flexible enough to quickly and fundamentally adapt their business models in times of change. If there is one industry that can survive whatever hardship is thrown at it, it is adult entertainment. Part of the industry's flexibility might be because it is historically unable to rely on law enforcement or policy makers when dealing with technological disruption. The socially stigmatized business has little political clout and adult entertainment companies are comparatively weak in lobbying policy makers to represent their interests. Because politics is not an option, these players may be especially quick to accept new environments as a given and figure out how to work within them.

While the digital age has been challenging, the conversations and interviews in this study suggest that the industry is restructuring itself to adapt to this new environment. Companies are shifting toward selling what cannot easily be copied or offered for free and looking for new ways to recoup production costs. Interestingly, it looks like traditional content may still be produced within these new business models.

Services

Ultimately, I think the defense is a good offense. You know, create a good product, have it easily available at a good price point, so people don't want to go around trying to find it.

Whenever there's a new way for people to consume, we'll get there. And we'll get there quick.

While average consumers may be less likely to pay for content that they can find for free elsewhere, consumers are willing to pay for content that is tied to services. Unlike music albums, adult entertainment is often used immediately, and consumers will make purchases quickly and compulsively—a consumption pattern that providers can exploit.

At the most basic service level, providers will invest in the visual aesthetic and usability of their websites. While the material may be available through unauthorized sources shortly after a release, the producer sites are convenient, high-quality, have tailored aesthetics, and are able to cater to individual tastes through reliable and narrow categorization of content.¹⁹ Since browsing is often part of the consumption, well-designed sites offer an added service value to the consumer and ultimately allow producers to sell material that is available for free elsewhere. Many websites still offer subscriptions, tying in users with the promise of continuously updated content that is easily found and immediately available. Although less lucrative than about five to ten years ago, producers report that subscription models continue to attract paying customers and contribute to their income. When asked why users would pay for their service if they can find the same (or similar) films or photos elsewhere, many assume that their customers value not having to navigate or sift through free material to find the content that they want.

Subscription models work particularly well in niche markets. Similar to the way that the music and book industries have been able to expand into less popular areas with online distribution, some producers are now focused on exploiting the long tail of the adult entertainment market. By accommodating narrower customer preferences, producers remain able to create and sell traditional content, because it is difficult to find rare or highly specific interests elsewhere. Sometimes production costs are sufficiently low to allow individual commissions for personalized projects. Unlike for the majority of adult content, niche brands are often able to build a loyal customer base that is interested in financially supporting creators.

Since content is often copied and distributed without authorization, some producers will also license their content non-exclusively at a very low price. This means that websites may offer authorized duplicates of the same content available on other websites, in addition to their own content. What the providers then compete over are distinctions in design, format quality (for example higher resolutions, faster downloads, or streaming video), content curation, search functions, media integration, and other service aspects. In these cases, there appears to be very little investment in the quality of content production—non-exclusively licensed content is among the cheapest produced. But at the same time this model incentivizes higher investments in service.

Companies are constantly playing with new video-on-demand models. Smart TVs and Netflix-like platforms can offer anything from individual films to streaming subscriptions for a monthly fee. Comparable to previous models of adult cable television and video-on-demand in hotel rooms, even the small bit of convenience that these models offer today seems to generate willingness to pay. Low content production costs for adult material could make freemium subscription models (supported by advertisements and premium content upgrades) sustainable. While producing content is still important to producers, many feel that they ultimately compete over "bringing content to the consumer."

Another service area that has grown in size and importance is the mobile market. Adult content providers are quick to innovate in the smartphone and tablet space, despite considerable obstacles.²⁰ While some stores do not allow adult-themed apps, adult websites were among the pioneers of mobile-friendly web design and there is a thriving app market for less-restrictive device platforms (e.g., Android).²¹

During times when unauthorized files needed to be tediously converted to different formats, producers were quick to offer their content in every possible format and provide instant access and cross-platform streaming to any device (for example from web to mobile devices, but also to Blu-ray players and game consoles like PlayStation). New advances in streaming from cloud and locker services are interesting, because providers could additionally store content libraries for the consumer, reducing the risk of discovery on their hard drive.

We might not make as much money on DVDs anymore, but now we have all of these other revenue streams, and all added up together, from cable TV to VOD to Internet to all this stuff added up, that creates the revenue that you need in order to make it successful.

But capitalizing on services is not the only way that producers are moving to recoup their investment costs. The main shift in the industry has been toward creating interactive experiences for the user.

Interactive Experience

[T]he industry is adapting—there's a lot more "live" stuff going on, there's also a lot more gaming, interaction.

You see more companies dabbling in interactivity with the content. So I think that as an industry, we are evolving.

According to interviewees, the most significant way that adult entertainment is adapting to compete with free content and recoup costs is by focusing on interactive experiences. As an interviewee described one of the challenges:

There's not another industry in the world that is media that is for a very specific reason. You can go watch a YouTube video for hundreds of thousands of different reasons. To laugh, to cry, to show your friends, to learn to hack, to whatever, it's everything. But pornography is just to get off. That's the only reason to watch it. So how do you monetize it [if content is free]?

Producers are keeping a close eye on developments in immersive technology. Some are playing with concepts of virtual spaces and thinking about ways to create interactive experiences with various kinds of new technologies. For example, some companies have invested in, or recently launched, virtual strip clubs and other digital 3D or virtual reality worlds, where users can watch media and interact with performers and each other. "[I]t's a good way of creating something that's harder for people to replicate, because you're creating an interactive experience."

One of the biggest interactivity trends in adult entertainment is live chat and live camera shows. Adult sites use popup chat windows to engage website visitors. Some are fully automated "bots," others feature an actual person on the other end, and some will begin as an automated conversation and transfer to a person later on. Personal attention through live chat is one of the strategies that pay sites use to set themselves apart from free sites.

Most industry specialists and the majority of producers noted that one of the most lucrative business models in the industry today is live camera shows. Performers establish a direct connection to consumers via webcam, either out of their own homes or from a studio. Live camera platforms provide a personal experience that is significantly different from recorded content. While the content of a live cam can be recorded and the resulting video material distributed without authorization, the recording of someone else's session lacks interactivity. "You can steal the feed, but you can't steal the experience." In fact, distribution of recorded cam content, whether authorized or unauthorized, can serve as marketing for live camera websites and their performers.

Chat and live camera offer advantages over static video in customizability and personal connection. Not only can they cater to a variety of content preferences, but also to more diverse motivations to seek out the entertainment in the first place. For example, one live cam website operator mentioned a customer who spends hours every week playing chess with one of the performers. He said that the "product" had expanded to meet new demands, for example the desire for personal connection.

It's worth noting that many of the mainstream news articles predicting the downfall of the industry use adult entertainment "stars" as an example. They report anecdotes of lower average wages and famous stars struggling to find work. But according to industry specialists, this narrative does not take webcam performers into account. Many of the

performers who make money through live camera and chat websites are not interested in being "stars," because it might actually hurt their business. When what they offer is a personal, intimate, exclusive experience, it decreases the value of their service to the consumer if the experience is too obviously shared with many.

There's the whole porn star thing, but then there's webcam girls. You know, webcam girls don't want to be known. 'Cause then that blows the opportunity of making a lot of money from people who are spending a lot of money. The guys who are spending hundreds of dollars a day to watch them on webcam, they're not gonna spend it if everyone knows who she is. 'Cause they want that exclusivity. More like, "oh this is my girlfriend"-type feeling, as opposed to being star-struck or in awe of the girl. And if you look at how many webcams there are, I think that porn stars are over. It's like novelty, almost. Like the old-school porn is. I think it can always exist, it's just more of a novelty than it is a business that's making a lot of money.

Another area where producers are looking to create immersive interactivity is gaming. The adult industry has previously faced a number of obstacles in the video game market. Not only are adult companies unaccustomed to the large ex-ante investments necessary for quality game production, ²² they have also been restricted from platforms, mainstream advertising, and standard distribution channels. But with fairly recent quality advances in online gaming, distribution channels and cost are less of an issue. And with increasing consolidation in the industry, companies are more able and willing to make long-term investments. Some of the larger producers have been experimenting with games, releasing initial trial versions for free to attract users and then offering paid upgrades or in-game purchases. Producers are also trying to customize the game experience by letting players create their own 3D scenes.

Finally, companies are searching for ways to build not only virtual, but also real-life social communities around their products. Adult communities are restricted from social media platforms like Facebook, word-ofmouth marketing is less practiced, and videos are generally not widely shared among friends and strangers. But not all platforms restrict adult content: Tumblr is host to a lot of curation and community-building around specific preferences, and many people in the adult industry use

Twitter to communicate with and connect to their customers and fans. Building social interaction and community appears to work especially well for niche markets. For example, one of the larger U.S. fetish producers has successfully built a participatory, interactive experience in San Francisco, including public tours of its facilities, allowing people to watch live shows in person or even participate in scenes, and creating a social network and live webcam community.

All of these strategies provide an experience to consumers instead of selling static content. While this shift makes sense given the difficulties of preventing photo and video material from being copied, it doesn't necessarily mean that adult entertainment producers will give up on traditional content production.

Traditional Content Production

To me, I think there's more money to be made in offering some of your content for free than in trying to protect it.

Producing copyrightable content still serves a function if it can be tied to services or experiences, or used for marketing purposes. Producers said that they were continuing to create standard photo and video content. Looking at the history of the online business, giving content away as advertisement is not a new strategy. Playboy adopted this approach in the 1990s when it realized that its images were being copied and shared online.²³ Rather than attempt to enforce its rights, it marked all of its material with its logo, the Playboy bunny, and harnessed the unauthorized distribution for branding purposes, using it to increase traffic to its website and attract new customers. Not stopping there, Playboy began to actively encourage the use of its material, contacting the people who were hosting the images and offering them a business proposition: If the host added a link back to the Playboy website, Playboy would pay \$25 or more for any new subscriber directed to them through the link. It even offered the host sites assistance in improving their web pages. So while continuing to produce high-quality images, Playboy started focusing on selling subscriptions—a service for which people were willing to pay.

Today, producers are engaging in similar tactics. Given the high visibility of content on tube sites, producers are able to distribute video clips

to a large audience quickly and cheaply. They can disseminate material without having to pay for hosting or bandwidth, which many producers said had become a heavier financial burden than content production itself. The tube sites are able to cover their bandwidth costs through economies of scale and advertising revenue. Many producers now actively place their own content on the tube sites in the form of short, branded video clips. Sometimes this happens as part of a partnership with the site operator. Producers also distribute branded video clips over file-sharing networks: "we seed our own torrents . . . ; when you search for a pirated version, you find us, first."

Some also host free content on their own websites, saying the traffic and subsequent purchases and sign-ups are worth the bandwidth cost.

People . . . see the value of making a piece of content that can be ripped off easily and giving it away, and then monetizing elsewhere. You know, things that can't be stolen.

I work with musicians and all day long I tell them "give your music away for free." Because of the eyeballs. If you get maybe a couple thousand people buying your music, that's nothing compared to hundreds of thousands of people who will download it if you give it away. And then . . . you get them to buy x, you know, something that you can sell. . . . and I think that's way more valuable than a piece of intellectual property and fighting that.

Producers also confirmed that content is generally substitutable, meaning that sticking to the model of selling content would be undermined by other producers giving content away.

The desire to have specific content is being completely set aside by the fact that you can just get other stuff.

With adult, we're facing not just piracy, but also free content.

The whole thing's a double-edged sword, I mean, you can lock down your website so it would be impossible for people to redistribute the stuff, but then it's really going to affect what people's expectations are. People expect when they come to a website they're gonna see videos, photos, and

if they like the video they can download it and have it. So there's a hunting and gathering on top of a horny desire that causes people to join these sites. And if you take that away from them, then they're unfulfilled. And . . . you have to satisfy the people who are legitimately there, and that also means that there are some people who are going to take advantage of that and redistribute it when they shouldn't.

Once this cycle has started, it is difficult to switch strategies, because producers who do not use content as a loss leader are at a disadvantage. Some indicated that the current situation resembled a prisoners' dilemma, in that no company has the incentive to deviate from giving away content, even though the industry might be better off if everyone played by the same rules. But given the difficulties of copyright enforcement, it's unlikely that a coordinated strategy would salvage the previous business model.

It's already changed, so why try to stop it? You have to learn what the new business model is to make money with that environment. And, you know, yeah, it's kind of fucked up, but a lot of things are fucked up. And it is a reality, so there's no way to change it.

Currently, the majority of producers continue to produce and give part of their content away for free. A few indicated they did so as part of a win-win business model. The others felt that they simply had little choice in the matter, either because their material was likely to be appropriated and distributed through unauthorized sources anyhow, or because their consumers expected free material and would substitute elsewhere if they did not make it available. In producing and giving away content as a loss leader, companies now try to draw attention to their brand, their websites, their services, and paid experiences.

Companies are becoming larger and better organized, incorporating production, marketing, and distribution. While most people have heard of Playboy or Hustler, fewer have heard of a company called Manwin. Yet in recent years, these new players have come to dwarf their more famous predecessors in size and market power, first acquiring networks of tube sites and then production companies. These changes in structure come with rising barriers to entry in the industry. Those able to enter

the market and succeed are comparatively professional and strategic companies, with the financial means to invest in a variety of business models as the industry adapts to environmental changes. Consolidation and integration allow firms to cross-subvent their operations, working with content as a loss leader while making other products and services profitable.

As the industry restructures itself to adapt to its low-IP environment, this raises a more general question: How do we evaluate these changes within the economic framework of copyright and innovation policy?

Lessons from the Adult Entertainment Industry

When asked about their predictions for the future of the industry, all of the industry specialists and producers believed that the adult entertainment business would continue, despite its hardships.

I don't think it's going to kill the porn industry. No way. There's way too much money to be made right now. I mean, webcams are just ridiculous. So it's just people who understand this [the changed world] that are going to do well. [...] I don't think piracy is gonna kill this industry.

Contrary to the stories in the press and the basic intuition behind copyright policy, this study suggests that the adult entertainment industry is surviving. Given its robustness in the face of change, it's worth considering whether there are lessons to be learned for innovation policy. Some industry-specific factors may translate to other creative industries on a case-by-case basis, but the shift toward services and interactive experience seems both broadly applicable and fundamentally important to consider in the context of innovation policy. It adds another perspective to the oversimplified debate over what types of creation we as a society want to incentivize and how to best support creators and content makers.

To borrow a modified example from Pine and Gilmore,²⁴ take coffee. Coffee can be sold to consumers in different ways. One way is to package coffee beans that people purchase as a product. Another way is to provide a service, i.e., selling prepared cups of coffee. In this case, consumers are paying for the product, but also for the service of having

it prepared and ready for immediate consumption. Yet another way is to construct an experience around the product, such as a hipster coworking coffeehouse, where people will pay not just for the coffee and the service, but also for the surrounding atmosphere. The interesting thing about this type of market is that the different goods—products, services, experiences—can cross-subvent each other. Even if coffee beans are made available for free, consumers will still be willing to pay for the services and experiences.

Applied to the online adult entertainment industry, coffee can be likened to traditional content—photography, film, etc. In this case, however, content is a non-exclusive, non-rivalrous information good. It can be easily copied once produced, leading to unlimited availability. Since consumers can get content for free, businesses tie content to services and experiences for which consumers are willing to pay. At the same time, they continue to produce and distribute information goods that they can tie to their brand and use to build their reputation. Another difference is that the distribution of information goods is cheap. In fact, the tube sites, the very mechanisms that have undermined producers' ability to sell content, are a highly cost-effective dissemination device. Free material that is distributed through tube sites can get hundreds of millions of views per day. The bandwidth costs for hosting the content are covered by the content aggregator. Producers therefore have continuing incentives to provide traditional content—to feed services and experiences, but also to strengthen their brand.

Our current copyright law is based on a simplified uniform theory, without regard for factors or circumstances that may sustain innovation in practice, or steer investment incentives in new directions rather than eliminate them. If coffee beans are easily replicated, the story goes, producers will have insufficient incentive to invest in coffee production. The market for coffee beans will die. To correct this, limited exclusive rights are created, taking into account that this will also limit access and distribution.

To be clear: One cannot claim an exogenous shock that makes coffee beans available to everyone for free will not cause negative market effects, just as one cannot claim that unauthorized piracy and content aggregators have not caused negative economic effects in the adult entertainment industry. Even if a system of cross-subsidizing various types

of goods is sustainable, production may still be at a level below what we as a society desire, both in terms of quality and quantity. It is important to remember, however, that our current copyright system constitutes a tradeoff. Exclusive rights should only be granted to the extent necessary to sustain a socially desirable level of creation. ²⁵ In other words, the social benefit of copyright should be weighed against the costs it imposes. Both sides of the tradeoff are incredibly difficult to measure, but law-makers and society must rely on the best possible information available when making policy decisions.

Other studies in this book have come to the conclusion that the market failure assumed in the absence of formal IP protection is not always as strong as predicted by traditional theory. Content production in the adult entertainment industry has not disappeared as our simplified theory would suggest. However, one should be hesitant to conclude that a blanket removal of copyright protection would strike the right balance for production. Just because an industry can survive without, or with less, copyright protection does not mean that economic market failure is absent. In the absence of copyright protection, the level of content production may still be lower than economically optimal.

And it is realistic to assume that production of adult content has decreased as a result of copyright enforcement difficulties. But this study demonstrates some persistence of content production, as well as increased investment in other areas. Standard copyright theory does not take into account incentives to produce for secondary markets or branding purposes. As discussed below, this shift is something that other creative industries are experiencing, as well, and it is something that theory and policy need to take into consideration.

One theoretical concern is the reduction of content quality. In the absence of copyright protection, production may focus on cheaper, ephemeral works, with less upfront investment and more immediate gains. This is a legitimate worry for creative industries, and it is here that there may be a significant difference between the adult entertainment industry and some of the other entertainment industries in practice.

Even during the boom of filmmaking in the industry, when producers had the means to invest high amounts in content quality, production costs for adult material steadily remained far lower than those of the major non-adult entertainment film industry. For example, *Pirates*,

the most elaborate, expensive adult movie ever produced, cost a total of \$1 million, 26 as compared to the \$317 million cost of Hollywood block-buster *Pirates of the Caribbean—At World's End.*27 The majority of adult films are not elaborate and are produced for far less. While high-quality production is undeniably of certain value to some consumers, it would be difficult to argue that the average user of adult content prefers a market with a smaller number of full-length, expensive films to one with very many different films that are short, simple, and inexpensive. Consumer preferences are likely part of the reason that most standard content producers have not invested large sums of money in high-quality plots, creative content, expensive sets, or special effects, focusing instead on short product cycles and high output rates.

The phenomenon of "Gonzo pornography"—professionally produced content that is made to look especially cheap—is a further indication of socially optimal low production costs. In the United States, legal record-keeping requirements create obstacles for homemade amateur-produced adult content,²⁸ but cheaply made U.S. content labeled as "amateur" has become rampant over the last decade. Interestingly, most of the popular "amateur" material is only portrayed as such and actually professionally produced.

While some might claim that the vast supply of "amateur" content is just cheap to make and doesn't necessarily reflect consumer preferences, many producers feel that amateur films are actually appealing to consumers because of their authentic feel. In fact, the real or perceived popularity of actual amateur adult content in the 1990s is what spawned this type of professionally produced film. Gonzo pornography effectively imitates user-generated content. The style of filming tries to capture the look and feel of a non-professional production, usually omitting scripts, plots, acting, costumes, and expensively groomed stars, and will even use bad lighting, cheap sets, and a shaky camera on purpose. Often, one person will do the directing, filming, and participate in the film all at the same time, which means that the production team can consist of as few as one to three people.

Needless to say, the costs of producing amateur-style content are extremely low. Assuming that some consumers actually do value this type of content more than expensively produced feature films, this means that the costs to produce enough of it to satisfy the market are low. Even when accounting for quantity and other consumer preferences, the overall costs for economically optimal adult content production are significantly lower than for Hollywood studios. In a market where information goods are optimally cheap, the decrease in production caused by loss of copyright may not be as substantial as for other industries.

As discussed in Chris Sprigman's chapter, the absence of IP protection could actually affect the kind of content produced rather than the amount of artistic production.²⁹ Looking at other studies on markets with low IP protection, many show increased investment in types of content that are more difficult to replicate. For example, French chefs develop intricate recipes that require additional know-how or personal assistance to copy,30 and tattoo artists will customize and personalize their artwork.³¹ This effect need not be negative. Oliar and Sprigman, in their 2008 study on stand-up comedy, argued that the shift they observed from a focus on joke performance to a focus on joke content cannot be easily evaluated in terms of what type of investment is more socially desirable.32

While it is difficult to make the case from a purely economic perspective that necessity drives optimal innovation, and while it would be far-fetched to claim that there is no market failure in the traditional sense in the struggling adult industry, the shift toward experience goods may not be quite as forced or suboptimal as assumed. In fact, one of the reasons adult entertainment drives new media formats so strongly could be because of users' continuous demand for novel methods of consuming content. If users tend to seek out ever-newer ways of enhancing their overall experience, they will be particularly responsive to new formats. One producer pointed out that, in succession, all new media formats for adult content have moved toward creating the most immersive experience possible. She postulated that the trend toward selling interactivity and experience was only partially spurned by current copyright protection issues and was essentially a natural development that had less to do with hardship-induced necessity than with what new technologies were available.

With regard to other major entertainment industries, the broad change this study observes in the adult market is by no means unique. Other industries are seeing a parallel shift toward experiences and services. For example, while file sharing is blamed for declining sales in the major music recording industry, it has had a positive impact on complementary markets for live performances,33 as well as for electronics and communication services.³⁴ We also see the effects of letting consumers browse free or unauthorized content to help them make informed decisions before purchasing.³⁵ Amidst these shifts, both the quantity and the quality of music may not suffer as much as traditional theory assumes.

The movie industry, despite declining DVD sales, appears to be reaching a much wider audience through streaming services, capitalizing on the increase in broadband and digital networks, and profiting from more and better-targeted advertising.³⁶ Independent musicians are giving content away as a loss leader to build their fan base and capitalize on live performances,³⁷ and independent filmmakers and authors are using crowd sourcing to fund their upfront investments in content production.³⁸

While the general trend toward services and experiences is universal, the most effective methods may differ across industries. The adult entertainment market is characterized by low production costs, commoditytype goods, high demand, and somewhat unique consumer needs and preferences. As such, this industry may be in a better position to capitalize on demand-driven traffic, immediacy, and privacy, while other entertainment industries may be better able to capitalize on ancillary markets for merchandise, loyalty toward creators, or crowd-sourced funding. Most important, the costs and benefits to copyright may vary across industries. Even with an enforceable copyright system, the economic costs of protecting adult entertainment content may be lower than for other entertainment goods, because content is more substitutable. This means that the monopoly-like effect of the exclusive rights is lower. But it also means that social welfare may not suffer in absence of copyright if consumers value access more than high-quality content.

It seems overly simplified to argue that the entertainment industries function just as well without copyright, and that our system of exclusive rights should be completely discarded. The general idea behind intellectual property, that it aims to correct a market failure and compensate creators for their investments, can't be cast aside without a better understanding of the involved costs. As the debate about the tradeoffs in current innovation policies evolves, we need more information of the sort that this book provides. Policy makers should consider that in some cases, consumers might prefer access over product quality, and that secondary markets could sustain both production and quality. This study sheds some light on a previously obscured value judgment for policy makers in practice.

Providing detailed, industry-specific insights into the types of investments and entertainment goods that result from changes in law, technology, and consumer expectations is valuable. How these insights are applied more generally depends on what types of goods policy makers want to incentivize. It also depends on whether the aim is to support creators and their incentives, or whether it is to ensure the widest possible distribution of works. Policy debates have brought copyright alternatives to the table, suggesting various ways to compensate creators for their work, while at the same time mitigating the costs of granting exclusive rights.³⁹ But in order for these debates to be grounded in practical reality, we need to analyze the workings of individual industries in order to better understand the needs of consumers and creators. This chapter shows that studying real-world markets can provide helpful insights to policy discussions as we think about revising our innovation laws in the digital age.

NOTES

This chapter is adapted from research undertaken at the Swiss Federal Institute of Technology and from the previous publication "What Drives IP Without IP? A Study of the Online Adult Entertainment Industry," 17 *Stanford Technology Law Review* 655 (2014).

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- 3 Ogi Ogas and Sai Gaddam, A Billion Wicked Thoughts: What the World's Largest Experiment Reveals About Human Desire (Penguin, 2011), 6.
- 4 Ibid., 6-7.
- 5 Sebastian Anthony, "Just How Big Are Porn Sites?" *Extremetech* (April 4, 2012), http://www.extremetech.com.
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Times (August 10, 2009); Chris Morris, "Is the Porn Industry Imperiled?" CNBC (January 2012), http://www.cnbc.com; Michael Stabile, "End of the Porn Golden Age," Salon (March 3, 2012), http://www.salon.com; David Futrelle, "Sex on the Internet: Sizing Up the Online Smut Economy," Time Magazine (April 2012); Joe Garofoli, "Economic Woes Hit Porn Industry," San Francisco Chronicle (March 2, 2009), http://www.sfgate.com; "The Trouble With Pornography: Hard Times," Economist (September 12, 2009).

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- 10 Bleistein v. Donaldson Lithographing Company, 188 U.S. 239 (1903); Mitchell Bros. Film Group v. Cinema Adult Theater, 604 F.2d 852 (5th Cir. Tex. 1979); Jartech, Inc. v. Clancy, 666 F.2d 403 (9th Cir. 1982).
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- 12 *Malibu Media v. John Does 1–10*, 12C3623 (C.D. Cal. pending).
- 13 AF Holdings, LLC v. Comcast Cable Communications, LLC 12C3516 (N.D. Ill. 2012).
- 14 Pacific Century International Ltd., v. Does 1-101, 11-02533 (N.D. Cal. July 8, 2011); *On The Cheap, LLC v. Does 1–5011,* 10–04472 (N.D. Cal. filed October 4, 2010); Rhett Pardon, "N.Y. Magistrate Judge Tosses 4 Porn BitTorrent Suits," Xbiz Newswire (May 7, 2012), http://newswire.xbiz.com.
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- 16 Mick Haig Productions, e.K. v. Does 1-670, Case No. 3:10-cv-1900-N (N.D. Tex September 2011); Mike Masnick, "Copyright Troll Claims Sanctions Against Him Are 'Bulls**t' and He's Going to Keep Sending Questionable Subpoenas," Techdirt (July 16, 2012), https://www.techdirt.com.
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- 27 Jenny Aluning, "Top Ten Most Expensive Movies of All Time," Star Central (January 17, 2010), http://www.starcentralmagazine.com.
- 28 For example, in June 2005, the 18 U.S.C. §2257 recordkeeping requirements were extended to site hosts as "secondary producers," which is defined as anyone who "inserts on a computer site or service a digital image of, or otherwise manages the sexually explicit content of a computer site or service that contains a visual depiction of, an actual human being engaged in actual or simulated sexually explicit conduct." See 73 Fed. Reg. at 77, 468.
- 29 See the Conclusion to this volume, by Chris Sprigman.
- 30 See chapter 1 of this volume, "Norms-Based Intellectual Property Systems," by Emmanuelle Fauchart and Eric von Hippel.
- 31 See chapter 4, "Owning the Body," by Aaron Perzanowski.
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