

Understanding the Effects of Online Paywalls on Information Access

by
Sneha Shah

A THESIS

submitted to
Oregon State University
Honors College

in partial fulfillment of
the requirements for the
degree of

Honors Baccalaureate of Science in Business Information Systems
(Honors Scholar)

Presented November 30, 2021
Commencement June 2022

AN ABSTRACT OF THE THESIS OF

Sneha Shah for the degree of Honors Baccalaureate of Science in Business Information Systems presented on November 30, 2020. Title: Understanding the Effects of Online Paywalls on Information Access.

Abstract approved: _____

Andrea Marks

At the start of the public's use of the internet in 1983, whatever news made it online was expected to be open and free of charge. However, the idea that news should always be accessible online changed as newspapers moved most of their content online and needed online subscriptions to help account for the decline in physical subscriptions. Paywalls were created to enforce this. An online paywall is a barrier to an article or site that can only be surpassed with paid subscriptions. Paywalls allowed traditional news outlets to move their physical subscriptions to digital models, and attract new, online-only subscribers. While this model generates additional revenue to keep news organizations functional, it also restricts information access for many who cannot or do not want to pay for it. This paper explores the existing literature on paywalls, with the intent of finding potential solutions or alternatives to the traditional online paywall system.

Key Words: paywall, internet, access, information

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I understand that my project will become part of the permanent collection of Oregon State University, Honors College. My signature below authorizes release of my project to any reader upon request.

Sneha Shah, Author

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Introduction

In 1984 when the internet as we knew it was new, Steven Brand, the creator of the Whole Earth Catalog, famously proclaimed at the first-ever Hackers Conference that “information wants to be free”. As noble as that sentiment is, this was not the complete thought that Brand expressed. An article by Steven Levy (2014) for Wired describes what was fully said:

“On the one hand information wants to be expensive, because it’s so valuable. The right information in the right place just changes your life. On the other hand, information wants to be free, because the cost of getting it out is getting lower and lower all the time. So you have these two fighting against each other.” (Stewart Brand as cited in Levy, 2014)

This sentiment from Brand aptly describes the current dilemma. Journalists and news media outlets deserve compensation for regularly providing valuable information to the public. At the same time, people deserve free and equitable access to information as a function of democracy. Paywalls (online barriers that are surpassed with payment) restrict information from a large subset of the population. Is this subscription model of information becoming a gatekeeping method, or should payment be expected for thoughtful journalism?

The Paywall Paradigm

A paywall is “a system that prevents Internet users from accessing certain Web content without a paid subscription” (Merriam-Webster, n.d.). Paywalls are prolific today, existing in some form for many popular news sites. In 2019, there were almost 69% of newspapers and weekly publications with a form of a paywall in the United States (Simon & Graves, 2019). With the sharp increase in online news viewing, outlets use paywalls to accommodate the

decrease in physical subscription income. However, paywalls also block people who cannot pay.

Types of Paywalls

There are several widely recognized categories of paywalls available today. According to Carson (2105), there are three common paywall types: ‘hard’, ‘soft’, and ‘freemium’. Hard paywalls impose a strict access barrier to all content on the site to those who are not paying customers (Carson, 2015). An example of this is the *Financial Times*, a newspaper with several paid tiers but no free content. This is the most restrictive form of a paywall, and in my mind, is the most unethical. Hard paywalls prevent any access at all, barring people from consequential political and finance news. Even the trial period is not free. It costs \$1 for four weeks and then makes a significant jump to \$68 per month.

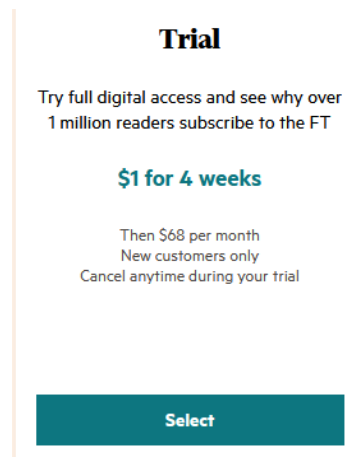


Figure 1: The Financial Times trial period information

Soft paywalls allow for freely available content balanced with some paid content. Usually, these fall into the subcategory of ‘metered’ paywalls, allowing readers to access a set number of articles for free before requesting payment for more content. *The Washington Post* is an example of this, offering 7-10 articles for free each month. This is more accessible

than a hard paywall, but forces users to decide what is ‘most important’ to read about.

Therefore, it still has an element of restriction.

Freemium paywalls, otherwise known as combination paywalls, keep parts of the content free to access while other premium content is behind a hard paywall. *The Oregonian* employs the freemium model. Pictured below is an example of their “subscriber exclusive story” that is not available without a paid subscription.

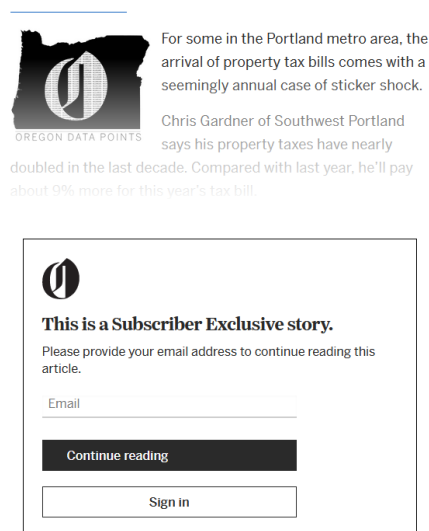


Figure 2: *The Oregonian* "Subscriber Exclusive" freemium paywall

This method still stifles information access because the publisher gets to decide what should be free versus what should be paid to read. The decision removes the choice for the reader entirely and can act as a form of intentional limitation for those who cannot or do not want to pay. Limiting the information people can access based on payment creates a divide within news that ideally should be available to everyone.

Paywall History

In 1996, *The Wall Street Journal* was the first national newspaper which created a sitewide paywall (Flynn, 1996). On April 26th, 1996, *The Wall Street Journal* announced it was

starting an online publication that evening and would allow users to access articles for free until July 31st. After that, *The Wall Street Journal* Interactive Edition, the online version, would have cost \$49 a year (or \$29 a year for those who also subscribed to the print newspaper) (Flynn, 1996; Shedden, 2015).

Though *The Wall Street Journal* was the first national newspaper to implement an online paywall, it seems that some local/regional newspapers had an online pay model in place even earlier. The earliest mention I found of this is in a *New York Times* article, stating that “[t]he *San Jose Mercury News*...charges \$4.95 a month for access to its Mercury Center Web site, or \$1 a month for its newspaper subscribers” (Flynn, 1996).

Failed Paywalls

Both *The Wall Street Journal* and the *San Jose Mercury News* appeared to have remarkable foresight. In the late 90s and early 2000s, companies thought that by putting print content online, they would establish the precedent of the “cannibalizing of print content for Internet use” (Aspen Institute, 2021). On the other hand, many saw this foray into online media as a huge advantage for existing companies. As quoted in Columbia University’s 21stC magazine article; “[t]raditional newspaper companies have one great asset over newer Internet news providers. They are the brand names. They have credibility with readers.” (Breecher, 1998). This would prove to be true, as *The Wall Street Journal* went on to have 200,000 online subscribers within two years in contrast to the many smaller or online-only news sites that had failed at the time (Dennis Publishing Limited, 2014). *The Wall Street Journal* had a sizeable corporate subscription base that depended on it to learn about the economy and relevant politics (Dow Jones & Company, n.d.). This translated well to the digital subscription world. Financial institutions and businesspeople used this publication to

do their jobs, and both were generally ahead of the technological curve. They also had the money to spend on a subscription. This was not the case for the readers of many other popular publications.

The LA Times attempted to put its entertainment section, CalendarLive, behind a paywall in 2003 after the success of other news paywalls, but experienced a drop of 97% in readership (Windsor, 2009). The entertainment section was not as important as current events, and readers could go without it if it was not free. The paper took the paywall down less than two years later. Perhaps *The LA Times* and many other papers saw the success of others and thought that this would work without realizing that they needed to offer a compelling, unique value to readers who had never paid for the articles before. Publications that tried to switch their paper subscribers to digital subscribers may have assumed that since people paid for their physical subscriptions, they would easily transfer to their digital subscriptions. This demonstrated a lack of consideration for their demographic, many of whom paid because the news was a physical paper and did not want to use their online services. These risks and others were not evaluated well enough before newspapers jumped into what they thought would be a successful online paywall strategy.

Reasons for the Paywall

The fundamental reason for any publication to have a paywall is to generate revenue. A 2019 study done at Reuters included a survey of editors and CEOs in which 52% of respondents planned to focus most on paid subscription implementation, compared to 27% who planned to focus more on advertising (Newman, 2019). Digital subscriptions had taken over print subscriptions for large news companies such as *The New York Times*. According to this

study, in 2018, three point one million *New York Times* subscribers were digital-only out of the publication's four million total subscribers (Newman, 2019). Furthermore, digital readership is projected to completely overtake all print readership by 2027, or even as early as 2024 (Mather Economics, 2021). Digital paywalls will likely be enacted more frequently to account for this loss in physical subscription revenue.

Another reason to use paywalls is to reduce the need for advertisements. Historically, ad revenue has always been highly profitable. In 2017, internet ad revenue reached \$75 billion, with a somewhat even revenue split between mobile and desktop ads, and it has continued to grow exponentially (Madrigal, 2017). This would be a positive trend for publishers and could lead to fewer paywalls, except for one key detail—“*all* the recent growth has been on mobile devices” (Madrigal, 2017). When the ad revenue growth is on these mobile platforms, tech giants Facebook and Google take most of the money.

In 2020, Google and Facebook combined made a total of over \$231 billion in ad revenue, even accounting for a general decline in advertising due to the coronavirus (Johnson, 2021; Statista Research Department, 2021b). In comparison, *The New York Times*, *The Atlantic*, and *The Wall Street Journal* combined produced less than \$540 million in ad revenue throughout 2020 (Trachtenberg, 2013; Statista Research Department, 2021a; Byers, 2021). Since much of search and news traffic occurs through Facebook and Google, these companies capture most of the money from ads, specifically ads on mobile devices. This actively takes away advertising revenue from digital news sites, resulting in a net loss of money for the publications that depend on this income. Paywalls help decrease newspapers' dependence on advertisements, which helps them cut the losses from the decreasing ad revenue.

On top of a dramatically reduced ad revenue, many Americans using an adblocker have dealt another blow to the ad revenue source. In 2020, at least 38% of Americans used an adblocker and in the 15-25 age range, approximately 52% used an adblocker regularly (Statista Research Department, 2021d). By enacting paywalls, this lost income can be partially recovered.

Who Reads the News, and How?

When most people talk about reading the news, they usually mean that they read it online. According to a 2020 Pew Research survey, 86% of Americans got their news online. The study shows the difference in news habits of different age demographics.

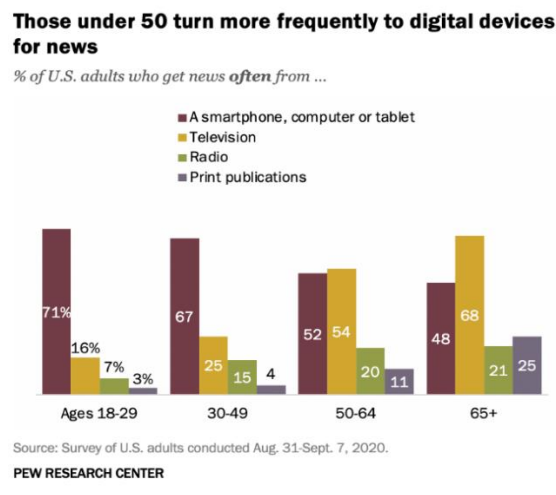


Figure 3: Pew Research survey results by age group

Based on this survey, the primary online news age demographic is 18-29 and 30-49, with 71% and 67% of their news coming from online sources, respectively. Online news is now the norm, not the exception. I have found that *all* my news comes from online sources. The last time I read through a physical newspaper was in 2013 before my parents canceled our *Oregonian* subscription for good. I receive news stories as online links, texted to me

from friends or posted by someone on my Twitter timeline. For me, a news story involves looking up some keywords and clicking the first link that is not paywalled. Since I am focused on finding something that I can read for free, I have a higher chance of running into a less reliable or downright incorrect source. If this much news is sought out online, it could be unethical and futile to force users to pay when other sites provide similar information for free.

The Cost of News

Providing information for free to a generation that is predominantly online may be necessary to make high-quality journalism accessible. According to a nationwide study by the Hope Center, because of the pandemic, three in five college students “were experiencing basic needs insecurity” (Goldrick-Rab, 2020). Based on this data, it is safe to assume that many college students and young adults do not have enough disposable income to pay for things such as online news paywalls, yet this is the same demographic that gets most of their news online. The same Pew Research survey demonstrated that 42% of Americans age 18-29 get their news from social media, and 28% get news from websites and/or apps. Free news sites, metered news sites, and social media have allowed free access to many of the same stories that the paywalled sites report on, albeit at a lower quality or with less depth.

Issues with Paywalls

Paywalls act as barriers to accessing information by design. While this may help with revenue and subscription management, it also allows news sites to become inaccessible to those who are unwilling or unable to pay to get past a paywall. By creating this obstacle, the news becomes another tool to stratify millions of Americans further. Those with more

disposable income will have better access to paid journalism, while those who do not will gravitate toward free journalism. Social media algorithms have famously led to an increase in political divide and one-sided information which keep people in their own bubbles; however, if paywalls continue as forecasted, these bubbles will form based on income, not opinion, and restrict our worldviews even more (Hill, 2020). The amount of money people can afford to spend will become a determining factor in the quality and type of news people get to read.

Another issue with the paywall is that with a bit of effort, they can be rendered ineffective. Though paywalls are pervasive, they are not infallible. Paywall circumvention is a dubious practice at best and may even be classified as illegal at worst. However, finding ways to circumvent paywalls is unavoidable since many people cannot or do not want to pay for the content behind the paywall.

Circumventing Paywalls

A well-known way to get around many major paywalls in the past was to use a private browsing mode. Private browsing mode, or “Incognito mode”, allows users to open up a window that can hide parts of their activity from the sites they visit. This browser worked for metered paywalls specifically because the site a user visited used cookies to track how many times the reader had accessed an article. Cookies are bits of information stored on your browser by different websites (Mozilla, n.d.). They can store things like site settings, information given, and in this case, the number of times you visited the site. However, cookies are not saved in private browsing, so the website cannot identify how many times you visited their news site in the past. Since they cannot track this, they assume you still have free articles left to read. This workaround was effective for many years until sites like *The New York Times* found that private modes had a piece of browser code that showed them if

someone was using a private browser (Benton, 2019). After this discovery, paywalls could be implemented even in private mode, rendering this circumvention method ineffective for most news sites.

After this change, the only way to get around cookie tracking is to either clear the browser history, specifically all the browser cookies, or disable all cookies entirely. Clearing browser history entirely may work. However, if you cleared cookies but the record of site visitation is still in your history, the site may still block news articles. Additionally, clearing browser history resets everything you have done, leading to the potential inconvenience of logged-out accounts and lost tabs. The most drastic paywall circumvention method is to disable cookies altogether. This typically is done within the privacy settings of a browser and is usually a last-resort option. Without cookies, many key features such as add-ons, links, and other interconnected content cannot function as well, if at all. However, it does work to get around the cookie-based metered paywalls, so it can be considered another valid circumvention method.

A different but still frequently used option is paywall-bypassing browser extensions. These are extensions that users install either through a third-party site or via the add-ons in their browser. Each extension may internally operate differently, but many typically include cookie-disabling functionality at the minimum. These extensions are typically created by individuals and not backed by any company. Installing this can be risky since you do not know who made it, how they made it, and how much of your data it can access.

A newer, slightly different form of paywall sidestepping comes in the form of an extension called Unpaywall (OurResearch, n.d.a). According to their website, “when you browse to a paywalled paper, we check to see if [there is] a free copy in our database”

(OurResearch, n.d.b). Though this seems similar to the legally questionable methods mentioned above, it is entirely legal. This is because the company actively gains permission to publicize the paper from its authors and publisher and utilizes open access/source journals. At this time, Unpaywall does not work with news media outlets and keeps its emphasis on formal research papers.

These circumvention methods add to an already-precarious paywall model for many publications. Though the paywall has been seen as an effective revenue measure for large publications, it is important to note that unless the company has an extensive reader base, most paywalls have proven to reduce overall site traffic and subscriptions. Even with the large publications, paywalls still reduce overall traffic even if the net result is profitable.

Existing Models and Potential Solutions

There are many potential solutions and modifications to the current paywall structure. The first solution operates on a model that already exists. News organizations can continue to use paywalls alongside running digital advertisements. Ideally, the paywall used here will have an allowance for free-to-read articles. This metered method will increase advertising revenue from site visitors who are reading within their article limit. Additionally, those subscribed will be contributing directly via the subscription, but may still receive ads. The publication can then continue to receive the ad revenue they were getting initially and can be further supplemented by the subscription payments.

While this is a well-known and widely used compromise, some of the issues discussed earlier come into play here. Ad revenue is not enough for many publications anymore since much of it goes to Facebook, Google, and similar companies that drive mobile

functionality and online searches. Additionally, many unsubscribed site visitors may bypass the paywall using incognito mode or by disabling cookies. Another issue that arises when using advertising in conjunction with subscriptions is that many paying customers expect little to no advertisement once they have paid for a service. After paying to subscribe, readers may still be disappointed to find ads; this could increase overall subscription turnover and negatively affect the organization. A modified alternative to this solution would be to remove all ads for paying customers. This can be a great incentive for customers to pay for a subscription in the first place. Though this may reduce overall revenue, it can also increase the longevity of customer subscriptions. In the end, though, this model still heavily depends on advertising, which is a declining source of revenue for many media companies in recent years.

Optional Model

Implementing optional subscriptions would be a less aggressive method to gain revenue. This would prevent the site visitation loss that many small- and medium-sized publications see when hard paywalls are applied. This strategy shifts the focus back to ad revenue, with significantly lesser revenue coming from subscriptions. While the strategy keeps site traffic at the forefront, it also dramatically reduces the revenue that a media company can get. Furthermore, repeated pushes to encourage users to subscribe to the news site may become annoying for some, who could avoid the site altogether. This model also leads to media sites pushing for clicks and visitation more than anything else. The focus on ads encourages clickbait, incendiary articles, and outright fake news to increase readership numbers (and, therefore, increase ad revenue). Dependence on a small number of subscribers and a large

amount of ad revenue via clicks could deteriorate the quality of journalism, especially at smaller media companies.

Personal Newsletter Model

Both suggestions so far describe working within the current confines of news revenue models. In a drastic shift of ideas, it is worth exploring another avenue altogether – personal newsletter subscriptions. The most popular personal newsletter site is Substack. Substack describes itself as a “better business model for writing” (*Jobs*, n.d.) and focuses on providing a platform for individual writers/groups to share ideas on a smaller scale. It comes with voluntary subscriptions to writers whom a reader may enjoy, assuming that people who enjoy the writing will pay. This model is similar to Patreon, a personal subscription site for creators, though Patreon has a wider breadth in terms of subscription tiers and subscriber rewards. Either way, this eliminates advertising dependency and allows writers more individual control. However, if somehow fully adopted, this strategy would essentially remove the need for news companies altogether. Substack, Patreon, and other similar platforms are likely to become oversaturated quickly (if they are not already). Thus, they only focus on a set number of already established creators, reducing the amount of publicity that other creators get, which reduces small creator revenue. Arguably, this pay-only model could further restrict information access since much of it is behind a paywall.

Since it is unlikely that all news will be through personal newsletters anytime soon, another option is to focus heavily on ads. News organizations could return to the internet's early days, remove paywalls entirely, and solely use ads. No optional subscriptions, no metered paywalls, no restriction. This effectively removes the issue of gatekept information for those with internet access, which is a great stride. Unfortunately, this brings back the

issue of organizations making controversial, or even fake, content to bring in traffic and increase ad revenue. Additionally, it may not even make enough revenue for small, less-supported publications to stay afloat. In the end, authors and employees at news organizations need compensation, and subscriptions help with this payment.

Conclusion

There is probably no ideal solution without a major overhaul of either news media or the public's ability/desire to pay. However, by combining parts of the solutions discussed, there is a chance to help preserve news media's existence. From an information access perspective, the best plan is to remove paywalls altogether, and operate solely on ad revenue, donations, and optional subscriptions. This strategy may be effective for smaller publications around the country, where the primary focus is to stay afloat in communities where payment to access news content is not viable. Effectively using this strategy for some large organizations is not impossible, but it may not be enough for others to keep their doors open. The donations strategy could help preserve some larger publications if the funds came from the 1%, as they do now, but this is hard to rely on for a solution.

Larger publications may have to focus more on the paywall model while still leveraging ad revenue, just as they have before. Metered paywalls create some free access, but information is being put behind paywalls, nonetheless. A slightly more open option would be to operate on the freemium, or combination, paywall model. By keeping some content behind a paywall and other content free to read, more access is available to those who want it. However, this opens another can of worms – should publications be determining what is 'important enough' to be free and adjusting access as such?

The paywall model is challenging in the information age, when free and open access to news, media, and other information is considered a right, not a privilege (Right to Information, 2018). At the same time, all publications, regardless of size, are losing subscribers and losing it fast. Since 2004, almost 1,800 newspapers in the U.S. have shut down (Abernathy, 2018). Journalists have the right to be paid, and people have the right to be informed.

There may not be a solution for completely free access without compromising journalistic values or depending on billionaire donations. All the ideas I proposed require a level of sacrifice from the news organization or the reader, and neither seems likely to give. Learning more about the internal workings of news organizations and the impacts they have on public information access allowed me to see more nuance in this situation. As I researched and wrote about how paywalls restrict access while simultaneously upholding news organizations, my opinion on them has changed considerably. I realize that high-quality information from dedicated journalists can only happen with fair compensation in today's economic system. At the same time, I still uphold that paying for news is inherently restricting information. Both can coexist in my mind while I continue to learn more about the complexities of information access in the current era of online news.

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