Issues in Information Systems
Volume 23, Issue 2, pp. 138-149, 2022

DOI: https://doi.org/10.48009/2_iis_2022_112

Deliberately confusing language in terms of service and privacy policy agreements

Johnathan Yerby, Mercer University, yerby_jm@mercer.edu
Ian Vaughn, Mercer University, ianvaughan77@gmail.com

Abstract

Terms of service and privacy policies are long complicated legal documents. Users agree to the terms of these agreements without reading or understanding their rights and responsibilities. People of all ages and backgrounds are subjected to mostly unregulated contracts and uses of personal data from nearly every facet of modern life. Social media, banking, gaming, news, healthcare, education, and work have terms of service and privacy policies that users must adhere to, usually with no opportunity to negotiate terms, or they can choose to not take part in that part of life. Companies such as Facebook and Apple use deliberately long and confusing terms of service with linked documents, to confuse or hide policies or controls. The contracts can be updated or changed whenever the company decides. Other companies such as Google, choose to write shorter, vague policies to give broad access and permissions to user's information. Most users do not believe they have the time or ability to read or understand the contracts they are agreeing to. There are no laws in the United States that governs how understandable terms of service, acceptable use, or privacy policies must be. With no legal or administrative requirements, companies are legally permitted to create long confusing agreements and require users to sign to use their services. This article highlights the issues with examples and offers a legislative solution using successful reforms of the past linked to plain language, the Fair Credit and Charge Card Disclosure Act, and Android mobile permissions enhancements.

Keywords: privacy, terms of service, contract law, social media, legislation

Introduction

An experimental study found that 97% and 93% of 543 participants agreed to the terms of service and a privacy policy of a social networking site that declared it would share all your information with the NSA and that users must give their first-born child as payment (Obar & Oeldorf-Hirsch, 2020). Online agreements are so ubiquitous that people quickly agree without reading or understanding the terms. If users select not to agree to the terms of service, they are denied access to the service and then re-prompted to give consent. People must either agree with the terms and policies or not use the service (Robinson & Zhu, 2020). The idea of online services began with software, platform, and infrastructure, but today there are countless examples of services that encompass people's personal and professional lives, across all ages and backgrounds. The agree or else nature of the terms and policies are rooted in early software sales using "shrink-wrap" agreements. Software was purchased in a store, wrapped in plastic shrink-wrap. When the user opened the shrink-wrap of software, they were simultaneously agreeing to the license and terms, without ever actually being forced to read, understand, or sign anything (Gatt, 2002). The modern form of

shrink-wrap is commonly referred to as click-wrap or browse-wrap and is a form of an adhesion contract (Davis, 2007). In adhesion contracts one party, the service provider usually, has substantially more power than the second party, the user. There is no negotiation or customizing terms, the provider presents a scenario of take it or leave it. Without agreement to the details, there is limited opportunity for support or clarification. Proponents of adhesion contracts state that they are necessary tools to meet mass demands in an indefinite number of regions, scenarios, and for standardization (Kessler, 1943; Schwartz, 2011). Users are increasingly aware that they are not in control and increasingly agree to terms without ever reading or understanding the implications. Within adhesion contracts, contractors hold leverage over the weaker party, often having them sign or agree while the contractor retains the right to accept, refuse, or modify the agreed contract as part of a living law (Kessler, 1943). A 2019 study found that Google changed their privacy policy and terms of service multiple times throughout 2018 and 2019 as they were testifying to Congress (Williams & Yerby, 2019). Another study found the phrase "change anything at any time" in several terms of service agreements (Chakraborty et al., 2022). Marotta-Wurgler (2012) explained that using click-wrap agreements with links and no prompt to agree to resulted in only seven people out of 4500 users even bothering to click the link to the policies. In Obar's (2020) study 74% of people skipped the click-wrap privacy policy, while the small exception group spent an average of 73 seconds to read a document that should take 29-32 minutes to read. So, people either did not read or they spent just over a minute to scroll through and still did not read the contracts. Roos (2017) pointed out that the function of the dense online agreements, which are universally not read or understood is to establish legal grounds to collect and share customer data, not to educate users of their rights. Preston (2014) argued that consumers do not and cannot read and understand even a fraction of online contracts. Additionally, the people that claim to have read the contract are often punished harsher for doing so, because they claimed to have understood the terms (Preston, 2014). This paper aims to explain the intended purpose of terms of service and privacy policies, the actuality, and propose solutions to improve privacy policies and terms of service. The solutions aim to fix deliberately confusing language and tactics used in terms of service and privacy policy agreements with consistent federal regulation.

Literature Review

Many websites, software, services, and products utilize terms of service or terms of use and are at times legally required to provide privacy policy if they collect personal data from users. Companies voluntarily craft their terms of service and require users to agree to them for reasons that benefits the company unequally (Robinson & Zhu, 2020). Terms of service can create legal barriers to prevent or punish abuse, retain ownership of information, administer as the organization sees fit, limit legal liability for the product or service, and predefine jurisdiction and governing law (Termsfeed, 2022). In an ideal environment the terms of service would be an explanation of what users should and should not do, with easy-to-understand ramifications. However, terms of service often a tactic to give a service provider an unfair advantage and endless route to changing the rules to benefit the organization. Chakraborty et al. (2022) found that firms with less negative severity to customers correlated with higher customer satisfaction. Companies can consider utilizing the terms of service in a manner that can be mutually beneficial to the organization and customer.

Privacy policies are required by law, occasionally, for certain sectors. Attorney Patrick Fowler (2015) stated

> "There is no general federal or state law that requires a company to have a privacy policy in all circumstances. But there are several laws that require one in some circumstances. Not having a privacy policy when it is required by law is a potential compliance problem that can lead to liability."

There are some Federal privacy policy requirements such as, the Children's Online Privacy Protection Act (COPPA) related to information about minors under the age of thirteen, Gramm-Leach-Bliley Act for some financial activities, and Health Insurance Portability and Accountability Act (HIPAA) for personally identifiable information related to healthcare (Fowler, 2015). FERPA is a federal law aimed at protecting student information for schools that receive funds from the US Department of Education (US Department of Education, 2021). Beyond these four Federal requirements that govern limited aspects of some data, states are enacting legislation slowly and inconsistently. California is leading the privacy legal requirements with the California Consumer Privacy Act (CCPA) as a model that other states are basing legislation on (Stallings, 2020).

People agree to contracts for a wide variety of services, subscriptions, and access to technologies. In special situations, mostly related to children under thirteen, healthcare, and some financial regulation, there are legal requirements to have privacy policies. There are no federal or state laws to require having terms of service. There are no requirements on the format or complexity of terms of service or privacy policies. In the few instances of state legislation like the CCPA, they list some components that must be included, but do not define how it should be readable or understandable. In 2012, Hugo Roy, an attorney in France, started "Terms of Service; Didn't Read" (short: ToS:DR). The aim of the project is to crowdsource reading terms of service and then "break them down into aims to foster a transparent and peer-reviewed process to rate and analyze terms of service and privacy policies. The goal is to generate a rating for the terms or policies from Class A to Class E, like a grade on a school assignment." (ToS:DR, 2022). The ToS:DR project is doing important work to inform consumers about the dangers and hidden content of terms of service, but it falls short of meaningful change. For meaningful change to take place companies are going to have to be legally required to comply. Without a clear set of guidelines, complying will be difficult to interpret and enforce.

Problem

A study conducted in 2014 of 30 popular websites found the average length of the Terms of Service document that every user of the site agrees to as a prerequisite for using the site was 3,851.7 words (Fiesler & Bruckman, 2014). The researchers also reported that users needed to read at a college junior reading level level. According to The Literacy Project (2021), 45 million Americans are functionally illiterate and cannot read above a fifth-grade level, and fifty percent of all adults cannot read a book at the eighth-grade level. The length of the agreements is one of the largest detriments to users even trying to read the contract (Maronick, 2014). McRobb (2006) concluded that even when people read the agreements "neither the organizations that publish privacy policies nor the individuals who read them" could agree on their meaning. With the adhesion contract nature of terms of service, there have been a wide variety of interpretations and courts willingness to enforce them (Preston & McCann, 2011). A study examining why users skipped reading terms of service agreements, the top reasons were that they were boring, tedious, all the same (35.8%), too long, wordy, legalese (27.2%), the formatting was difficult to discern (17.3%), people assuming they knew what was in the contract before reading it (14.8%) and other reasons (Maronick, 2014).

Positive momentum for reforming privacy policies includes the four federal regulations that aim to protect some aspects of data and the CCPA that forces companies to add new sections to their existing policies to give California residents the rights to know what is collected, how it is used, right to delete, right to opt-out, and right to non-discrimination for using the rights of CCPA (Bonta, 2022). However, these small pieces of progress do not address the issues of terms still being deliberately long and confusing. The requirements do not solve the problems of people giving up reading the terms because of the length, complexity, ability to change post-agreement.

Over the last few years, the public has become more aware of the privacy issues of using web services and software. Facebook had two data breaches that leaked the personal information of 533 million people in March 2021 and 420 million people in September 2019 (Holmes, 2021). There are thousands of other data breaches from thousands of other companies that illustrate just how large an industry data is and call into question how much personal information should tech and social media companies be able to access (McCandless, 2020).

Complexity

Technology and social media companies have no legal obligations to make their Terms of Service/Privacy policy documents easy to read and understand. The end of their legal obligation is to make sure their users are notified of their existence and provided with the opportunity to read them. Thus far, having long complex terms of service with linked text and versioning that changes whenever the company decides to have not slowed adoption of platforms (Ibdah et. al, 2021). Apple, Facebook, Amazon, YouTube, Reddit, Khan Academy, Pornhub, PayPal, Pinterest, or Spotify, all companies that have earned the lowest rating score on ToS:DR are doing very well with profits and number of users (2022). However, as shown in figure 1, you can see how Facebook and Amazon stack up against another provider such as DuckDuckGo.

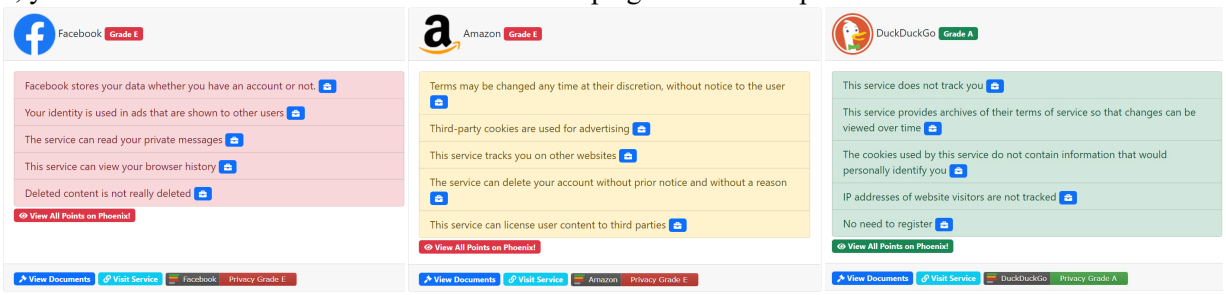

Figure 1. ToS:DR Grade for Facebook, Amazon, and DuckDuckGo (ToS:DR, 2022)

Lomas and Dillet (2015) highlighted different strategies for organizations to craft their policies to do what they want. To use iTunes, you will need to read over 20,000 words, or Facebook's over 15,000 spread across numerous pages in different formats. Other services such as Google use approximately 5000 words, but they keep verbiage vague to allow a great scope of what they collect from users (Lomas and Dillet, 2015). Services such as Facebook and Google earn revenue by selling access to the data they give themselves permission to collect in long documents nobody reads. LinkedIn earned more than $3 billion in revenue in 2020 on the mostly free to use website for business professionals. The primary source of revenue was selling access to their more than 700 million users (Graham, 2021). According to Huddleston (2021), Apple made $691,234.57 a minute in 2021. In that same article Amazon was reported to have made $837,330.25 per minute in 2021 (Huddleston, 2021). There is currently no incentive for big tech companies to simplify or clarify their terms of service. Technology and service companies benefit from have control to set their own terms, keep them difficult to understand, and change them as they see fit.

A Pew Research study about Americans' feelings on Terms of Service and Privacy policy agreements found, as shown in Figure 2, that only one in five people always read Privacy Policies before agreeing to them, 22% read it all the way through, 35% of them read it partly, and 43% only glance at it before agreeing (Auxier et al., 2020). People claim to want to protect their personal information (Yerby et. al, 2019). Due to length and perceived complexity, Americans decide not to even try to read or understand the contracts that they sign, and only 13% believe they understand a great deal of the contract, as shown in Figure 3.

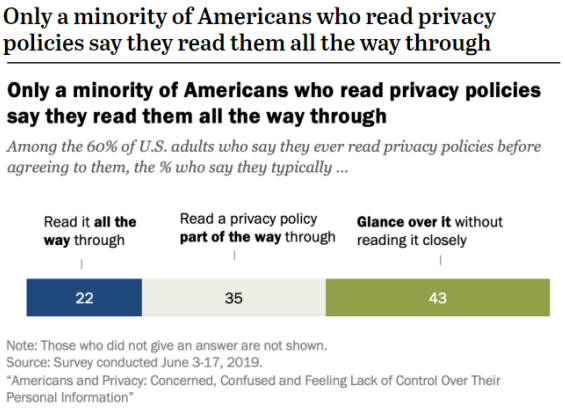

Figure 2. Amount Read (Auxier et al., 2020)

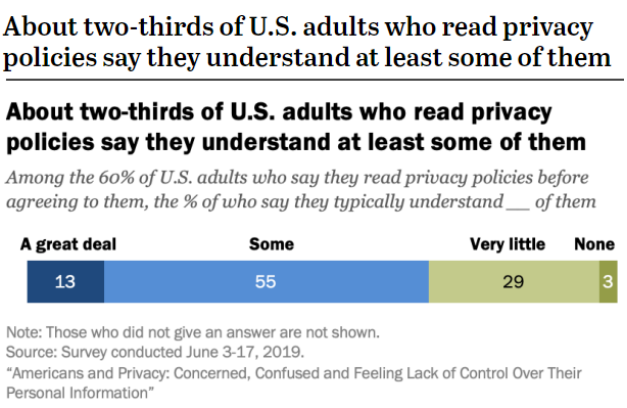

Figure 3. Amount Understood (Auxier et al., 2020)

Enforceability

Many organizations rely on click-wrap, shrink-wrap, browse-wrap, or other adhesion contracts because they are trying to standardize, ease trade, and streamline a process. There are many nefarious aspects and hidden provisions of adhesion contracts, but they can be attractive to solve a problem of getting many people to agree to a set of rules (Schwartz, 2011). The goal for an organization using this method is to reduce or cut the time, effort, and expense in negotiating terms, while also providing a legal recourse when something goes wrong.

Terms of Service and Privacy Policy agreements are usually binding documents whether the person agreeing to them has any knowledge of the provisions inside of them (Schwartz, 2011). Adhesion contracts may be invalidated or not enforceable when it is unconscionable to the party signing it (Lawshelf, 2022). Some items that may lead to an unenforceable contract include extreme inequalities of bargaining or economic power, deliberately confusing language, exploiting the underprivileged, unsophisticated, uneducated and the illiterate, imbalance of obligations, and provisions that are inconsistent with the signing party's expectations (Lawshelf, 2022).

An example of an adhesion contract being enforced was in a 2012 federal appeals court case that found a customer liable for credit card fees he was unaware of (Davis v. HSBC Bank Nev., 2012). The court ruled this way because the fees were disclosed in the Terms and Conditions that he agreed to by clicking a box without reading the document.

An example of an adhesion contract not being enforced was in a 2016 case, *James v. National Financial, LLC*. A house cleaner with no high school education took out $200 loan which was going to require her to make 26 bi-weekly interest-only payments of $60, plus a 27th payment of $60 interest plus the original $200. She would have paid $1,820 for a $200 loan. She broke her hand a day after obtaining the loan, could not make the payments, could not reach a settlement, and went to court, where the court decided that the adhesion contract was not enforceable.

Online shoe retailer, Zappos, is another example of a failed adhesion contract. Zappos provided their terms of service as a browse-wrap, meaning that the user could find it if they wanted to, but they were never forced to even click yes on a policy that they were likely not reading or understanding (Goldman, 2012). The court found that Zappos could not conclude if plaintiffs suing the company ever viewed, let alone manifested assent to, the Terms of Use. The also noted that "Terms of Use is inconspicuous, buried in the

middle to bottom of every Zappos.com webpage among many other links" and that reasonable users would never view it (Goldman, 2012).
The existing system leaves room for conflict, mistrust, and litigation to decide if the terms that users are agreeing to are unconscionable. Both the consumer and the organization would benefit from more ethically focused terms that are easier to understand. Organizations would be able to argue that more users were able to read and understand the terms, and people would have a chance at a realistic understanding of the contract that they agree to.

Examples of Hidden Provisions Found in Documents

It is not surprising that given the complexity of these documents, companies will insert tiny provisions that can have profound legal and privacy consequences. Examples of questionable provisions that companies have hidden in their Terms of Service documents are as follows.

Twitter

In 2015 Twitter had a provision in its Terms of Service that stated they owned the rights to anything posted to their website even after your account is deleted or deactivated. This provision has since been removed and their Terms of Service, which goes live in June 2022, states that the user retains all right to their content posted to the website. (Twitter, 2022).

Spotify

In 2015, Spotify updated their Terms of Service to include a provision that gave them access to everything stored on the phone that had Spotify installed. When this permission was discovered and questioned by the public, they insisted it was in preparation for new features they have planned later and that the information was not being exploited (Wijesekera et al., 2015). Though, reports of credit cards being charged without authorization increased over the time this provision was in effect (McGauley, 2015).

Facebook

Still in Facebook's Terms of Service to this day, they give themselves a "non-exclusive, transferable, sub-licensable, royalty-free, and worldwide license to host, use, distribute, modify, run, copy, publicly perform or display, translate, and create derivative works of your content". It also states that even when you delete the content from your page, it is still accessible by Facebook. They also grant themselves "permission to use your name, profile picture, and information about your actions with ads and sponsored content". Prior studies have found that their policies are intentionally vague (Williams & Yerby, 2019).
All that legal language gives Facebook and Meta, Facebook's new name for its overarching corporate structure, permission to use the content you post to Facebook for their own goals. This can be advertising, selling to third parties, and any number of other methods for them to make money using your data.

Reddit

In 2020 Reddit added a condition that allows them to use, copy, modify, adapt, derive, distribute, store, perform, and display any of your content, your name, voice, or likeness through any media now or in the future. In addition to "you grant us a worldwide, royalty-free, perpetual, irrevocable, non-exclusive, transferable, and sublicensable license" (McGauley, 2015). Regarding a Do Not Track request, the response is "Most modern web browsers give you the option to send a Do Not Track signal to the sites you visit, indicating that you do not wish to be tracked. However, there is no accepted standard for how a site should

respond to this signal, and we do not take any action in response to this signal." (Reddit User Agreement, 2021).

Methodology

This paper began from an evaluation of comparing characteristics of Terms of Service for Apple, Microsoft, Facebook, Google, Apple, and Spotify. The evaluation was part of a classroom discussion to compare various companies, discuss what terms of service are, and highlight prevailing issues. Students also spent another part of the semester comparing how different countries and states within the United States were drafting legislation to address privacy. States, including Hawaii, Maryland, Massachusetts, Mississippi, New Mexico, New York, North Dakota, and Rhode Island, are drafting laws that are somewhat like the California Consumer Privacy Act of 2018, with slight variations (Marmor et al., 2019).

Through the discovery and discussion of the inevitable need for state law privacy laws conflicting, overlapping, and introducing confusion the authors decided to investigate further to illustrate the issue and propose a solution. The authors of the paper began the paper by reviewing all the passed, rejected, and on-going state and federal legislation relating to privacy policies. Then the authors conducted a review of literature with terms relating to privacy policies and terms of service. Regarding the proposed solution, it is based on historical changes, which solved different problems with similar characteristics. The authors propose applying multiple old solutions to a new problem.

Discussion

History has shown that large companies operate in the best interest of the company and stakeholders, not individuals. They must be forced into it through legal means. The solution to this problem that affects nearly every citizen in the United States, is to implementing Federal laws or regulations to compel companies to keep their Terms of Service/Privacy Policy documents understandable. Currently no laws exist that govern the complexity or understandability of any legal contract let alone Terms of Service and Privacy Policies.

Plain-Language Contracts

In the Harvard Business Review, Shaun Burton (2018) that made a case for "Plain-Language Contracts". There have been movements over the past 75 years to make contract language understandable by someone with a high school education. Simplified language would cut down on legal fees for companies and individuals, save time in negotiations, and it just makes sense. Plain language contracts would need to require clear and effective communication. Opponents of Plain Language Contracts will try to deride the idea as anti-literary, anti-intellectual, or unable to meet the needs of something as complex as an innovative technology or service (Kimble, 1994).

In the article by Burton (2018), he was careful to make the distinction that simplification does not mean just shortening the overall length of the document. As this could have the unintended consequence of making the agreements so vague that lose purpose. Terms of service and privacy policies can retain the bulk of the intention, while changing the format and language. If organizations really want to effect actual awareness to their policies it will require crafting readable policies and ensuring that people have the time and ability to understand them (Yerby & Floyd, 2018).

The Fair Credit and Charge Card Disclosure Act

Recent successful reforms have come from the Truth in Lending Act and Android app permissions reform. The Truth in Lending Act was enacted on May 29, 1968, as part of the Consumer Credit Protection Act and has undergone multiple amendments to better provide protection and clarity to consumers (Laws and Regulations, 2015). In 1970 unsolicited credit cards were banned, then Regulation Z changed how consumers were allowed to be billed in 1974, the Truth in Lending Simplification and Reform Act in 1980 put into place rules about the complexity and simplicity of lending terms and conditions. In 1988, the Fair Credit and Charge Card Disclosure Act added new requirements to document specific terms, in readable language, in a predictable format (Laws and Regulations, 2015). The Fair Credit and Charge Card Disclosure Act went as far as to require credit card solicitations to format their documents in "clearly and conspicuously in a tabular format" and listed the most important pieces of information that help consumers decide to agree to use one company or another (H.R.515, 1988). The format was named after Chuck Schumer and is now known as a "Schumer box." Consumers are very used to seeing details of credit offers, as shown in Figure 4, where they feel that they can make clear financial decisions, read, and understand the terms (Frankel & Adams, 2021). Through the reforms in the original Truth in Lending Act and four major amendments, consumers have a much clearer understanding of the terms of service that they are agreeing to when engaging with financial institutions.

Interest Rates and Interest Charges	
Annual Percentage Rate (APR) for Purchases	**0%** Introductory APR on all purchases for six months.* After that, the Standard Rate APR will range from **7.99%** to **17.99%**, based on your creditworthiness.
APR for Balance Transfers	**0%** introductory APR for twelve months.** After that, the Standard Rate APR will range from **7.99%** to **17.99%,** based on your creditworthiness
APR for Cash Advances	**0%** introductory APR for six months After that, the Standard Rate APR will range from **7.99%** to **17.99%,** based on your creditworthiness

Figure 4. Schumer Box (Frankel & Adams, 2021)

Android operating system app permissions

A second successful reform model comes from the changes in application permissions for Android mobile operating systems. Prior to Android 6, users had to make a choice to install or not when wishing to use an application. This binary model of accept-reject was heavily criticized for being harmful for user's autonomy and privacy (Andriotis et. al, 2016). The solution was a new permission model using least privilege, ability for users to fine-tune permissions and reject them when the user chooses, and more clearly explaining what permissions an application was requesting (Andriotis et. al, 2016; Permissions on Android, 2022). The previous method was confusing, resulted in over-privileged applications and consumers that were less satisfied and aware. When users were asked about the permissions that had granted, 80% responded that they would block at least one of the permissions that they approved if they had the choice (Wijesekera et al., 2015). To further demonstrate the parallel issue between existing deliberately confusing terms of service and privacy policies to Android permissions, Felt et. al. (2012) explained that most users did not pay attention to systems messages related to permission request because they could not understand what they meant.

The solution to deliberately confusing language in the Terms of service and privacy policy agreements will be using plain-language and an updated format so users can find, read, and understand the terms that they are agreeing to. Future research should focus on legislation that could be passed, including examples related to the formatting and requirements of specific rights, responsibilities, and legal ramifications that are often

buried in the details away from users' awareness. Prior problems with lending and Android application permissions provide a framework that can be applied to this critical issue that affects nearly every citizen.

Conclusion

The current state of terms of service and privacy policies needs to be reviewed and improved. It will take federal regulations to address the problems of unfair, unclear, confusing, uneven, and difficult to enforce contracts that affect nearly every member of society. The authors hope that this paper is an informed review of the current situation regarding deliberately confusing language in terms of services and privacy policies that are making the world enabled by technology worse. New state-level legislation is being considered with an emphasis on copying the CCPA language yet changing key details enough to make it increasingly difficult for business. Some variations of the CCPA copycat laws will give citizens more or less power over their data, some states address minors, penalties vary by state, notification rules vary by state, and even who is covered varies depending on where business is done or where the consumers live. Compliance is going to get even more difficult for companies that operate in multi-state and multi-nation capacities. Additional analysis on the details of what the federal law should be based on needs to be conducted. Should the federal law be based on CCPA, GDPR, or something new? There are grassroot efforts aimed at rating service and technology providers, but it will never be enough to convince the companies to change. The new regulation should not stifle business or innovation, nor create a new problem of overly vague contracts that allow everything. The new system should rely on plain language that normal people can understand and feel confident about agreeing to. A new model should utilize the frameworks of Android permissions granular control and plain language and the Fair Credit and Charge Card Disclosure Act requirements detailing specific pieces of information always be included in a very predictable and readable manner. Power and permissions should be understood. When organizations are not compelled to act ethically by law, we get the system that we have now. The world uses the Internet for so many essential services and the people should have the ability to know what they are agreeing to without having to hire a lawyer every time they create a new account or visit a website.

References

Andriotis, P., Sasse, M. A., & Stringhini, G. (2016, December). Permissions snapshots: Assessing users' adaptation to the Android runtime permission model. In *2016 IEEE International Workshop on Information Forensics and Security (WIFS)* (pp. 1-6). IEEE.

Auxier, B., Rainie, L., Anderson, M., Perrin, A., Kumar, M., & Turner, E. (2020, May 26). *Americans' attitudes and experiences with privacy policies and Laws*. Pew Research Center: Internet, Science & Tech. https://www.pewresearch.org/internet/2019/11/15/americans-attitudes-and-experiences-with-privacy-policies-and-laws/

Bonta, R. (2022, March 28). *California Consumer Privacy Act (CCPA)*. State of California - Department of Justice - Office of the Attorney General. https://bit.ly/3NnksqQ

Burton, S. (2018, June 19). Why it's time to kill legalese. *Harvard Business Review*. Jan-Feb 2008 issue, 134-139. https://hbr.org/2018/01/the-case-for-plain-language-contracts

Chakraborty, A., Shankar, R., & Marsden, J. R. (2022). An empirical analysis of consumer-unfriendly e-commerce terms of service agreements: Implications for customer satisfaction and business survival. *Electronic Commerce Research and Applications*, 53. https://doi.org/10.1016/j.elerap.2022.101151

Davis, N. J. (2007). Presumed assent: The judicial acceptance of clickwrap. *Berkeley Technology Law Journal*, *22(1)*, 577-598. https://www.jstor.org/stable/24118246

Fiesler, C., & Bruckman, A. (2014). Copyright terms in online creative communities. *CHI EA '14 Extended Abstracts on Human Factors in Computing Systems.* 2551-2556. https://doi.org/10.1145/2559206.2581294

Fowler, P. (2015, March 12). Why you need a privacy policy – part 2: Avoiding three common fumbles. Retrieved May 4, 2022, from https://www.swlaw.com/blog/data-security/2015/03/12/why-you-need-a-privacy-policy-part-2-avoiding-three-common-fumbles/

Frankel, R. S., & Adams, D. (2021, September 22). *What is a Schumer box and how do I use it?* Forbes. https://www.forbes.com/advisor/credit-cards/what-is-a-schumer-box/

Gatt, A. (2002). Electronic commerce—click-wrap agreements: The enforceability of click-wrap agreements. *Computer Law & Security Review*, *18*(6), 404-410. https://doi.org/10.1016/S0267-3649(02)01105-6

Graham, M. (2021, April 28). Microsoft says LinkedIn topped $3 billion in ad revenue in the last year, outpacing Snap and Pinterest. https://www.cnbc.com/2021/04/27/microsoft-linkedin-topped-3-billion-in-ad-revenue-in-last-year.html

Goldman, E. (2012, December 16). How Zappos' user agreement failed in court and left Zappos legally naked. Forbes. https://www.forbes.com/sites/ericgoldman/2012/10/10/how-zappos-user-agreement-failed-in-court-and-left-zappos-legally-naked/?sh=1df1b0543e31

H.R.515 - 100th Congress (1987-1988): Fair Credit and Charge Card Disclosure Act of 1988. (1988, November 3). https://www.congress.gov/bill/100th-congress/house-bill/515

Holmes, A. (2021, April 3). *533 million Facebook users' phone numbers and personal data have been leaked online*. Business Insider. https://www.businessinsider.com/stolen-data-of-533-million-facebook-users-leaked-online-2021-4

Huddleston, T., Jr. (2021, May 01). How much revenue tech giants like Amazon and Apple make per minute? https://www.cnbc.com/2021/05/01/how-much-revenue-tech-giants-like-amazon-and-apple-make-per-minute.html

Ibdah, Lachtar, N., Raparthi, S. M., & Bacha, A. (2021). "Why should I read the privacy policy, I just need the service": A study on attitudes and perceptions toward privacy policies. *IEEE Access*, 9, 166465–166487. https://doi.org/10.1109/ACCESS.2021.3130086

James v. National Financial, LLC. (2016) Court of Chancery of the state of Delaware, C.A. No. 8931-VCL. https://courts.delaware.gov/opinions/download.aspx?ID=215820

Kessler, F. (1943). Contracts of adhesion--some thoughts about freedom of contract. *Columbia Law Review*, *43*(5), 629-642.

Kimble, J. (1994). Answering the critics of plain language. *Scribes Journal of Legal Writing 5 Scribes J. Leg. Writing*, *5*, 51. https://heinonline.org/HOL/P?h=hein.journals/scrib5&i=57

Lomas, N., & Dillet, R. (2015, August 1). *Terms and conditions are the biggest lie of our industry*. Techcrunch. https://techcrunch.com/2015/08/21/agree-to-disagree/

Marmor, R. R., Casbarro, M., & Khoury, M. (2019, February 7). *"Copycat CCPA" bills introduced in states across country*. Insights | Davis Wright Tremaine. https://tinyurl.com/2p824rzm

Maronick, T. J. (2014). Do consumers read terms of service agreements when installing software? A two-study empirical analysis. *International Journal of Business and Social Research*, *4*(6), 137-145. https://ideas.repec.org/a/mir/mirbus/v4y2014i6p137-145.html

McCandless, D. (2020, December 9). *World's biggest data breaches & hacks*. Information is Beautiful. Retrieved May 17, 2022, from https://www.informationisbeautiful.net/visualizations/worlds-biggest-data-breaches-hacks/

McGauley, J. (2015, October 8). *7 sketchy terms and conditions you didn't read (but probably should)*. Thrillist. https://www.thrillist.com/tech/nation/terms-and-conditions-youve-mindlessly-agreed-to-fine-print-in-end-user-license-agreements

McRobb, S. (2006). Let's agree to differ: Varying interpretations of online privacy policies. *Journal of Information, Communication and Ethics in Society*, *4*(4), 215–228. https://doi.org/10.1108/14779960680000294

Obar, J. & Oeldorf-Hirsch, A. (2020). The biggest lie on the Internet: ignoring the privacy policies and terms of service policies of social networking services, *Information, Communication & Society*, 23:1, 128-147. https://doi.org/10.1080/1369118X.2018.1486870

Permissions on Android: Android developers. (2022, May 12). Android Developers. Retrieved May 17, 2022, from https://developer.android.com/guide/topics/permissions/overview

Preston, C.B. (2014). Please note: You have waived everything: Can notice redeem online contracts? *American University Law Review*, *64*(3) 535-590. https://heinonline.org/HOL/P?h=hein.journals/aulr64&i=571

Preston C.B. & McCann E.W., (2012). Unwrapping shrinkwraps, clickwraps, and browsewraps: how the law went wrong from horse traders to the law of the horse. *Brigham Young University Journal of Public Law*, 26(1) 1-35. https://digitalcommons.law.byu.edu/jpl/vol26/iss1/2

Reddit User Agreement. Reddit. (2021, September 12). Retrieved May 17, 2022, from https://www.redditinc.com/policies/user-agreement-september-12-2021

Robinson, E. P., & Zhu, Y. (2020). Beyond "I Agree": Users' understanding of web site terms of service. *Social Media + Society*. https://doi.org/10.1177/2056305119897321

Roos, D. (2017, January 17). The real reason website and app terms of service are so confusing. HowStuffWorks.com. https://people.howstuffworks.com/the-real-reason-website-app-terms-service-are-confusing.htm

Schwartz, A. A. (2011). Consumer Contract Exchanges and the Problem of Adhesion. *Yale Journal on Regulation, 28(2)*, 313-366. https://heinonline.org/HOL/P?h=hein.journals/yjor28&i=317

Stallings, W. (2020). Handling of personal information and deidentified, aggregated, and pseudonymized information under the California consumer privacy act. *IEEE Security & Privacy*, *18*(1), 61-64. https://doi.org/10.1109/MSEC.2019.2953324

Terms of service. (2022, January 4). Retrieved April 18, 2022, from Meta, Facebook terms of service website, https://www.facebook.com/terms.php

Termsfeed. (2022, March 29). *5 reasons why you need terms and conditions.* Termsfeed. Retrieved May 4, 2022, from https://www.termsfeed.com/blog/5-reasons-need-terms-conditions/

The Literacy Project. (2021). Retrieved May 4, 2022, from https://literacyproj.org/

Twitter. (n.d.). *Twitter terms of service*. Twitter. Retrieved May 17, 2022, from https://twitter.com/en/tos

Wijesekera, P., Baokar, A., Hosseini, A., Egelman, S., Wagner, D., & Beznosov, K. (2015). Android permissions remystified: A field study on contextual integrity. *24th USENIX Security Symposium,* 499-514. https://www.usenix.org/conference/usenixsecurity15/technical-sessions/presentation/wijesekera

Williams, E., & Yerby, J. (2019). Google and Facebook data retention and location tracking through forensic cloud analysis. *Southern Association for Information Systems (SAIS)*. https://aisel.aisnet.org/sais2019/3/

Yerby, J., & Floyd, K. (2018, August). Faculty and staff information security awareness and behaviors. In *Journal of The Colloquium for Information Systems Security Education* (Vol. 6, No. 1, 23-23). https://cisse.info/journal/index.php/cisse/article/view/90/CISSE_v06_i01_p05.pdf

Yerby, J., Koohang, A., & Paliszkiewicz, J. (2019). Social media privacy concerns and risk beliefs. *Online Journal of Applied Knowledge Management (OJAKM)* (Vol. 7, No. 1, 1-13). http://www.iiakm.org/ojakm/articles/2019/OJAKM_Volume7_1pp1-13.php