

# DATA OWNERSHIP

*The Suitability of a  
Consumer Property  
Right in a 21<sup>st</sup>  
Century Economy*



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# EXECUTIVE SUMMARY

**Data pertaining to consumers in the U.S. business-to-consumer (B2C) data economy historically has been treated as the property of the entity that collected, compiled, or secured it, with varying layers of consumer “control” granted by law and/or practice.**

In 2019, new property terms began to emerge in the data lexicon, with the notion of actual consumer “ownership” of such data gradually emerging as part of the B2C data debate. Perhaps often unintentionally, the frequent conflation of data “control” and “ownership” by policymakers continues, with uncertainty persisting about the ideal framework that ought to govern the U.S. information economy.

This paper seeks to bring clarity to continuing efforts to define the U.S. data framework—in which the notion of B2C data ownership has surfaced. In doing so, its principal goal is to disentangle and distinguish the terms “ownership” and “control,” as they have been used in the ongoing U.S. B2C data debate. While the terms are related, their meanings differ in ways that might significantly impact the benefits that consumers expect to receive from the current “control” data model. As we will discuss, consumer “ownership” of data would likely impose confusion, as well as impractical restrictions on the movement of data, resulting in less, not more, individual control over data pertaining to them. This

restriction on data movement may also result in little or no individual value for consumers, as consumers may lose access to services that they currently enjoy for free or at a low-cost.

The first section of this paper describes the context in which the debate in the United States is focusing on data control and ownership, and seeks to explain how the concept of “ownership” has historically constituted a “property right.” The second section provides an overview of traditional property theories and applies unique features of data to each one, thereby seeking to address whether and to what extent these theories may be applicable to data. Finally, the third section considers how the relationship between consumer property rights and data ought to be viewed, with a recommendation that the United States continue to treat data, in the B2C context, as a resource unconnected to a consumer property right, noting the positive economic and personal outcomes that flow from such an approach.

# ORIGINS OF THE U.S. DATA OWNERSHIP DEBATE

**The debate over the possible individual ownership of data in the B2C data economy intensified throughout 2019 and will continue to escalate. Numerous groups and policymakers have asserted that individuals should “own” data pertaining to them in order to enhance and fully exert control over their personal privacy, a view which, if embraced, would clearly expand the current law on property rights.<sup>1</sup>**

Others have maintained that granting a property right in data about individuals would be illogical because “no one owns data,”<sup>2</sup> it would not make economic sense,<sup>3</sup> and it may ultimately result in lesser privacy for consumers.<sup>4</sup> The frequent comingling of “control” and “ownership” in data discussions reveals a fundamental misunderstanding by some policymakers and the public at large about the actual legal meaning of “ownership.” This section defines property ownership, distinguishes it from “control,” and provides highlights from the emerging data ownership debate. It also explains where these property rights discussions could lead, as a matter of law and policy, while the broader privacy debate is expected to escalate in the states and in the U.S. Congress during 2020 and 2021.

## **Defining Consumer Ownership and Control**

To understand outcomes associated with granting a consumer property right in data, policymakers, businesses, and consumers alike must first understand what a property right actually means, as a matter of law. Unfortunately, the current discussions regarding B2C data propertization often use “ownership” and “control” interchangeably. While these terms may hold a similar

colloquial meaning, they confer a very different set of rights and responsibilities upon individuals when applied in the legal context.

In 1792, James Madison referred to property ownership as “that dominion which one man claims and exercises over the external things of the world, to the exclusion of every other individual.”<sup>5</sup> Today, in the United States,

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ownership allows individuals to exercise a full slate of rights with respect to the property they own.<sup>6</sup> Property rights are viewed in relation to the rights of others—a person’s ability to own something is only significant because he or she can enforce those rights against someone else.<sup>7</sup> This “bundle of rights” incorporates five

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independent primary rights: (1) the right to possess, (2) the right to control, (3) the right to enjoy, (4) the right to dispose, and (5) the right to exclude. While the right to control is an important element of ownership, it is only one of several rights that, together, demonstrate to others that an individual is the owner of “a thing.”<sup>8</sup> As a result, the right to control is much narrower than the right to own.

Privacy law and its associated regulatory framework, as they exist today in the United States, are primarily concerned with the narrower right to control various aspects of personal information. Privacy itself has been defined as the ability “to edit, manage, and delete [personal] information . . . and decide when, how, and to what extent [that] information is communicated to others.”<sup>9</sup> The right to control has been built into many privacy-related legislative developments over the last few decades. For example, laws governing consent over the use of data allow individuals to exercise control over data about themselves by partially controlling its use and dissemination without disrupting the ability of companies to use the same information for business purposes as well as for the benefit of consumers. As noted above, however, “control” differs from “ownership.” While an individual may have the power to control data, that does not necessarily mean that he or she has the power to exercise other rights and responsibilities that historically accompany ownership. Indeed, the characteristics of data about consumers are such that granting individuals a traditional property right in data pertaining to them may prove surprisingly difficult.

For example, take the right to exclude.<sup>10</sup> In most cases, an individual possesses true ownership only if he or she can completely exclude others from the use of or access to the property in question.<sup>11</sup> In the context of B2C data, however, an individual may control data about him or herself without the practical ability to fully exclude others from using it in some other capacity. The use of basic information, such as a person’s name and birth date, is an example. A person may have the right to “possess” and use this information, but that same person cannot necessarily exclude all others from exercising the same authority over the data. An individual will disclose this information to multiple parties throughout his or her lifetime, including, to name a few, friends, family members, employers, health care providers, education providers and even social media platforms. Given the very nature and utility of a person’s name and birth date, third parties will always be able to use this information. Thus, individuals cannot reliably expect to exclude others from the use and control over data pertaining to them.<sup>12</sup> As the ability to exercise the right to exclude is foundational to actual property ownership, the inability for individuals to exclude others from such data also serves to demonstrate that control of data may be contrary to fundamental principles of property law.<sup>13</sup>

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## U.S. Data Ownership Discussions

Discussions touching upon data ownership in B2C circles are underway throughout the country, in different fora, from the states to the Congress.

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### State Data Dividend Proposals

For example, the California Consumer Privacy Act (CCPA), which became effective on January 1, 2020, has been a primary privacy-related topic of discussion for entities doing business in California. However, California has also been a focal point of a growing debate over a novel concept—the actual ownership of data. According to California Governor Gavin Newsom, California’s consumers should soon be able to “share in the wealth that is created from their data.”<sup>14</sup>

In his first State of the State Address in February 2019, Governor Newsom proposed the concept of an undefined “data dividend.” This idea is still being explored by a team of data scientists gathered together by Newsom, as well as senior legislators in Sacramento.<sup>15</sup> Accordingly, precise details about the proposal are currently unavailable. In general, though, the concept as Newsom has described it would require businesses to share with customers some portion of profits earned from the use of “their data.” A dividend typically is associated with ownership rights, and the most typical form is a shareholder dividend paid to owners of corporate stock.<sup>16</sup>

New York State Senator David Carlucci has also proposed similar legislation in New York. The bill, as proposed, would levy a “data tax” on companies that engage in business in New York and distribute the money to New York residents in the form of a dividend.<sup>17</sup> While it is not yet

clear that either proposed data dividend would be directly associated with actual data ownership, the implications of potential data ownership warrant highlighting it here.

Notably, various consumer groups have suggested that a data dividend may negatively impact consumers. For example, at least one consumer protection organization has taken the view that a data dividend would be a “bad deal” for consumers.<sup>18</sup> The Electronic Frontier Foundation (EFF) has expressed similar concerns by noting that a property rights scheme that would allow corporations to pay consumers in exchange for personal information might actually diminish consumers’ ultimate rights to privacy.<sup>19</sup>

It is also possible that a potential data dividend may only result in a few dollars for each consumer. According to the Center for Data Innovation,<sup>20</sup> if certain data platforms shared half of their 2017 profits with their global users, the checks would have been worth just three dollars each.<sup>21</sup> That said, this approach assumes data about individuals would not be the subject of negotiations. It is likely, however, that if data were to be deemed a property right, organizations would soon surface across the country that would attempt collectively to organize consumers and negotiate, *en masse*, the value of their combined data with the business community.

### U.S. Presidential Candidate Data Policy Platforms

The notion of data ownership also surfaced in the platform of at least one candidate in the 2020 U.S. presidential contest. Former 2020 U.S. presidential candidate Andrew Yang’s policy platform included “Data as a Property Right.”<sup>22</sup> His policy stated that “[d]ata generated by each individual needs to be owned by them, with certain rights conveyed that will allow them to know how it’s used and protect it.”<sup>23</sup>

Yang’s policy also appeared to conflate ownership with control. As previously discussed, the phrase “property right,” which reflects an ownership interest, has a specific legal meaning.<sup>24</sup> Control alone, even expansive control, does not equate to a property right. Depending on the form his policy would have ultimately taken, his proposal for a “property right” may have been more about increased

consumer control over data that pertains to them than an actual right. For instance, Yang’s data policy platform stated that his proposal would include “[t]he right to be informed if ownership of your data changes hands.”<sup>25</sup> If a property right in data were in effect, the consumer would be the owner of the data and would not need to be informed if ownership changed hands as no ownership change could take place absent the consumer’s consent.<sup>26</sup> This policy reflects the more limited right to control and, again, does not convey an ownership interest in the property.<sup>27</sup>

## Proposed Legislation in Congress

In 2019, Senator John Kennedy (R-LA) introduced legislation (S. 806) that would create a property right in data generated by users of the Internet. Senator Kennedy’s legislation was called the “Own Your Own Data Act,” and it is unambiguous in that it would bar the collection of “private data” by social media companies and grant consumers “property rights to all the data that they generate on the Internet.”<sup>28</sup> To do so, the bill would create an “exclusive property right” for individuals in such data.<sup>29</sup> However, Senator Kennedy’s bill, as introduced, does not define what constitutes a legal property right and has not yet attracted additional co-sponsors or progressed in the Senate beyond introduction. It is nonetheless an example of one means by which data about individuals could easily and very quickly migrate to the status of actual property.

Similarly, Senators Mark R. Warner (D-VA), Josh Hawley (R-MO), and Richard Blumenthal (D-CT) introduced legislation in October 2019 that would establish data portability for consumers.<sup>30</sup> The legislation, entitled the “Augmenting Compatibility and Competition by Enabling Service Switching Act” (ACCESS Act), does not specifically address either property rights or property ownership.<sup>31</sup> However, while discussing the proposal, Senator Hawley noted that “[y]our data is your property” and that the bill will “give consumers the power to move their data from one service to another.”<sup>32</sup> Again, as with Mr. Yang, this legislation may reflect confusion about what it means to actually own data.

Another notable legislator who has waded into the debate over data ownership is the House Minority Leader, Kevin McCarthy (R-CA). Like Senator Kennedy, McCarthy seemed to be unambiguous in his expressed intent when he said, on July 21, 2019, that “[c]onservatives believe in private property ownership, and in this digital era, YOUR DATA is your private property.” Then he added that “[w]hen it comes to the data that tech companies collect from you, you should be able to see it, control it, and—if you so choose—delete it.”<sup>33</sup> Congressman McCarthy’s comments again demonstrate how easily legislators use the terms “ownership” and “control” interchangeably without fully understanding or comprehending the legal effects inherent in each term.<sup>34</sup>

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# “OWNERSHIP” IN PROPERTY LEGAL FRAMEWORKS AND APPLICABILITY TO DATA

**Historically, ownership rights have been associated with tangible objects as well as real estate, with an emphasis on the latter.<sup>35</sup> As economies moved away from their agricultural origins, however, property rights in intangible objects also became recognized, in the form of intellectual property.<sup>36</sup>**

As we will discuss, we choose to grant property rights where there is a social and economic value to affording those objects the rights and protections of property ownership.

Many of the discussions about data propretization conflate ownership of data with control over data. While individuals may restrict the use of data pertaining to them under a range of state and federal laws, these restrictions evidence “control” but do not give rise to the level of ownership. Currently, individuals do not “own” data that pertains to them.<sup>37</sup>

Given the interest in extending an ownership right to consumers over data about them, however, it is worthwhile to consider how, and if, data would fit into the current ownership framework that derives from property law. This section provides a summation of various property theories that encompass the notion of “ownership,” and considers their application to data. First, the section explains natural law theories that address the underpinnings of property rights and analyzes the theories as they compare with the common characteristics of data. This analysis explains whether data has the requisite characteristics

to be characterized as “property,” as it has come to be known. Second, the section assesses property-based torts and applies the characteristics of data to such torts to determine if a property right in data might be asserted through a tort theory. Third, constitutional theories that address issues of ownership in property rights are also explored. The analysis applies these theories to data in order to determine whether data can logically be afforded the same protections that currently exist for traditional forms of property. Finally, intellectual property theories are discussed and analyzed to determine whether data might fall within their scope.

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## Natural Law Theories

Historically, there have been two prevailing theories used to justify property ownership which underlie much of our modern thinking about property rights. The first theory, the Labor Theory, asserts that ownership is justified whenever an individual has contributed his or her labor to produce, create, or obtain the object.<sup>38</sup> Stated another way, creating things of value from whole cloth can warrant property ownership. The second theory, the Scarcity Theory, suggests that ownership is justified when the would-be property is scarce.<sup>39</sup> Neither theory supports an individual right to data ownership.

The first theory justifies ownership over objects that were created through an individual's expenditure of his or her labor.<sup>40</sup> For example, an individual who creates a work of art has a property right in this work. In the data context, we often recognize a property right in profiles of information that a business labors to create, using data elements that contain information about individual

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consumers. However, we do not grant a property right in the data itself because a person has not labored or performed work to create data about him or her.<sup>41</sup> Much data about a person is merely assigned.

Similarly, the second theory justifies ownership when a product is scarce.<sup>42</sup> According to the theory, if a product is not scarce, it could be used in a way that would not restrict others from using the same product.<sup>43</sup> If no need exists to restrict another's use of a product, there is no need for a property right.<sup>44</sup> In the data context, this theory would not support an individual property right in data about a person because data itself is not a scarce resource. Data elements about a person, such as names and addresses, are widely distributed and are easily reproduced with minimal effort.<sup>45</sup>

Accordingly, on the individual level, such data does not reflect the type of scarcity that would justify the extension of a property right.

## Tort Law

Traditionally, an individual who owns property that has been harmed may enforce his or her property rights through the exercise of tort law. Traditional property related theories of tort law, such as trespass of chattels as well as the bailment theory, also do not contemplate an individual property right in personal data. In contrast, invasion of privacy torts provide a limited mechanism for individuals to address the acquisition or use of personal data without the need to create a property right in such data.

## Trespass to Chattels

It is difficult to apply the theory of trespass to chattels to data pertaining to individuals. Traditional trespass theories of harm require injury to a tangible, physical item of property.<sup>46</sup> When data about a person is acquired, with or without permission, it does not usually involve a physical trespass.<sup>47</sup> Even if individuals were granted an ownership right in data about themselves, it would be unlikely to change the outcome of trespass of chattels litigation. As a result, we do not believe that providing a property right in data would allow consumers to use tort law to enforce their trespass-related claims.

## Bailment Theory

Bailment theory would present similar difficulties were an individual property right to be created in data. A bailment is a legal relationship at common law that arises when the physical custody of personal property is temporarily passed from the owner (the bailor) to another (the bailee). The bailee has custody over the property for a specific purpose and typically owes a legal obligation to keep the item secure and undamaged. The bailee never takes actual ownership of the property. If the bailee breaches the terms of the bailment, he or she could find themselves liable for the tort of conversion or for breach of contract.<sup>48</sup>

While the bailment theory has been given new life in both the Fourth Amendment<sup>49</sup> and data breach contexts, it also does not easily apply to personal data. Courts in data



security litigation have not yet focused on whether an individual owns or controls data that pertains to them. Instead, they have looked at the transfer of the data itself and asked whether it constitutes the “delivery” of property to a bailee, or the non-owner. Most courts have answered

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that question in the negative.<sup>50</sup> One court noted that electronic data could be delivered, and a bailment created, in circumstances where the bailee promised to return the data.<sup>51</sup> If the return of data is not explicitly negotiated in the online transaction, courts continue to be unlikely to find the existence of a bailment. As a result, even if an individual were granted a property right in his or her data, it is not clear that an individual can enforce his or her rights in the event of a breach absent an explicit negotiation in the contract regarding the return of such data.

## **Invasion of Privacy**

In the absence of general privacy legislation, individuals use the invasion of privacy torts to remedy the harms caused by the unauthorized acquisition or use of personal data. The Second Restatement identifies the four privacy torts as: (1) intrusion upon seclusion; (2) disclosure of private facts; (3) appropriation of name or likeness; and (4) false light.<sup>52</sup> Today these torts provide a limited means at common law for individuals to assert control over information about them without the need to actually own or enjoy dominion over the information.

The use of the invasion of privacy torts has been limited by the privacy torts’ focus on the public exposure of private information through actual publication,<sup>53</sup> an approach

which is ill-suited for how personal data is usually exposed in a data breach.<sup>54</sup> Granting an ownership right in personal data does not address those concerns and would not expand the grounds upon which individuals may use the invasion of privacy torts to protect data about them.

## **Constitutional Law**

Granting an individual property right in personal data may also raise several constitutional issues, ranging from Article III standing<sup>55</sup> to the Fifth Amendment,<sup>56</sup> and, most relevant for our analysis, the First Amendment.

Should the government create an individual right in personal data, it would likely encounter First Amendment issues. The First Amendment, of course, prohibits the government from making laws that abridge the free expression of speech. In a 2011 decision, *Sorrell v. IMS Health*, the Supreme Court held that prescriber-identifying information, a form of personal data, qualifies as speech within the meaning of the First Amendment.<sup>57</sup> As a result of this finding, when the government seeks to impose a content- or speaker-based burden on this form of information, it subjects itself to a “heightened scrutiny” of review.<sup>58</sup>

Applying this logic to data propertization raises First Amendment considerations. Some academics have argued that such propertization would “restrict data collection and thus hamper the free flow of information,” in violation of the First Amendment.<sup>59</sup> Creating a property right in data, they contend, could function as an impermissible restriction on speech. Thus, by creating a property right in data, legislatures could

*“Thus, by creating a property right in data, legislatures could inadvertently mandate a broad restriction on the free flow of information between parties, which, in addition to running into constitutional issues, could have adverse consequences for consumers.”*

inadvertently mandate a broad restriction on the free flow of information between parties, which, in addition to running into constitutional issues, could have adverse consequences for consumers. The First Amendment requires the government to demonstrate the need and effectiveness of privacy laws that restrict expression, regardless of whether that speech is commercial.<sup>60</sup> As a consequence, it is not clear that the creation of a property right in personal data could ultimately withstand scrutiny under the First Amendment.

## Intellectual Property

Intellectual property concepts are particularly relevant to understanding how property laws can apply to data about individuals because such concepts contemplate property rights over intangible information. Intellectual property provides a means to protect intangible information through copyright law, trademark law,<sup>61</sup> and patent law.<sup>62</sup> Of the three, copyright law alone provides a framework in which data could be propertized.

The Copyright Clause of the U.S. Constitution allows Congress to create copyrights in works that are original, not in the underlying data or facts. The law protects the creative expression of information, not the underlying information itself.<sup>63</sup> However, compilations of data can be copyrighted. In *Feist Publications, Inc. v. Rural Telephone Service Co.*, the Supreme Court unanimously held that compilations of data can be copyrighted and thus protected, but only if originality is a key feature in the collection or compilation of that data.<sup>64</sup>

Applying *Feist* to the data context, copyright law would not automatically create an individual ownership right in data about a person or the compilation of such data absent some form of creativity. Without copyright protections, individual pieces of data and even compilations of facts could be accessed and reused by another compiler. Following the line of reasoning in *Feist*, copyright law alone does not provide a meaningful way for individuals to own data that pertains to them.

“ [C]opyright law would not automatically create an individual ownership right in data about a person or the compilation of such data absent some form of creativity. ”

# THE NEXT DECADE'S U.S. B2C DATA FRAMEWORK

**While many U.S. fora continue to consider whether a consumer privacy legal framework grounded in the notion of control remains the ideal governance structure, what has emerged with the successes of the data economy are the numerous positive outcomes associated with treating data as unattached from property rights.**

As such, decision makers contemplating any future data framework intended to benefit consumers may be wise to embrace a system that does not codify consumer property rights as they may pertain to data about individuals.

## **Positive Outcomes of Data Being Unattached from Property Rights**

The U.S. data economy suggests that the United States should continue to treat data as a resource that is not owned as property by individuals. Americans enjoy many benefits that flow from data being unattached to a consumer property right while having tools to allow them to exert control over data that pertains to them. Continuing to view data in this way will benefit Americans in countless ways including: (1) maintaining

low costs of products and services for consumers; (2) avoiding valuation concerns over data; (3) enabling consumers to control data about them; (4) allowing data and studies to be reliable; (5) allowing consumers to leverage their credit history to access capital, employment, and other resources; (6) empowering entrepreneurship to flourish; and (7) not creating an unequal privacy regime based on income status.

## **Costs to Consumers**

Absent a property right in data, the costs of services to consumers may remain low. Consumers may ultimately benefit from property rights remaining unassociated with data because they are more likely to continue to receive free services and products. Social media platforms and hundreds of other sites and applications advertise their services free to consumers.<sup>65</sup> In exchange for free services, companies often use data about consumers to provide such services. However, if a property right were broadly granted, businesses would likely have to pay consumers to use data pertaining to them. Not only would these payments increase the costs of doing business for a company, but they would likely also lessen a company's revenue as the stream of data it could monetize and rely upon would probably diminish. If a property right in data were to exist, the financial impact of such a right may ultimately be borne by consumers. As companies' profits

*“Consumers may ultimately benefit from property rights remaining unassociated with data because they are more likely to continue to receive free services and products.”*

diminish, they likely will seek other means to increase revenue, such as by requiring payment for services. If a property right in data were to exist, then services that were once free to consumers might no longer be free.

This outcome may not be in line with either consumer desires or expectations. According to a 2019 survey from the Center for Data Innovation, only one in four Americans would want online services, such as social media platforms, to collect less data about them if it meant that consumers would have to start paying a fee to use the companies' services.<sup>66</sup> Forty-two percent of survey respondents strongly disagreed that they would like online services to collect less data about them if it meant paying a monthly fee.<sup>67</sup> Therefore, to reflect consumers' desires and expectations, data about individuals should continue to be considered as distinct from property rights, and by continuing to view data as disassociated from property rights, Americans may continue to enjoy services and products at lower costs.

## Valuation

For a property right in data to be meaningful to consumers, the value of the data would likely need to be determined. Scholars and political commentators have noted that valuing data about individuals would be difficult and raises many questions.<sup>68</sup> For instance, from what perspective should the data be valued? Is the appropriate value the value the consumer attributes to the data, or the value the company attributes to the data?

As noted previously, the potential difficulty of valuing data about consumers was recently reflected in the newly enacted CCPA. In the original legislation, a business could charge a consumer a different rate if the

rate was related to the "value provided to the consumer" by the consumer's data. In amending the CCPA to charge a different rate based on the value "provided to the business," the California legislature seems to have acknowledged difficulties in determining how data can be valued.<sup>69</sup>

Even if an agreed-upon system for valuation existed, the value of data may not be satisfying to consumers. Americans tend to overestimate the value of information about them. In 2019, for example, Morning Consult, an online survey research company, asked 2,200 American adults to put a dollar amount on how much they thought pieces of personal information about them were worth.<sup>70</sup> The average response for an address was \$50, while the average response for geolocation information and internet browsing history was \$100.<sup>71</sup> However, according to the Financial Times' 2013 personal data value calculator, the average person's data is worth far, far less—the average person's data typically retails for under a dollar.<sup>72</sup> General information about a single person, such as age, gender and location, is worth just \$0.0005 per person, whereas a person shopping for a particular product is slightly more valuable to companies promoting those goods.<sup>73</sup> Even data that would likely be considered the most sensitive to consumers, such as specific health conditions or prescriptions, may only "retail" for \$0.26 a person.<sup>74</sup>

Again, as noted earlier, these estimates assume that the value of data would be evaluated individually. But, again, if a property right in data about an individual were to be created, it is quite likely that organizations would soon form to collectively negotiate the cost of data belonging to massive numbers of consumers. That collective approach would probably enhance the value of the data mass, but also lessen the reliability of data generally available.

## Consumers' Ability to Control Information

Americans frequently enjoy the ability to control what information is collected about them and what information is shared about them, and can even request that companies delete information about them. For example, states now have statutory schemes that allow consumers to exercise control over data about them, including the CCPA<sup>75</sup> or the Nevada Privacy of Information Collected on the Internet

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from Consumers Act.<sup>76</sup> Additionally, some companies voluntarily provide means of consumer control over data, such as through “Do Not Track” initiatives<sup>77</sup> or tools that prevent data from being associated with consumer accounts.<sup>78</sup> Legislative, industry, or company efforts could further grant consumers control over data about them. However, granting a legal property right in data may be inconsistent with expanding consumer control.

The ability to exercise control would likely diminish if a property right were granted in data. Upon the sale of a consumer’s property right, the consumer would lose his/her rights to the property and would no longer be able to exercise control. This is true in the real property context. For instance, when a person sells his/her house, he/she cannot go to the new owner and request to have access to the home. In a typical sale, once an item of property is sold, the ability to continue to access or control that property evaporates. Some scholars have advocated for a property right in data with the understanding that consumers could continually sell data, and therefore, maintain control of the underlying data even through a sale.<sup>79</sup> A true sale of property would not allow a consumer to maintain his/her own rights. A sale of property involves an exchange of ownership,<sup>80</sup> while licensing involves retaining ownership but giving permission for third parties to utilize the property.<sup>81</sup> Relatedly, others have noted that there is no reason to believe that companies would not seek exclusive rights to data they purchase,<sup>82</sup> which not only would cut off consumer control over data, but also would decrease the flow of information by limiting the access of data to the new “owner.” Therefore, upon a sale of data about them, the consumer likely would not be able to access the data, exclude others from it, or importantly, control the data. By continuing to view data as detached

from property rights, consumers may be able to maintain a more effective means by which they can control personal data.

## Reliability

More data may be available if data remains unencumbered by property rights, and data will flow far more freely. More data being available could also lead to larger datasets and positively impact the reliability of data. While discussions about property rights in data often focus on data generated on the Internet, a property right in data could impact all data about individuals, including data used for common, socially beneficial purposes. For instance, data used for scientific research could be adversely impacted and lead to decreased reliability of scientific studies and the data supporting them. If people have a property right in data about them, data needed for research might be less available as a result of the cost of obtaining the necessary data and/or decisions by data

*“ In contrast, not granting a property right in data about individuals would allow data to flow freely, be used widely in scientific studies, and positively impact the reliability of studies. ”*

owners to withhold the data. The cost of obtaining data could be too large for researchers to bear, with the result that researchers would have to rely on smaller datasets and sample sizes in their research. Having smaller datasets and sample sizes could decrease the reliability of such studies and slow scientific progress, which could have particularly detrimental consequences in the healthcare context. Surveys and scientific studies performed by either the government or by private researchers rely on large sample sizes to produce accurate outcomes. The smaller the dataset, the more likely the sample size will be too small to be reliable. A small sample size can produce false-positives or over-estimate the value of conclusions.<sup>83</sup> These inaccuracies can happen because, in small datasets, sampling errors like selection bias or the undercoverage

of certain groups occur more frequently.<sup>84</sup> In contrast, not granting a property right in data about individuals would allow data to flow freely, be used widely in scientific studies, and positively impact the reliability of studies.

## Creditworthiness

A lack of consumer ownership of data pertaining to them is particularly useful in the context of credit. Credit provides a means for consumers to obtain capital for goods or services that an individual may not be able to purchase with a one-time payment. For example, if an individual wished to purchase a house, he or she could obtain credit from a bank to do so immediately rather than need to wait and save hundreds of thousands of dollars to make a one-time payment in the future.

Credit reports provide businesses with information about an individual's payment and spending habits that allows those businesses to assess the risk of engaging in a transaction with that individual.<sup>85</sup> An individual's credit history is reviewed in a wide range of circumstances such as loan offers, background checks for employment, or applications for rent. Individuals who have historically been responsible with their payments can use these credit histories as proof to businesses that they are a reliable party in a transaction. In the long run, this lowers the cost of borrowing because lenders may trust the information provided to them through credit bureaus to make their lending decisions.

Businesses may look to alternative sources of data pertaining to individuals outside of credit reports if they are interacting with consumers who have not had enough

time to build a credit history. For example, businesses may look to alternate data like rent and utility payment histories or bank account information to provide a means for consumers to access credit.<sup>86</sup>

Both credit reports and alternative sources of credit data require access to information about individuals in order to be reliable. If an individual were granted a property right in data about him or her, he or she could theoretically forbid credit bureaus or businesses from collecting or using the information to decide whether to extend credit. Restricting the flow of information in this way creates a reliability problem for businesses. Put simply, businesses are less likely to extend credit to an individual if there is not a verifiable means to provide assurance that the individual will repay. Absent this information, businesses are more likely to compensate for this verification issue by increasing the price of products and/or by eliminating access to these products altogether. A third consequence would likely be an adverse impact on the speed that decisions could be made. All options harm consumers and businesses.

## Entrepreneurship

Some of the largest companies in the world have business models that rely heavily on data—and were founded by young entrepreneurs.<sup>87</sup> If a property right in data had existed when such companies were created, the costs associated with entering the market may have been too high for these young founders and their companies to flourish. By being able to use data about consumers without paying for it, these companies were able to create their businesses and offer products on which consumers can now rely daily. The ability for future entrepreneurs to enter the U.S. market can remain strong—by continuing to view property rights as disconnected to data, the costs of entering industries that rely upon data may remain low. Continuing to view data and rights associated with it in the way they are currently conceived may foster entrepreneurship and further solidify the United States as a leader in innovation.

## Equality

Creating a property right in data could also adversely impact people with less resources. For instance, individuals with more resources may be less inclined

*“If an individual were granted a property right in data about him or her, he or she could theoretically forbid credit bureaus or businesses from collecting or using the information to decide whether to extend credit.”*

to sell data to companies, which could lead to skewed data sets collected by companies but also, importantly, could lead to the exercise of privacy protections based on economic status. A property right in data could create the mirror of a “pay-for-privacy” (PFP) model. PFP models enable consumers to pay for greater privacy restrictions.<sup>88</sup> The EFF has expressed opposition to pay for privacy models and has expressed the view that such models undermine consumer privacy by discouraging people from exercising rights to privacy and by leading to unequal privacy protections based on income status.<sup>89</sup> By granting a property right in data, people with fewer economic resources may be encouraged to sell their data. Even though the sale of data under these circumstances would be the result of a willful decision, such sale could also decrease a consumer’s privacy, leading to an unequal privacy protection impact based on economic status.

This debate arose during the October 2019 Senate Committee on Banking, Housing, and Urban Affairs hearing on data ownership. Two members of the Committee, Senator Sherrod Brown (D-OH) and Senator Martha McSally (R-AZ), expressed concern that endowing data with property rights could increase the country’s economic divide because, they said, less wealthy consumers would be more likely to sell data.

## Next Steps

This paper has attempted to examine the conflation of the terms “control” and “ownership” in the U.S. data debate, detailed a range of consumer property theories, including possible impediments to achieving an actual property

right in data (e.g., the First Amendment), and identified some cautionary consequences of adopting, by law, a property right in data.

Continuing risks exist to which policymakers ought to be sensitized. One is the risk posed by judicial fiat—the possibility that a federal or state court of law may create a property right by interpreting a statute and/or a previous holding in a fashion that establishes the right by law. For example, the text of the CCPA, which became effective on January 1, 2020, contains no less than 25 references to possessive consumer ownership of information about themselves and, in one instance, the statute expressly requires that a covered business provide a “clear and conspicuous” link on its home page, titled “Do Not Sell My Personal Information.”<sup>90</sup> This link would enable a consumer to direct the business not to sell any information that pertains to him or her.

Another alternative avenue of approach may be best exemplified by California Governor Newsom’s proposed but not yet fully explained “data dividend.”<sup>91</sup> Depending on how his proposal is ultimately articulated, it might attempt to bypass the challenges associated with allowing the market to establish a monetary “value” for personal data by creating a statutory value, as has already occurred by the setting of civil penalties in section 12(b), and then assessing, again by either statute or rule, the amount a business or businesses must contribute to a state fund designed to provide the resources necessary to pay this “dividend.” This statutory figure would then risk becoming a political weapon, subject to being increased by political whim and not the marketplace.

*“One is the risk posed by judicial fiat—the possibility that a federal or state court of law may create a property right by interpreting a statute and/or a previous holding in a fashion that establishes the right by law.”*

# CONCLUSION

## **We are at a key inflection point with the B2C data-based economy in the United States.**

Never before has there been such a confluence of will among decision makers and stakeholders that could engineer a new and very different framework surrounding data, with the potential to alter the way the economy functions. By placing the spotlight on the apparent

conflation of the terms control and ownership in the data debate currently underway, we hope this paper proves to be a practical tool in helping policymakers decide how data ought to be treated.





# ENDNOTES

- 1 Lothar Determann, *No One Owns Data*, 70 Hastings L.J. 1, 7 (2019).
- 2 *Id.*
- 3 Cf. Richard Posner, *The Right to Privacy*, 12 Ga. L. Rev. 393, 394-95 (1978) (asserting costs of obtaining approval to use data about consumers would be too high relative to the value of the data to make economic sense).
- 4 E.g., Cameron F. Kerry, *Should Consumers Be Able to Sell Their Own Personal Data?*, Wall Street Journal, Oct. 13, 2019, <https://www.wsj.com/articles/should-consumers-be-able-to-sell-their-own-personal-data-11570971600>; *Data Ownership: Exploring Implications for Data Privacy Rights and Data Valuation: Hearing Before the S. Comm. on Banking, Housing, and Urban Affairs*, 116th Cong. (2019) (statement of Chad Marlow, senior advocacy and policy counsel at the American Civil Liberties Union) (“While the data as property model may have merit as a tool for redistributing the money that is currently being made off the sale of personal information, any claim that it advances privacy is false.”).
- 5 James Madison, *Property*, The Papers of James Madison (William T. Hutchinson, ed., 1977). See also *Ownership*, Black’s Law Dictionary (2d ed. 1995); *Property*, Black’s Law Dictionary (2d ed. 1995) (defining property as “ownership of a thing”).
- 6 Restatement (First) of Prop. Div. 1, 1-6 (Am. Law Inst., 1936); *Bundle-Of-Rights-Theory*, Black’s Law Dictionary (2d ed. 1995); *Ownership*, Black’s Law Dictionary (10th ed. 2009).
- 7 Restatement (First) of Prop. Div. 1, 1-6 (Am. Law Inst., 1936); *Bundle-Of-Rights-Theory*, Black’s Law Dictionary (2d ed. 1995); *Ownership*, Black’s Law Dictionary (10th ed. 2009).
- 8 The rights conferred by ownership accompany obligations to others as well. For example, in real property, property holders are obligated to maintain the premises in good repair and to pay taxes required by the government, among other obligations. Jacqueline Lipton, *Information Property: Rights and Responsibilities*, 56 Fla. L. R. 136, 172 (2004). Similarly, in copyright law, applicants for copyright registration “must disclose certain information about the copyright work in question.” *Id.* at 182.
- 9 Alan Westin, *Privacy and Freedom* 7 (1967).
- 10 The “right to exclude” has been defined as “the right to prohibit one or more persons from using a particular resource, either at all or in some category of ways.” James Y. Stern, *What is the Right to Exclude and Why Does It Matter?* in *Property Theory: Legal and Political Perspectives* 38-9 (M.H. Otusku & J.E. Penner eds., Cambridge University Press 2018).
- 11 Legal scholars have often defined “property” in terms of the ability to exclude others and have noted that “without the right to exclude, there can be no property.” For example, William Blackstone, author of the *Commentaries on the Laws of England* which influenced the development of the American legal system, explained that individuals view property as the “sole and despotic dominion . . . over the external things of the world, in total exclusion of the right of any other individual in the universe.” 2 William Blackstone, *Commentaries on the Laws of England*, 2 (1776). Thomas W. Merrill, *Property and the Right to Exclude II*, 3 Brigham-Kanner Prop. Rts. Conf. J. 1, 2-8 (2014) (additionally asserting that the right to exclude is the *sine qua non* of property).
- 12 Further, individuals may be unable to control the government’s collection, use, and disclosure of such data. Some data, like date of birth, name, marital status, and physical address is different in

- that it is registered and stored by the government. Nonetheless, an individual will still be unable to exercise a right of exclusion against the government, as the government stores the data.
- 13 It does not follow, however, that personal data cannot become designated as personal property. If such a designation were to take place, either by legislation or judicial fiat, it would, by definition, become a modified right with limitations on the full exercise of control or dominion.
- 14 Governor Gavin Newsom, State of the State Address (Feb. 12, 2019).
- 15 Jazmine Ulloa, *Newsom Wants Companies Collecting Personal Data to Share the Wealth with Californians*, L.A. Times, May 5, 2019, <https://www.latimes.com/politics/la-pol-ca-gavin-newsom-california-data-dividend-20190505-story.html>.
- 16 James Royal, Ph.D. & Arielle O’Shea, *What is a Dividend?*, Nerd Wallet, Apr. 9, 2019, <https://www.nerdwallet.com/blog/investing/what-are-dividends/>.
- 17 ‘Data Tax’ Would Let NY Residents Share in Wealth of Big Tech Data Collection, MSN.com, Nov. 27, 2019, <https://www.msn.com/en-us/money/news/%E2%80%98data-tax%E2%80%99-would-let-ny-residents-share-in-wealth-of-big-tech-data-collection/ar-BBXsdMC>.
- 18 Jeffrey Chester, the executive director of the Center for Digital Democracy, noted that “[i]f the deal is that in order to save a few dollars you have to agree to let Google, Facebook, Amazon and others track you and target you with AI-driven marketing on all your devices in every moment of your life, it’s a bad deal.” *Id.*
- 19 Adam Schwartz, *The Payoff From California’s “Data Dividend” Must Be Stronger Privacy Laws*, Electronic Frontier Foundation, Feb. 15, 2019, <https://www.eff.org/deeplinks/2019/02/payoff-californias-data-dividend-must-be-stronger-privacy-laws>.
- 20 The Center for Data Innovation is a think-tank studying the intersection of data, technology, and public policy. Center for Data Innovation, *About the Center for Data Innovation*, <https://www.datainnovation.org/about/>.
- 21 Eline Chivot, *Paying Users for Their Data Would Exacerbate Digital Inequality*, Center for Data Innovation, Jan. 11, 2019, <https://www.datainnovation.org/2019/01/paying-users-for-their-data-would-exacerbate-digital-inequality/>.
- 22 Yang 2020, *Data as a Property Right*, <https://www.yang2020.com/policies/data-property-right/>.
- 23 *Id.*
- 24 *See supra* Section I.A.
- 25 *Id.*
- 26 We note that ownership does not always change due to the owner’s consent. In the context of “takings” under the Fifth Amendment, the government can take private property without the owner’s consent. Additionally, the American legal system allows ownership of property to change absent consent. However, such means of changing ownership are primarily adversarial and do not reflect the most common form of ownership change—sales.
- 27 Laura Somaini, *The Right to Data Portability and User Control: Ambitions and Limitations*, *Rivista di diritto dei Media* 3/2018 (“As it is, the right [of data portability] does not produce the key characteristic of property, i.e., the right to exclude.”).
- 28 John Kennedy United States Senator for Louisiana, *Sen. John Kennedy (R-LA) Introduces Social Media Data Privacy Legislation*, Mar. 14, 2019, <https://www.kennedy.senate.gov/public/2019/3/sen-john-kennedy-r-la-introduces-social-media-data-privacy-legislation>.
- 29 Own Your Own Data Act of 2019, S. 806, 116th Cong. § 2(a) (2019).
- 30 ACCESS Act of 2019, S. 2658, 116th Cong. (2019).
- 31 *Compare id.*

- 32 Mark R. Warner, *Press Release: Senators Introduce Bipartisan Bill to Encourage Competition in Social Media*, Oct. 22, 2019, <https://www.warner.senate.gov/public/index.cfm/2019/10/senators-introduce-bipartisan-bill-to-encourage-competition-in-social-media>.
- 33 Kevin McCarthy, July 21, 2019, <https://twitter.com/gopleader/status/1153083345405972480?lang=en>.
- 34 Examples of the conflation of these terms amongst lawmakers is evident elsewhere. For example, Chairman of the Senate Committee on Banking, Housing, and Urban Affairs, Mike Crapo (R-ID), proclaimed in an op-ed that “[i]ndividuals are the rightful owners of their data.” Fox News, July 5, 2019, <https://www.foxnews.com/opinion/sen-mike-crapo-americans-deserve-privacy>. At a Committee hearing on data ownership on October 24, 2019, Sen. Sherrod Brown (D-OH), the Ranking Member of the Committee, expressed skepticism about creating a property right in data and noted that assigning consumers property rights in data could burden consumers by making it difficult to assign ownership of existing data that is “already” prevalent across the Internet. *Data Ownership: Exploring Implications for Data Privacy Rights and Data Valuation: Hearing Before the S. Comm. on Banking, Housing, and Urban Affairs*, 116th Cong. (2019) (statement of Sen. Sherrod Brown, Ranking Member, S. Comm. on Banking, Housing, and Urban Affairs). At the hearing, Senator Kennedy, the sponsor of the “Own Your Own Data Act,” expressed support for the right to share data, the right to know what personal information is collected, and the right to stop the sharing of data. *Id.* (statement of Sen. John Kennedy, Member, S. Comm. on Banking, Housing, and Urban Affairs). In response, Will Rinehart, a hearing witness and the Director of Technology and Innovation Policy at the American Action Forum, noted that the CCPA incorporates these rights without establishing property rights. *Id.* (statement of Will Rinehart, Director of Technology and Innovation Policy at the American Action Forum).
- 35 *Cf.* Russ Versteeg, *The Roman Law Roots of Copyright*, 39 Md. L. Rev. 522, 531 (2000). The emphasis on tangible objects appears in Roman law, which specifically denied the possibility of legal possession and ownership of anything that could not be touched. See Athanassios N. Yiannopoulos, *Introduction to the Law of Things: Louisiana and Comparative Law*, 22 La L. Rev 756, 773 (contrasting Roman civil law to Louisiana civil law and noting that Roman law only treated tangible objects as “corporeal” and only allowed ownership over corporeal objects).
- 36 Today, the United States recognizes a range of property rights, including real property (land or real estate), personal property (physical property other than real property), and intellectual property (intangible property that is the product of intellectual originality). William W. Fisher III, *The Growth of Intellectual Property: A History of the Ownership of Ideas in the United States*, 1, 10 (1999), at <https://cyber.harvard.edu/people/ffisher/iphistory.pdf> (explaining that the “gradual transformation of the American economy” led to the expansion and recognition of intellectual property rights). The recognition of property rights in intangible objects was reflected in the original Restatement of Property, which considered “property” to mean the legal relationship between persons with respect to a thing, a thing being either tangible or intangible. Restatement (First) of Prop. Div. 1, 3 (Am. Law Inst., 1936).
- 37 Determann, *supra* note 2 at 26.
- 38 According to John Locke, labor “in the beginning, gave a right to property.” John Locke, *Second Treatise of Government*, ch. 5, sec. 27, 32. Locke provided examples, noting a property right is justified in instances where a person was attempting to own bread or the produce they made or cultivated, as they mixed their labor with the materials. *Id.* at sec. 46.
- 39 *Infra* note 53.

- 40 We note that while property rights can exist for objects that did not require labor for a person to obtain the object, such as when a person receives objects through inheritance, the initial acquisition of such an object would have required labor on behalf of the original acquiror. Therefore, labor was required to be exerted for property rights to initially be established.
- 41 In contrast, a company having a property right in a data set compiled from data about various individuals would comport with the Labor Theory of Property. Unlike data about individuals, companies must labor to create a larger data set. For instance, companies exert effort by creating means of and systems for collecting data and by compiling data in sets that are based on specific features (for example, a company might maintain a data set that involves consumers the company believes are likely to purchase a specific item based on a prior purchase).
- 42 David Hume, *A Treatise of Human Nature* (1739).
- 43 Hans-Hermann Hoppe, *A Theory of Socialism and Capitalism* 8 (1989).
- 44 *See id.* To illustrate this theory, Hoppe posited that if for some reason there was a superabundance of bananas, where consumption of bananas would not reduce the supply of bananas for anyone, then property rights over bananas would be superfluous.
- 45 In contrast, the Scarcity Theory justifies extending a property right in data to the extent that it is aggregated and manipulated by companies for a specific purpose. When a company compiles and analyzes data, it uses scarce resources to do so. A company that aggregates individual consumer preferences for marketing purposes, for example, will need to use employees' time and creative energy to develop the code or algorithms that make the dataset relevant. Accordingly, granting companies a property right to these datasets is justified under the Scarcity Theory.
- 46 Rather, it is often held within computer systems that may themselves be tangible objects.
- 47 The tort of trespass of chattels has been successfully raised in a few cases that involve data breaches when the "chattel" at issue is a physical computer system. These cases involve corporations that allege that their computer systems have been misused by a third party, resulting in the loss of data about individuals. In these cases, courts have focused on the tangible computer systems that have been accessed as the "chattel" at issue and not the data itself. *Intel v. Hamidi*, 71 P.3d 296 (Cal. 2003); *see also eBay, Inc., v. Bidder's Edge, Inc.*, 100 F. Supp. 2d 1058 (N.D. Cal. 2000).
- 48 *See generally* Mark S. Dennis, *Bailee's Liability for Damage, Loss, or Theft of Bailed Property*, 46 AM. JUR. PROOF OF FACTS 3d 361 § 2 (2018).
- 49 For a broader discussion of the proposed application of bailment theory to the Fourth Amendment, *see Carpenter v. United States*, 138 S. Ct. 2206, 2272 (2018) (Gorsuch, J., dissenting).
- 50 *See e.g. In re Target Corp. Consumer Data Sec. Breach Litig.*, 66 F. Supp. 3d 1154 (D. Minn. 2014); *In re Sony Gaming Networks & Customer Data Sec. Breach Litig.*, 903 F. Supp. 2d 942 (S.D. Cal. 2012); *Richardson v. DSW, Inc.*, No. 05-4599, 2005 WL 2978755 (N.D. Ill. Nov. 3, 2005).
- 51 *Richardson v. DSW, Inc.*, No. 05-4599, 2005 WL 2978755 (N.D. Ill. Nov. 3, 2005).
- 52 Restatement (Second) of Torts §§ 652B-E (Am. Law. Inst. 1976).
- 53 Publication is the dissemination of personal information by the information holder. For a broader discussion of this issue, *see* Alicia Solow-Niederman, *Beyond the Privacy Torts: Reinvigorating a Common Law Approach for Data Breaches*, 127 Yale L.J. F. 614 (2018).
- 54 In data breaches, the harm arises from a data holder's failure to prevent access to or acquisition of information by a third party, which does not amount to publication for purposes of the privacy

torts. The data holder usually is not the party that disseminates the consumer's personal data, making it difficult for consumers to claim that data holder caused the harm required by the invasion of privacy torts. See e.g. *Galaria v. Nationwide Mut. Ins. Co.*, No. 13-188 (S.D. Ohio Feb. 10, 2014) (dismissing consumers invasion of privacy claims where the breached company did not disseminate the consumers personal information or allege sufficient dissemination of the information to the public in general to satisfy the publication requirements).

55 To establish standing in litigation, Article III of the Constitution requires a plaintiff to establish harm to a legally protected interest. In litigation regarding traditional property interests, such as real property, this requirement can be met when the property itself is harmed. Under a diminished value theory, the harm alleged by the plaintiff is the diminished value of an otherwise valuable property interest. When it comes to data about an individual, it is often unclear what type of harm is sufficient to meet the standing requirement. In data breach litigation, plaintiffs often plead damages by arguing that the exposure of data about them amounts to property damage and use the diminished value theory to argue that information about them was devalued as a result of the defendant's conduct. While courts have often recognized an "intrinsic value" in data about a person, they have been reluctant to find that plaintiffs have alleged sufficient injury to meet the standing requirement. See e.g. *In re Facebook Internet Tracking Litig.*, 263 F. Supp. 3d 836 (N.D. Cal. Jun. 30, 2017); *Barnes & Noble Pin Pad Litig.*, No. 12-cv-8617, 2013 WL 4759588 (N.D. Ill. Sept. 3, 2013); *LaCourt v. Specific Media, Inc.*, No. SACV 10-1256- GW, 2011 WL 1661532 (C.D. Cal. Apr. 28, 2011). In *Claridge v. RockYou Inc.*, a social networking website, suffered a data breach that affected millions of its users. The plaintiff claimed that he suffered economic damage because he provided RockYou with personally information that constituted "valuable property." The plaintiff claimed that the failure to protect this information resulted in the breach, and ultimately diminished the value of the information that pertained to him.

The plaintiff's allegations of harm were enough to establish standing to survive a motion to dismiss but the Court emphasized that it still had "doubts about the plaintiff's ultimate ability to prove his damages theory in this case." The case ultimately settled out of court. 785 F.Supp.2d 855 (N.D. Cal. Apr. 11, 2011).

- 56 The Takings Clause of the Fifth Amendment prohibits the government from taking private property for public use without just compensation. While the Takings Clause has traditionally applied to the appropriation of real property, the property interests protected under the Fifth Amendment can also be intangible. In *Ruckelshaus v. Monsanto Company*, the Supreme Court extended the Takings Clause to protect trade secrets. The Court found that a taking had occurred because Congress created a property right by statute to trade secrets and had made promises to the plaintiff that the data would remain confidential. 467 U.S. 986 (1984). Assuming Congress granted a property right in data, the Takings Clause would only be valuable to consumers in those limited circumstances where the government, as opposed to a private party, takes data about a person without consent or just compensation.
- 57 564 U.S. 552, 570 (2011). In this case, the Court addressed the question of whether a legislative ban on the sale or use of personally identifiable healthcare data might unconstitutionally restrict the free speech rights of companies that used that data, in violation of the First Amendment.
- 58 *Id.* at 562-3.
- 59 Determann, *supra* note 2 at 38-9.
- 60 Fred H. Cate & Robert Litan, *Constitutional Issues in Information Privacy*, 9 Mich. Telecomm. & Tech. L. Rev. 35, 51 (2002).
- 61 Trademark law does not provide a vehicle for individuals to exercise a property right over personal data. Trademark law protects brand names and logos used in goods and services against unauthorized commercial use if such use would confuse consumers, creating a limited property

- right to identifying information. Trademark law does not apply to data and would only cover personal identifiers that were trademarked if other entities tried to use the identifier in a confusing way. See Determann, *supra* note 2 at 17.
- 62 Patent law provides property rights to inventions and gives patent owners the right to exclude others from reproducing, selling, or importing the product for a limited period of time. However, the Supreme Court has held that patent law does not provide an ownership right to the underlying data behind an invention, machine, or process. Patent law therefore does not provide a viable means by which individuals may assert a property right over data. See *e.g.* *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576 (2013).
- 63 Determann, *supra* note 2 at 18.
- 64 The plaintiff in *Feist* compiled and distributed a phone directory that contained the names and phone numbers of businesses in the area. The defendant had copied several thousand numbers from the book for its own phone directory. In denying copyright protection to the original phonebook, the Court noted copyright law is meant to “promote the Progress of Science and useful Arts,” not to protect general collection of information. 499 U.S. 340 (1991).
- 65 See, *e.g.*, Erin Bernstein & Theresa J. Lee, *Where the Consumer Is the Commodity: The Difficulty with the Current Definition of Commercial Speech*, 2013 Mich. St. L. Rev. 39, 40 (“Companies like Facebook, Google, and Twitter offer services used by billions of users that have become central to our day-to-day lives. These services are free to users.”).
- 66 Daniel Castro & Michael McLaughlin, *Survey: Few Americans Willing to Pay for Privacy*, Center for Data Innovation, Jan. 16, 2019, <https://www.datainnovation.org/2019/01/survey-few-americans-willing-to-pay-for-privacy/>.
- 67 *Id.*
- 68 See Cameron F. Kerry & John B. Morris, *Why Data Ownership is the Wrong Approach to Protecting Privacy*, Brookings Institute, June 26, 2019, <https://www.brookings.edu/blog/techtank/2019/06/26/why-data-ownership-is-the-wrong-approach-to-protecting-privacy/>.
- 69 The issue of valuing personal data also arises in the bankruptcy context. Personal information compiled by a company can be a valuable asset for debtors. The 2005 amendments to the Bankruptcy Code introduced a provision prohibiting the sale or lease of personally identifying information (defined as information that includes names, addresses, e-mail addresses, social security numbers, and other types of information) in a bankruptcy proceeding unless certain conditions are met. 11 U.S.C. §§ 101(41A), 363(b)(1)(B). When those conditions are met, companies try to gauge the value of the consumer information compiled by the debtor. Even in this context, there is no set procedure for valuation. James E. Short and Steve Todd, *What’s Your Data Worth?*, MIT Sloan Management Review, March 3, 2017, <https://sloanreview.mit.edu/article/whats-your-data-worth/>.
- 70 Sam Sabin, *In Data-Driven World, Consumers Likely to Overestimate Their Information’s Value*, Morning Consult, June 3, 2019, <https://morningconsult.com/2019/06/03/data-driven-world-consumers-likely-overestimate-their-informations-value/>.
- 71 *Id.*
- 72 Emily Steel, Callum Locke, Emily Cadman, Ben Freese, *How Much is Your Personal Data Worth?*, Financial Times, June 12, 2013, <https://ig.ft.com/how-much-is-your-personal-data-worth/>.
- 73 *Id.*
- 74 *Id.*
- 75 Cal. Civ. Code §§ 1798.100-199.
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- 77 Electronic Frontier Foundation, *Do Not Track*, <https://www EFF.org/issues/do-not-track>.

- 78 Jeff Horwitz, *Facebook to Let Users Control Their Data From Other Companies*, Wall Street Journal, Aug. 20, 2019, <https://www.wsj.com/articles/facebook-to-let-users-control-their-data-from-other-companies-11566313200>.
- 79 Christopher Tonetti, *Should Consumers Be Able to Sell Their Own Personal Data?*, Wall Street Journal, Oct. 13, 2019, <https://www.wsj.com/articles/should-consumers-be-able-to-sell-their-own-personal-data-11570971600>.
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- 83 A. Hackshaw, *Small studies: Strengths and Limitations*, 32 Eur. Respir. J 1141, 1141-43 (2008).
- 84 A. E. Simmons, *The Disadvantages of a Small Sample Size*, Sciencing, May 14, 2018, <https://sciencing.com/disadvantages-small-sample-size-8448532.html>.
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