

# THE DATA PRIVACY CONCERN OF CLOUD SERVICE PROVIDERS IN THE BANKING INDUSTRY

*Savannah Darnall\**

In her article, Professor Baker illuminates the risks posed by cloud computing services as banks continue to move their businesses and customer operations into the cloud.<sup>1</sup> As single points of failure, she notes, cloud computing services contribute a significant systemic risk to financial market stability.<sup>2</sup> Her article provides a brief overview of the benefits, costs, and risks to “banking on the cloud”; she then argues for the classification of cloud service providers as systemically important financial market utilities under Title VIII of the Dodd Frank Act.<sup>3</sup> This comment turns away from the analysis of financial market utilities and aims to further highlight the data privacy concerns of such entities’ storage of consumer financial information from an individual consumer perspective.

One definition of data breach is “an unauthorized acquisition of computerized data that compromises the security, confidentiality, or integrity of personal information maintained by a person or business.”<sup>4</sup> When considering data privacy concerns, we often think immediately of data breaches and hacks—criminal behavior—though data breaches can be either an intentional hack or a careless accident.<sup>5</sup> We think of the Equifax<sup>6</sup> and Capital One<sup>7</sup> breaches; we consider briefly whether the baby pictures and political arguments that make Facebook significantly less enjoyable are

---

\* Savannah Darnall is a third-year law student at the University of Tennessee College of Law and is scheduled to graduate in May 2020.

<sup>1</sup> Colleen Baker et al., *Banking on the Cloud*, 21 TENN. J. BUS. L. 281, 282–83 (2020).

<sup>2</sup> *Id.* at 283.

<sup>3</sup> *Id.* at 287–93, 297–300.

<sup>4</sup> See Catherine M. Bump et al., Summary of State Data Security Laws as of March 2006, *Seventh Annual Institute on Privacy Law: Evolving Laws and Practices in a Security Driven World*. (ed. Practising Law Institute 2006) 39–63.

<sup>5</sup> ANITA ALLEN & MARC ROTENBERG, *PRIVACY LAW AND SOCIETY* 1048 (3d ed. 2007).

<sup>6</sup> Allen St. John, *Equifax Data Breach: What Consumers Need to Know*, CONSUMER REPORTS, (Sept. 21, 2017), <https://www.consumerreports.org/privacy/what-consumers-need-to-know-about-the-equifax-data-breach/>.

<sup>7</sup> CAPITAL ONE (Sep. 23, 2019), <https://www.capitalone.com/facts2019/>.

worth our data being compromised by an outside third party.<sup>8</sup> In fact, some projections show that nearly half of the U.S. population was impacted by the Equifax and Facebook breaches.<sup>9</sup> The Capital One data breach happened on Amazon's cloud servers (Amazon Web Services), which exposed the sensitive personal information, including Social Security numbers and bank account information, of over 100 million people in the United States and Canada.<sup>10</sup> Recently, Equifax and the Federal Trade Commission (FTC) reached a settlement in which Equifax would contribute up to \$425 million to help those affected by the data breach,<sup>11</sup> though the settlement has proved to be a cumbersome process for customers to receive their \$125 share of the payment.<sup>12</sup>

On the other side of data breaches as a consumer data privacy concern lies data usage. This is the playground of technology such as Siri, Alexa, Google Home, and Vizio Smart TVs in which the device listens to and/or records day-to-day consumer interactions with their environment with the aim of gathering valuable data on consumer spending habits to drive advertisement and search algorithms.<sup>13</sup> The average Amazon Prime customer, including 51% of households in 2018, spent \$2,486 in 2017 on purchases from Amazon.<sup>14</sup> In the same year, Amazon Web Services

---

<sup>8</sup> Cecilia Kang & Sheera Frenkel, *Facebook Says Cambridge Analytica Harvested Data of Up to 87 Million Users*, N.Y. TIMES (Apr. 4, 2018), <https://www.nytimes.com/2018/04/04/technology/mark-zuckerberg-testify-congress.html>.

<sup>9</sup> FORBES, *How are Recent Data Breaches Affecting Consumer Trust in Companies?*, Quora (May 28, 2019), <https://www.forbes.com/sites/quora/2019/05/28/how-are-recent-data-breaches-affecting-consumer-trust-in-companies/#3ee23d0b49c4>.

<sup>10</sup> Liz Hoffman, Dana Mattioli, & Ryan Tracy, *Fed Examined Amazon's Cloud in New Scrutiny for Tech*, WALL ST. J. (AUG. 1, 2019), <https://www.wsj.com/articles/fed-examined-amazons-cloud-in-new-scrutiny-for-tech-1156469>.

<sup>11</sup> Federal Trade Commission, *Equifax Data Breach Settlement*, FED. TRADE COMM'N (January 2020), <https://www.ftc.gov/enforcement/cases-proceedings/refunds/equifax-data-breach-settlement>.

<sup>12</sup> Kelly Tyko, *Consumers must deal with more red tape to get cash from Equifax settlement*, USA TODAY (Sep. 10, 2019), <https://www.usatoday.com/story/money/2019/09/10/equifax-data-breach-settlement-new-step-added-get-cash/2276645001/>.

<sup>13</sup> See generally *FTC v. VIZIO, Inc.*, No. 2:17-cv-00758-SRC-CLW, 2017 U.S. Dist. LEXIS 219381, at 3 (D.N.J. 2017) (issuing sanctions against Vizio for using and selling data from customers' smart TVs about their watching and purchasing habits without the consumers' express consent); Dan Goodin, *Alexa and Google Home Abused to Eavesdrop and Phish Passwords*, ARS TECHNICA (Oct. 20, 2019), <https://arstechnica.com/information-technology/2019/10/alex-and-google-home-abused-to-eavesdrop-and-phish-passwords/>.

<sup>14</sup> Louis Columbus, *10 Charts That Will Change Your Perspective of Amazon Prime's Growth*, FORBES (Mar. 4, 2018), <https://www.forbes.com/sites/louiscolumnbus/>

captured about half of the public cloud market in which it stored valuable financial and personal consumer information for various companies.<sup>15</sup> By now, the common joke that Alexa or Siri listens to our conversations and immediately shows an advertisement reflecting those same conversations, is now the reality of consumer acquiescence to the new normal of the digital age. Tech giants like Amazon, Google, and Microsoft have long compiled and aggregated consumer data and used it to build faster, more accurate algorithms to drive consumer search and spending habits.

This is a tradeoff most consumers understand. Without access to our location data, Google Maps cannot give the most efficient route that reflects the most accurate traffic. If Amazon had not been able to access the data surrounding our e-commerce habits, it would not have been able to offer its most innovative projects to date, such as Amazon Prime and one-click shopping.<sup>16</sup> Few could seriously doubt whether Amazon Web Services' access to mountains of financial information associated with its cloud services for banks helps drive that innovation. One significant benefit to Amazon's access to this valuable information is that "[r]eams of data can be analyzed and deployed by cutting-edge artificial intelligence, machine learning and blockchain technologies that most banks' . . . IT systems would be unable to support."<sup>17</sup> The innovations tech giants offer are important and valuable to the modern world, but so is the right of consumers to control their own data, how it is used, and what becomes of it.

Consumers and companies are still trying to figure out how to work around and with each other within banking and e-commerce ecosystems. Research presents mixed results among consumer reactions. On the one hand, some studies show consumers to be optimistic that the tradeoff with big tech companies is worth it; a survey completed by marketing platform SmarterHQ<sup>18</sup> found that in early 2019, consumers still trusted that Amazon was using their data appropriately. Millennials and Generation Z

---

2018/03/04/10-charts-that-will-change-your-perspective-of-amazon-primers-growth/#5b6525823fee.

<sup>15</sup> Hoffman, Mattioli, & Tracy, *supra* note 10.

<sup>16</sup> Mike Sands, *How Amazon is Minting A New Generation of Customer-Data-Obsessed Companies*, FORBES (Mar. 20, 2018), <https://www.forbes.com/sites/mikesands1/2018/03/02/how-amazon-is-minting-a-new-generation-of-customer-data-obsessed-companies/#45c9de3e28ed>.

<sup>17</sup> Baker et al., *supra* note 1, at 288.

<sup>18</sup> Caitlin Mullen, *Trust in Amazon Tops Big Tech, Banks, Social Media*, BIZWOMEN (Mar. 7, 2019), <https://www.bizjournals.com/bizwomen/news/latest-news/2019/03/trust-in-amazon-tops-big-tech-banks-socialmedia.html?page=all>.

trusted the conglomerate nearly two times as much as they trusted their own banking institutions.<sup>19</sup> Across the board, consumers trust Amazon more than they trust the government or the press, while 79% of consumers believe companies have access to too much of their personal information and 86% are generally concerned about their online privacy.<sup>20</sup>

Yet, another study showed that 81% of consumers had actually become more concerned about how companies were using their data and 89% thought companies should be more clear about how they were using consumer data.<sup>21</sup> The FTC warned that the payouts to those affected by the Equifax breach may not be the \$125-per-person originally predicted because the public response has been so widespread.<sup>22</sup> According to that same study, consumers' level of wariness about the usage of their data may be on the rise; however, most still are not convinced that they should care about how their data is being used, and many are not taking meaningful action after privacy breaches.<sup>23</sup> Seventy-one percent of people surveyed said they were willing to give up their privacy to get access to what technology can offer, and only 45% have updated their privacy settings.<sup>24</sup> Only 16% reported walking away from a company because of data misuse.<sup>25</sup>

Even if consumers have a hard time showing concern for the misuse of their data, the United States Congress should. Cloud computing is a convenient, cost effective way for companies to rent cloud space in an increasingly e-commerce world. A move to include cloud service providers as financial market utilities under the Dodd Frank Act, as Baker suggests, is one of many encouraging steps to be taken towards increased data privacy rights in the United States. However, as many cloud service providers house information involving an entire range of personal data, both financial and otherwise, sweeping federal data privacy protection is critical to allowing consumers to regain control over their data. State-by-state data privacy laws are will not do; the chaotic and unwieldy costs of

---

<sup>19</sup> *Id.*

<sup>20</sup> *Id.*

<sup>21</sup> Erik Sherman, *People are Concerned About Their Privacy in Theory, Not Practice, Says New Study*, FORTUNE (Feb. 25, 2019), <https://fortune.com/2019/02/25/consumers-data-privacy/>.

<sup>22</sup> Tyko, *supra* note 12.

<sup>23</sup> Kim Hart, *Consumers Kinda, Sorta Care About Their Data*, AXIOS (Feb. 25, 2019), <https://www.axios.com/consumers-kinda-sorta-care-about-their-data-3292eae9-2176-4a12-b8b5-8f2de4311907.html>.

<sup>24</sup> *Id.*

<sup>25</sup> *Id.*

compliance with fifty different privacy laws for companies large and small is not a real solution. Congress should move with a sense of thoughtful urgency – consumers are giving tech companies and cloud service providers much more than the companies themselves are giving in return. It is time to give consumers the power over their own data, financial or otherwise, whether they really want it or not.