

**Big Data and Consumer Trust: Progress and Continuing Challenges**

**U.S. Federal Trade Commissioner Julie Brill  
Remarks Before the International Conference of Data Protection and  
Privacy Commissioners**

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But I also believe that big data will not realize its full potential unless companies, researchers and policymakers work to build consumer trust in the big data enterprise.<sup>7</sup> As in the past, privacy and data security protections will continue to play an essential role in building consumer trust. The question is how to put those protections into practice. My agency, the Federal Trade Commission (FTC), has been actively engaged in answering this question through a series of public workshops and reports.<sup>8</sup>

Our counterparts around the world are asking the same question through similar efforts. The European Commission's recently released Communication on a data-driven economy;<sup>9</sup> the UK Information Commissioner's Office (ICO) recent report on big data and data protection;<sup>10</sup> the OECD's Global Forum on the Knowledge Economy;<sup>11</sup> and Japan's review of its own data privacy law in light of big data's challenges – these are just some examples of the common search by regulators, businesses, and others for answers about how to reconcile the furious pace of growth in big data analytics with more stable values such as privacy and fair treatment.

I find it encouraging that all of us – with our diverse perspectives and legal systems – are affirming the relevance of fundamental privacy principles in the big data era, and are focusing our attention on *how* the principles apply in our data-intensive world.

### **The Main Challenges to Consumer Trust: Data Security, Sensitive Information Protection, and Ethical Data Practices**

Let me focus on three challenges to building consumer trust and realizing big data's full social and economic potential.

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[rulemaking-on-V2V-communications](#) (stating results of preliminary report on Left Turn Assist and Intersection Movement Assist technologies, which estimates that the technologies could prevent up to 592,000 crashes and save 1,083 lives per year).

<sup>7</sup> For a full elaboration of this argument, see generally Julie Brill, Comm'r, FTC, Keynote Address at the U.S. Chamber of Commerce Foundation Conference on the Future of Data-Driven Innovation: The Trees and the Forest: Protecting Consumer Trust in the Big Data Era (Oct. 7, 2014), *available at* [http://www.ftc.gov/system/files/documents/public\\_statements/590171/141007uschamberbrillremarks.pdf](http://www.ftc.gov/system/files/documents/public_statements/590171/141007uschamberbrillremarks.pdf).

<sup>8</sup> *See, e.g.*, FTC, Internet of Things Workshop – Privacy and Security in a Connected World (last visited Oct. 9, 2014), <http://www.ftc.gov/news-events/events-calendar/2013/11/internet-things-privacy-security-connected-world>; FTC, Big Data: A Tool for Inclusion or Exclusion (last visited Oct. 9, 2014), <http://www.ftc.gov/news-events/events-calendar/2014/09/big-data-tool-inclusion-or-exclusion>.

<sup>9</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, and the Committee of the Regions, *Towards a Thriving Data-Driven Economy* (July 2, 2014), *available at* <https://ec.europa.eu/digital-agenda/en/news/communication-data-driven-economy>.

<sup>10</sup> UK INFORMATION COMMISSIONER'S OFFICE, BIG DATA AND DATA PROTECTION (July 28, 2014, v. 1.0), *available at* [http://ico.org.uk/news/latest\\_news/2014/~media/documents/library/Data\\_Protection/Practical\\_application/big-data-and-data-protection.pdf](http://ico.org.uk/news/latest_news/2014/~media/documents/library/Data_Protection/Practical_application/big-data-and-data-protection.pdf).

<sup>11</sup> OECD, Global Forum on the Knowledge Economy (last visited Oct. 9, 2014), <http://www.oecd.org/innovation/inno/globalforumontheknowledgeeconomy.htm>.

## **Data Security**

security practices led to live feeds from Internet-connected home video cameras being hijacked and posted to public Internet sites.<sup>19</sup>

Looking more broadly, a recent study by Hewlett-Packard found that 90 percent of connected devices are collecting personal information, and 70 percent of them are transmitting this data without encryption.<sup>20</sup> As more devices become connected to the Internet, the potential

Companies should give consumers great control over collection and use of sensitive data like health information. Meaningful individual control is a much broader concept than simply permitting or refusing information collection at one point in time.<sup>24</sup> Instead, companies should develop intuitive and immersive consumer dashboards, apps and other tools that will engage and, at the same time, inform consumers about how their sensitive health information is being collected and used.<sup>25</sup> And to the extent that this sensitive information winds up in data broker profiles, data brokers must similarly empower consumers with an easy-to-use portal that will give them the ability to keep aspects of their private lives away from big data driven marketing.<sup>26</sup>

### **Discrimination and Unethical Data Practices**

The third challenge to consumer trust that I want to highlight comes from the possibility of unfair or unethical treatment as companies use increasingly powerful analytics tools on the massive amounts of data that are available about individual consumers. This is a challenge that *all* companies need to take seriously.

Some of the findings in the FTC's ground-breaking study on data brokers, released earlier this year, raised this issue. We found that the profiles these companies create about individuals, which may contain thousands of data points,<sup>27</sup> will sometimes separate consumers according to race, ethnicity, family status, and other characteristics that companies are not allowed to consider for purposes such as housing, credit, employment, and medical care.<sup>28</sup>

In the marketing context that these profiles are intended to serve, merely collecting such information might not present a legal problem under current U.S. law. Indeed, these and other big data tools have the potential to promote economic inclusion. For example, big data driven marketing can make underserved consumers aware of opportunities for credit and other services.<sup>29</sup>

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But there is also a clear potential for use of the information to be harmful and discriminatory, and to destroy consumer trust. The same data that allows banks to reach traditionally unbanked, financially vulnerable populations could just as easily be used to target them with advertisements for high-interest payday loans.<sup>30</sup>

Moreover, consumer segments that steer clear of traditionally restricted categories could still have devastating emotional effects on consumers. Consider, for example, a list of domestic abuse victims. Such a list might be useful for companies that want to market home security devices. But I think this is a case in which the explanation that the list is “just for marketing” falls short. We all need to discuss the many issues surrounding consumer profiles like these, including the individual data elements that they contain, how they group consumers together, and how the profiles are used in practice.

And as companies begin scrutinizing their own data –perhaps supplementing it with information from data brokers – they also need to be on the lookout for how data can lead them into making distinctions that are ethically, if not legally, questionable. For example, what if a company analyzing its own data, in an effort to identify “good” versus “troublesome” customers, ends up tracking individuals along racial or ethnic lines? A recent *Harvard Business Review* article argues that this kind of result isn’t just possible but inevitable, and all companies should think carefully about where “value-added personalization and segmentation end[s] and harmful discrimination begin[s].”<sup>31</sup>

Much of the challenge in ethical data practices lies behind the scenes, out of consumers’ view. Therefore, more of the burden is on companies to ensure that their collection and use practices are consistent with a trusted relationship. I encourage companies to think about this the way engineers think about designing automobiles: while we want to give consumers better control and transparency tools that they can easily access on their dashboards, we must also ensure that companies build better protections “under the hood” to ensure ethical treatment of consumers.<sup>32</sup>

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are expected to create efficiencies, lower costs, and improve the ability of certain populations to find and access credit and other services.”). See also Comment of the Chamber of Commerce of the United States on the Big Data: A Tool for Inclusion or Exclusion? Workshop 3 (Aug. 15, 2014), available at [http://www.ftc.gov/system/files/documents/public\\_comments/2014/08/00021-92389.pdf](http://www.ftc.gov/system/files/documents/public_comments/2014/08/00021-92389.pdf) (quoting with approval the FTC’s conference description).

<sup>30</sup> See, e.g., Comment of the National Consumer Law Center on the Big Data: A Tool for Inclusion or Exclusion? Workshop 2 (Aug. 15, 2014), available at [http://www.ftc.gov/system/files/documents/public\\_comments/2014/08/00018-92374.pdf](http://www.ftc.gov/system/files/documents/public_comments/2014/08/00018-92374.pdf); Jeffrey Chester and Edmund Mierzwinski, Big Data Means Big Opportunities and Big Challenges: Promoting Financial Inclusion and Consumer Protection in the “Big Data” Financial Era 13 (Mar. 2014) (submitted as a comment of the Center for Digital Democracy and U.S. PIRG on the Big Data: A Tool for Inclusion or Exclusion? Workshop), available at [http://www.ftc.gov/system/files/documents/public\\_comments/2014/05/00003-90097.pdf](http://www.ftc.gov/system/files/documents/public_comments/2014/05/00003-90097.pdf).

<sup>31</sup> Michael Schrage, *Big Data’s Dangerous New Era of Discrimination*, HARVARD BUSINESS REVIEW BLOG NETWORK (Jan. 29, 2014, 8:00 a.m.), <http://blogs.hbr.org/2014/01/big-datas-dangerous-new-era-of-discrimination/>.

<sup>32</sup> Yochi Dreazen, . . . *Guard Your Privacy: Steps to Protect Confidentiality While Online Are Often Underused*, WALL ST. J. (Nov. 18, 2002, 9:52 AM), available at <http://online.wsj.com/articles/SB1037222318310696668> (quoting Marc Rotenberg as saying, “I don’t think users need more settings on the dashboard – they need online privacy protections under the hood.”).

Data brokers should take a strong, proactive step by assessing the potential impact of their products that profile consumers by race, ethnicity or other sensitive classifications, or that are proxies for such sensitive classifications.

And companies that are beginning to dive into their own data should deploy greater resources and imagination to designing intuitive portals, dashboards, and better interfaces for consumers to use to control their privacy and security. Companies could also make ethics reviews part of their big data analytics business practices – perhaps by creating “consumer subject review boards” to identify and reduce consumer risks, as one U.S. privacy scholar has suggested.<sup>33</sup> And whether or not companies go to this level of formality, every one of them should be asking whether their analysis of consumer data is taking them into questionable territory.<sup>34</sup>

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The fundamental privacy principles that many of us hold and enforce have proven over years and decades that they are durable and capture important attributes of individual freedom and autonomy. The rise of big data is only the most recent challenge to these principles, and many of us here have concluded that traditional privacy principles can not only coexist with big data, but can also improve big data’s chances for success. For those of us who care deeply about privacy, affirming these principles will not be enough. We will need to continue to examine specific big data challenges – like data security, sensitive information, and discrimination – and get specific about solutions.

Thank you.

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<sup>33</sup> See generally Ryan Calo, *Consumer Subject Review Boards: A Thought Experiment*, 66 STAN. L. REV. ONLINE