Before the
FEDERAL TRADE COMMISSION
Washington, DC 20530

In the Matter of	)	
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Big Data: A Tool for Inclusion or Exclusion? Workshop	)	Project No. P145406
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COMMENTS OF
THE CONSUMER ELECTRONICS ASSOCIATION

The Consumer Electronics Association ("CEA")[1] commends the Federal Trade Commission (the "Commission") on its September 15, 2014 workshop on big data (the "Workshop"), and offers these comments as the Commission further considers the implications of big data. The Workshop sought to "explore the use of 'big data' and its impact on American consumers, including low income and underserved consumers."[2] CEA agrees with the many Workshop participants who recognized the numerous, well-documented benefits of big data. Some Workshop participants suggested, however, that consumers could be harmed by certain uses of big data. CEA urges the Commission to consider how a responsible use framework could mitigate the risks that big data may pose while ensuring that consumers enjoy the benefits that big data will bring. Also, to the extent that big data could be used in a discriminatory way, CEA

[1] CEA is the principal U.S. trade association of the consumer electronics and information technologies industries. CEA's more than 2,000 member companies lead the consumer electronics industry in the development, manufacturing and distribution of audio, video, mobile electronics, communications, information technology, multimedia and accessory products, as well as related services, that are sold through consumer channels. Ranging from giant multinational corporations to specialty niche companies, CEA members cumulatively generate more than $211 billion in annual factory sales and employ tens of thousands of people.

[2] Federal Trade Commission, Big Data: A Tool for Inclusion or Exclusion?, http://www.ftc.gov/news-events/events-calendar/2014/09/big-data-tool-inclusion-or-exclusion (last visited Oct. 26, 2014).

urges the Commission and other government and industry stakeholders to consider how existing anti-discrimination and consumer protection laws could supplement a responsible use framework to address these concerns.

I. BIG DATA ANALYTICS WILL FACILITATE BETTER DECISION-MAKING AND DELIVER VALUE ACROSS ALL SECTORS OF THE ECONOMY

Big data analytics hold tremendous promise to benefit consumers and the economy as a whole. As Chairwoman Ramirez noted during the Workshop, big data "has the capacity to save lives, improve education, enhance government services, increase marketplace efficiency, and boost economic productivity."[3] CEA agrees with the Chairwoman and believes that big data already has begun to produce tangible benefits that will grow exponentially in the future.

Big data analytics' many benefits already are observable and well-documented. The recent White House report, *Big Data: Seizing Opportunities, Preserving Values*, noted, for example, that "[b]ig data and the growing 'Internet of Things' have made it possible to merge the industrial and information economies," reducing maintenance costs and increasing safety in several industries; use predictive analytics software to discover potential Medicare and Medicaid reimbursement fraud before claims are paid; and detect early warning signs of potentially fatal infections in neonatal intensive care units.[4] As Commissioner Ohlhausen has observed, "[t]oday's consumers are themselves producers and users of big data, whether posting billions of

[3] Opening Remarks of FTC Chairwoman Ramirez, *Big Data: A Tool for Inclusion or Exclusion*, Washington, DC, at 1 (Sept. 15, 2014), *available at* http://www.ftc.gov/system/files/documents/public_statements/582421/big_data_workshop_opening_remarks_ftc_chairwoman_edith_ramirez_9-15-14.pdf.

[4] Executive Office of the President, *Big Data: Seizing Opportunities, Preserving Values*, at 5-6 (May 2014), *available at* http://www.whitehouse.gov/sites/default/files/docs/big_data_privacy_report_may_1_2014.pdf.

photos on Facebook, using Bing's flight price predictors to make travel plans, or joining the self-quantification movement by wearing a FitBit Flex."[5]

Big data promises even greater, transformative innovations in the near future. For example, the President's Council of Advisors on Science and Technology ("PCAST") observed that big data can improve healthcare through personalized medicine and mobile device symptom detection, and can revolutionize education through personalized educational materials that can track students' engagement.[6] Big data, when combined with the Internet of Things,[7] will touch every sector of the economy and improve consumers' lives.

CEA is bullish on the potential of big data. Nevertheless, CEA recognizes that certain, inappropriate uses of big data could cause tangible harm to consumers. Misuse or inappropriate use of big data would undermine the potential benefits of big data by eroding consumers' trust in the services and devices they use. Therefore, it is imperative that industry and government work together to identify potential harms and mitigate the risk that those harms could occur.

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[5] Comments of FTC Commissioner Maureen Ohlhausen on Big Data Consumer Privacy, and the Consumer Bill of Rights, Before the National Telecommunications and Information Administration, at 3-4 (filed Aug. 5, 2014).

[6] The President's Council of Advisors on Science and Technology, *Big Data and Privacy: A Technological Perspective*, at 13-14 (May 2014), *available at* http://www.whitehouse.gov/sites/default/files/microsites/ostp/PCAST/pcast_big_data_and_privacy_-_may_2014.pdf ("PCAST Big Data Report").

[7] Big data and the Internet of Things are closely related and inextricably linked. The Internet of Things is the next phase in the development of the Internet and the World Wide Web and is jaw-dropping in its expanse and in its potential to improve quality of life across many metrics. *See generally* Comments of the Consumer Electronics Association in the Matter of the Privacy and Security Implications of the Internet of Things, Before the Federal Trade Commission, at 2-17 (filed June 10, 2013); *see also* Comments of the Consumer Electronics Association in the Matter of Spring Privacy Series: Consumer Generated and Controlled Health Data, Before the Federal Trade Commission, Project No. P145401, at 3-5 (filed June 9, 2014).

II. THE COMMISSION SHOULD CONSIDER THE BENEFITS OF A RESPONSIBLE USE FRAMEWORK TO PROTECT CONSUMER PRIVACY IN AN ERA OF BIG DATA

The "notice and choice" framework that has long governed consumer privacy protection may not be adequate to address all of the issues associated with big data. The promise of big data often lies in beneficial uses that are not apparent at the time of collection, but are discovered in the future. CEA therefore encourages the Commission to consider the benefits of a responsible use framework, which would allow consumers to reap the benefits of big data while protecting them from misuse of their data. To that end, CEA recommends that the Commission adopt PCAST's recommendation that "[p]olicy attention should focus more on the actual uses of big data and less on its collection and analysis."[8] According to PCAST,

> By actual uses, we mean the specific events where something happens that can cause an adverse consequence or harm to an individual or class of individuals. In the context of big data, these events ("use") are almost always actions of a computer program or app interacting either with the raw data or with the fruits of analysis of those data. In this formulation, it is not the data themselves that cause the harm, nor the program itself (absent any data), but the confluence of the two. These "use events" (in commerce, by government, or by individuals) embody the necessary specificity to be the subject of regulation. . . . Th[e] dual-use character of information, too, argues for the regulation of use rather than collection.[9]

Increased focus on data use, rather than collection, also makes sense because non-consumer facing companies that will be integral players in the Internet of Things and big data analytics are not able to communicate directly with consumers to provide notice and obtain consent. A responsible use framework can protect consumers without impeding innovation by giving

[8] PCAST Big Data Report at 49.

[9] *Id.* at 49-50.

industry, researchers, and other stakeholders the freedom to use data in inventive ways, potentially discovering unanticipated uses that benefit consumers, while prohibiting misuse of the data, thereby protecting consumers from harm.

A responsible use framework also will help provide the rules of the road for the Internet of Things. In many cases, the value of Internet of Things devices is linked to their ability to collect data and provide user feedback. Connected sensors become much more useful to consumers when the data they collect is analyzed. For example, granular energy usage data by room and geographic region permits power companies to better allocate energy production, but the same information also could inform homeowners how to save energy. Moreover, consumer electronics devices and sensors that collect and analyze information offer consumers the personalized services and functionalities they demand and increasingly adopt. A responsible use framework is well suited to adapt to and address these and other emerging big data and Internet of Things applications.

Notice and choice remain important tools for consumer protection and would complement a responsible use framework. A rigid implementation of notice and choice principles, as well as a focus on collection restrictions, however, can inhibit beneficial data-driven innovation, such as the discovery of cures for disease or revolutionary ways to conserve energy. In addition, the ever-increasing volume of data collected challenges the viability of notice and choice mechanisms. As PCAST recognized, a regime that requires consumers to process too many notices unfairly places the burden on consumers to police their data.[10] Accordingly, a strict notice and choice and restricted collection framework neither advances consumer privacy nor provides consumer and societal value in a big data and Internet of Things

[10] *See id*. at 38.

era. In contrast, a responsible use framework complemented by notice and choice principles would ensure strong consumer protection and allow data-driven innovation.

Although notice and choice principles present certain challenges in an era of big data and the Internet of Things, CEA believes that notice and choice and responsible use frameworks are compatible. In some contexts, the best way to effectuate consumer choice and protect consumers' privacy may be to provide adequate notice and choice, particularly when implemented through just-in-time notice.

In other circumstances, notice and choice may not be practical or effective to protect consumers. For example, "wearable" consumer electronics are small devices worn on the body or clothes that have limited or no visual interface and a limited number of functions. This form-factor presents few opportunities to display even a shortened privacy notice. While it is true that wearables and other small devices often interface with a hub such as a smartphone, tablet, or computer that is capable of displaying a privacy notice, that may not be the case for all devices, both now and in the future.[11]

A new approach, such as a responsible use framework complemented by notice and choice, is therefore necessary to protect consumers in an era of big data. The Commission should help expand the policy discussion regarding a responsible use framework and should carefully examine whether strictly applying the notice and choice framework to big data could have negative consequences throughout the technology ecosystem. Manufacturers must have the flexibility to design devices with innovative data control options, and in the manner they believe

[11] Manufacturers compete to minimize set-up time and the need for active configuration of wearables and Internet of Things devices that are designed to be unobtrusive to the user. Additional, mandatory notifications may harm the competitiveness of these devices without increasing consumer privacy.

responds best to consumer demand. A regulatory framework focused on responsible use allows manufacturers to do so; one focused on notice and choice may arbitrarily affect design decisions to the detriment of consumers and innovation.

III. EXISTING FRAMEWORKS MAY SUFFICIENTLY PROTECT CONSUMERS AGAINST DISCRIMINATION FROM DATA MISUSE

Many commenters have raised concerns that big data could cause or better enable discrimination. Discrimination can cause significant harm to consumers, particularly those that are the most vulnerable.[12] Discrimination, however, is not caused by big data analytics, nor is it the inevitable result of collecting and correlating large data sets. Rather, discrimination is the result of human decision-making, where actors intentionally—or even unintentionally—use information in ways that produce discriminatory outcomes. The numerous laws that address discrimination, including the Fair Credit Reporting Act, Fair Housing Act, and Equal Credit Opportunity Act apply to discriminatory practices whether or not big data analytics are involved. Likewise, existing consumer protection laws, including Section 5 of the FTC Act, can address unfair and deceptive misuses of big data that cause harm.

To the extent that gaps exist, sweeping attempts to address discrimination in the context of big data may actually have the effect of inhibiting legitimate and beneficial uses of data. The same piece of data may be used for different purposes. Placing restrictions on data flows would be an overly broad approach because such restrictions punish all users of data, not just bad actors who have appropriated it for discriminatory purposes. Although restrictions could prevent

[12] Discrimination as used in these comments refers to discrimination against protected classes of consumers. It does not refer to reasonable price discrimination, a common and economically efficient pricing strategy that offers pro-consumer and pro-competitive benefits.

objectionable uses of data, they also would negatively impact legitimate uses of that data.[13] Therefore, the Commission should work with industry, other government agencies, and other stakeholders to determine whether existing laws adequately protect consumers from harmful discrimination. If particular applications of big data analysis present a risk of discrimination, government and industry should jointly examine whether existing anti-discrimination laws should be updated before considering prescriptive regulation of the data itself.

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[13] In fact, big data can be an effective tool to root out discriminatory practices. In a recent study, the Future of Privacy Forum and Anti-Defamation League cite numerous case studies where big data actually can empower vulnerable groups, including by providing access to employment opportunities and helping to uncover discriminatory practices. *See generally* The Future of Privacy Forum and Anti-Defamation League, *Big Data: A Tool for Fighting Discrimination and Empowering Groups* (2014), *available at* http://www.futureofprivacy.org/wp-content/uploads/Big-Data-A-Tool-for-Fighting-Discrimination-and-Empowering-Groups-Report1.pdf.

IV. CONCLUSION

CEA appreciates the opportunity to comment on the potential of big data and looks forward to assisting Commission staff as it further considers these issues.

Respectfully submitted,

CONSUMER ELECTRONICS ASSOCIATION

/s/_____

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