HEARING BEFORE THE SUBCOMMITTEE ON CONSUMER PROTECTION AND COMMERCE OF THE COMMITTEE ON ENERGY AND COMMERCE U.S. HOUSE OF REPRESENTATIVES

RESPONSE TO ADDITIONAL QUESTIONS

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<u>Congressman G. K. Butterfield</u>
1. In your testimony you stated that tech companies often over rely on algorithms while ignoring input from communities of color. How do algorithms affect diversity? What methods would you recommend companies utilize in order to supplement the deficiencies in their algorithms?

Algorithms reflect the people who make them, their perspectives, and biases. When differing world views, abilities, or use cases are not taken into account, this can have an adverse impact on the users of those products.

For example, if a voice recognition device is less likely to understand female voices or those with accents, it may impair those users' ability to interact with the product. Similarly, if an algorithm for a social media product displays images based on what is most shared, this can also surface images of violence rather than positive moments which can have detrimental rippling effects.

These aberrations are more likely to affect demographics that differ from the majority population of tech. This includes women, ethnic minorities, people with disabilities, the elderly and more. There are several steps tech companies can take to counteract the blind spots of algorithms:

- Hire diverse employees with differing perspectives.
- Ensure that products with widespread adoption are tested with the most diverse subset of users possible.
- Introduce cognitive bias training for teams whose work relies on algorithms.
- Add sociologists to the staff to work alongside engineers. Create a path for them to communicate on an ongoing basis a greater understanding of the cultural implications of the work at hand.
- Create an in-product channel for users to report deficiencies and a correlating workflow for product teams to correct them.
- Acknowledge from the start that bias is a factor in algorithms.

Without holding the humans behind the algorithms accountable for their output, we risk creating a world where access to emerging technology is limited to a select few.