June 15th, 2018

Mr. Jeffrey P. Bezos Founder and Chief Executive Officer Amazon, Inc. 410 Terry Ave. N Seattle, WA 98109

## Re: Fiduciary Oversight: Rekognition and AMZN Shareholders

Dear Mr. Bezos:

According to multiple news reports—confirmed by Amazon—our Company has developed and is selling to law enforcement agencies, marketed as part of Amazon Web Services (AWS), a facial recognition system called Rekognition.<sup>1</sup> The undersigned Amazon (AMZN) shareholders are concerned such government surveillance infrastructure technology may not only pose a privacy threat to customers and other stakeholders across the country, but may also raise substantial risks for our Company, negatively impacting our company's stock valuation and increasing financial risk for shareholders.

To date, we have seen no evidence of our Board of Directors conducting fiduciary oversight on how Rekognition may or may not, should or should not, be deployed. The recent experience and scrutiny of Facebook demonstrates the degree to which these new issues may undermine company value as the detrimental impacts on society become clear. While Rekognition may be intended to enhance some law enforcement activities, we are deeply concerned it may ultimately violate civil and human rights.

There is substantial expert opinion indicating facial recognition software often replicates bias based on race and other factors. We are concerned the technology would be used to unfairly and disproportionately target and surveil people of color, immigrants, and civil society organizations. Below is just a sampling of the various ways this technology is already undergoing scrutiny:

• A New York Times article, "Facial Recognition Is Accurate, if You're a White Guy", reviewed a study by M.I.T. researcher Joy Buolamwini measuring the performance of face recognition systems created by Microsoft, IBM and Chinese company Megvii. Buolamwini found the algorithms delivered 99% accuracy rates when scanning the faces

 $<sup>^{1}\,\</sup>underline{\text{https://aws.amazon.com/blogs/aws/amazon-rekognition-image-detection-and-recognition-powered-by-deep-learning/}$ 

of white men, with disparate results for people of color: "(T)he darker the skin, the more errors arise — up to nearly 35 percent for images of darker skinned women." <sup>2</sup>

- According to the BBC, police in South Wales using facial recognition programs "made 2,685 'matches' between May 2017 and March 2018—but 2,451 were false alarms."
  U.K. Information Commissioner Elizabeth Denham said the issue had become a "priority" for her office. 3
- In China, Apple has reportedly provided refunds to iPhone X customers who have repeatedly discovered the phone's face recognition software can have trouble accurately recognizing people of color.<sup>4</sup>
- In May 2018, a coalition of civil and human rights organizations wrote to Amazon CEO Jeff Bezos, stating: "Amazon touts itself as a customer-centric company and directs its leadership to 'work vigorously to earn and keep customer trust.' In the past, Amazon has opposed secret government surveillance. And you have personally supported First Amendment freedoms and spoken out against the discriminatory Muslim Ban. But Amazon's Rekognition product runs counter to these values. As advertised, Rekognition is a powerful surveillance system readily available to violate rights and target communities of color." <sup>5</sup>
- In April 2018, a coalition of more than 40 leading U.S. civil and racial justice organizations said facial recognition technology by another publicly-held company (Axon), would be "categorically unethical to deploy" and "would inevitably misidentify some innocent civilians as suspects. These errors could have fatal consequences—consequences falling disproportionately on certain populations. Real-time face recognition could also prime law enforcement officers to perceive individuals as more dangerous than they really are and to use more force than the situation requires. No policy or safeguard can mitigate these risks sufficiently well for real-time face recognition ever to be marketable." <sup>6</sup>

In addition to our concerns for U.S. consumers who may be put in harm's way with law enforcement's use of Rekognition, we are also concerned sales may be expanded to foreign governments, including authoritarian regimes. Without protective policies in place, it seems inevitable the application of these technologies will result in Amazon's Rekognition being used to identify and detain democracy advocates. Experience has shown repressive governments tend toward incarceration and torture of identified people who are opposing repressive practices, and the surveillance technologies will tend to harden this circle of repression. South Africa's former apartheid regime and its Bureau of State Security (BOSS), would have welcomed such a

<sup>&</sup>lt;sup>2</sup> https://www.nytimes.com/2018/02/09/technology/facial-recognition-race-artificial-intelligence.html

<sup>&</sup>lt;sup>3</sup> http://www.bbc.com/news/technology-44089161

<sup>&</sup>lt;sup>4</sup> http://www.newsweek.com/iphone-x-racist-apple-refunds-device-cant-tell-chinese-people-apart-woman-751263

<sup>&</sup>lt;sup>5</sup> https://www.aclunc.org/docs/20180522 AR Coalition Letter.pdf

<sup>&</sup>lt;sup>6</sup> https://civilrights.org/axon-product-development-law-enforcement/

technology to augment the notorious pass system utilized to control the majority African population in that country.

We believe our Company needs to immediately halt the expansion, further development, and marketing of Rekognition, and any other surveillance technologies, to all governments and government agencies, until there is a clear demonstration our Board of Directors has undertaken appropriate fiduciary oversight and placed appropriate guidelines and policies in place to safeguard the rights of our customers, shareholders, other stakeholders and citizens.

## Sincerely,

**Arjuna Capital** As You Sow **Castlebar Asset Management** John Chevedden **Dominican Sisters of Hope** Domini Impact Investments, LLC **Figure 8 Investment Strategies** Forrest Hill, PhD, CFP Harrington Investments, Inc. **Maryknoll Sisters** Mirova **Northwest Coalition for Responsible Investment Sustainvest Asset Management** The Social Equity Group The Sustainability Group of Loring, Wolcott & Coolidge Transformative Wealth Management, LLC **Ursuline Sisters of Tildonk, US Province Walden Asset Management Zevin Asset Management**