Request for Information (RFI) on Public and Private Sector Uses of Biometric Technologies: Responses

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January 14, 2022

Office of Science and Technology Policy
1650 Pennsylvania Avenue NW
Washington, DC 20502
Via email to BiometricRFI@ostp.eop.gov

Re: RFI Response: Biometric Technologies

To Whom It May Concern:

HireVue submits the following comments to the Office of Science and Technology Policy's Request for Information on Public and Private Users of Biometric Technology (the "RFI").

HireVue is the global leader offering an end-to-end hiring software platform featuring video interviewing, assessments, and text-enabled recruiting tools using AI. HireVue has hosted more than 27 million video interviews and 150M chat-based candidate engagements for over 700 pioneering customers around the globe.

With respect to employment, HireVue believes the only factors that should be evaluated during the recruitment process are a candidate's competencies concerning job-related knowledge, skills, and abilities associated with that particular job. From our beginning more than 15 years ago, HireVue's core mission has always been to democratize the hiring process and improve accessibility for job candidates.

In the early stages (~2016-2019) of HireVue's development of our assessment solution, work was undertaken to score video interview responses by analyzing the same data humans use to evaluate interview answers. These verbal (words spoken), para-verbal (e.g., audio tones), and video (e.g., facial action units) data sets were used to custom build algorithms statistically linked to on-the-job performance metrics (e.g., customer service ratings). Over these few years, we had enough data and expert human ratings (of job performance and competency evaluations) to study the incremental relations of the verbal, para-verbal, and video data to job success and rater evaluations. This research, along with significant improvements in Natural Language Processing (NLP) technology, proved the para-verbal and video data features did not add incremental measurement accuracy in our algorithms. Thus, in 2020, we discontinued those uses and began only putting into production (and updating existing client assessments) our NLP-based assessments to evaluate candidates' interview responses. As of January 31, 2022, all of our USA-based customers will only be using NLP analytics in the assessments (with the exception of one customer who will switch to the upgraded assessment a month later; due to business constraint issues.

To avoid doubt, HireVue does not use technology to identify or analyze physical aspects of a person (e.g., DNA, fingerprints, face, or retina scans) or behavioral aspects derived from voice patterns, tonality, body gestures, or gate. HireVue also has no plans to use biometric information to identify or infer emotion, disposition, character, or intent into any of our recruiting tools.
HireVue's hiring assessments simply score candidates' spoken responses to recorded interviews using NLP technology. The candidates' spoken responses are scored using an expertly guided rating scale for each individual competency related to the job requirements (e.g., service orientation) to help companies quickly, accurately and fairly assess job candidates.

Even though HireVue only uses NLP analytics in our assessments, we are submitting comments to this RFI because we recognize the impact our software can have on individuals and on society, and we feel our experience can help guide development of regulations with respect to employment decisions whether biometrics or other analytical tools are deployed. Based on the state and continuing pace of innovation with technology, we believe any current regulatory guidance should be updated and HireVue supports public and private sector efforts to update these policies and provide guidance and clarity of all automated and algorithmic aided hiring decisions. Thus, HireVue is supportive of the OSTP's RFI and its review of policies and regulation regarding the use of biometric technology.

We also believe that technology providers need to be actively engaged and open to discussing the applicable legal standards, demonstrating a commitment to transparency and accountability, and establishing ethical standards in the use of their technology. Based on these topics, HireVue addresses Point Seven generally and sets forth the practices or procedures it's taken with its use of NLP-assisted assessments which could be informative when considering guidance for the use of biometric technology.

First, HireVue's methods are firmly grounded on over 100 year of selection science. We believe that technology providers have a responsibility to implement standards and best practices from the fields of industrial-organizational psychology and data science. We employ a team of advanced degree industrial-organizational psychologists and data scientists who develop scientifically validated algorithmic assessments that target the core competencies needed for a job role being filled. NLP technology relies only on what is said by the candidate and does not need to use any video analysis or other audio characteristics because our scientifically validated research found that facial analysis and audio patterns do not significantly contribute to the competency measurement or job performance success.

Second, HireVue follows and in many ways exceeds the Equal Employment Opportunity Commission (EEOC) Uniform Guidelines when developing, testing, and monitoring all HireVue NLP-driven assessments and takes efforts to describe the process and regularly update that information for employers and candidates alike. HireVue works to go beyond what is legally required to mitigate any bias that may exist as a result of its use of technology by testing for adverse impact in its prediction models, then removing or minimizing the weight given to data points in the assessments that may create biased results.

Third, HireVue set an industry standard by publishing its own ethical AI principles to inform the public of the standards to which it voluntarily holds itself and creates accountability. Furthermore, in an effort to bolster its accountability, HireVue tested its methodologies and bias mitigation techniques by subjecting them to multiple independent third-party audits, then publishing the details of the resulting reports. With respect to each auditor's recommendations,
HireVue took into consideration and modified our solutions, to further enhance and fine tune our assessments and methodologies.

HireVue supports thoughtful and reasoned legislation and guidance to employers and technology providers to achieve accurate and fair technology assisted employment decisions. HireVue can provide any requested additional information and is willing to engage in constructive dialog with policy makers as a leading Human Resources technology provider. HireVue is happy to discuss what other transparency, ethics and accountability measures are reasonable and necessary in the recruiting technology industry.

Sincerely,

Kevin Parker

HireVue, Inc. CEO

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2 The interview-based NLP models demonstrate high levels of convergent validity (average r value of 0.66; n=60,183), good test-retest reliability (average r of 0.72; n=181,610), and minimal levels of between-group differences (Cohen’s d < 0.20; n=81,910). Additionally, the predictive validity on organizational data in four criterion validation samples has acceptable evidence (Interview-based NLP models average uncorrected criterion validity of .24; n=1,687). In similar criterion validation studies customized AI-based algorithms yield even higher validities (range 0.25 to 0.49) which are comparable to the predictive validity of structured interviews (McDaniel et al., 1994; Schmidt & Hunter, 1998).

3 See Mondragon, Nathan (June 6th, 2021). Creating AI-driven pre-hire assessments. hirevue.com. Retrieved January 10, 2022, from https://www.hirevue.com/blog/hiring/creating-ai-driven-pre-employment-assessments: “The Guidelines require fair treatment of applicants in the hiring process regardless of race, gender, and age (40 and over). These protections include the 4/5ths Rule, also known as the Red-Flag Rule, and other statistical tests for group differences; all of which HireVue uses to monitor and mitigate our assessments. We go beyond that to test for a wider array of group differences beyond those solely required by law. Only after we are confident that the adverse impact of any bias has been minimized do we release any algorithmic-based assessment for customer use. Furthermore, we continue to monitor the algorithm for any bias creep that may occur.... In addition to EEOC guidelines, at HireVue, we test for a wider array of group differences, beyond those required by law. That’s because there are biases beyond age, gender, and ethnicity, for example, attractiveness, country of residence, non-native accent, etc.”
4 Zuloaga, Lindsey. (January 11, 2021), *Industry Leadership: New audit results and decision on visual analysis*, HireVue.com. Retrieved January 10, 2022, from [https://www.hirevue.com/blog/hiring/industry-leadership-new-audit-results-and-decision-on-visual-analysis](https://www.hirevue.com/blog/hiring/industry-leadership-new-audit-results-and-decision-on-visual-analysis); See also Hire Vue, Inc. April 7, 2021, Independent audit affirms the scientific foundations of HireVue Assessments. HireVue.com, retrieved January 12, 2022 from [https://www.hirevue.com/press-release/independent-audit-affirms-the-scientific-foundation-of-hirevue-assessments](https://www.hirevue.com/press-release/independent-audit-affirms-the-scientific-foundation-of-hirevue-assessments). “Central to the audit findings is the conclusion that the HireVue job analysis process was “of very high quality and rigor in relation to established standards... resulting in the creation of trustworthy content-related validation evidence and subsequent hiring decisions.” Also of note was Dr. Landers’ conclusion about the company’s use of AI and IO Psychology produces results supported by IO Psychology science.”