code4thought ®

AEDT BIAS AUDIT

Bryq

Prepared in accordance with NYC Local Law 144

by code4thought

on 4/2026

Contents

About code4thought

code4thought is a technology company focused on rendering AI and large-scale software systems trustworthy and thoughtful. Through our proprietary AI Quality Testing platform, **iQ4AI** and expert advisory **Trustworthy AI services**, we provide comprehensive quality testing and assessment solutions for AI systems across the entire lifecycle. We empower organizations with the tools and insights needed to ensure performance, compliance and responsible AI development and adoption.
code4thought works worldwide through corporate entities in UK, London & Greece, Athens & Patras.

Audit ID

AEDT: Bryq Talent Intelligence

Audit Date: April 2026

Candidate Scoring: January 2025 - December 2025

Summary of Results

Bryq's Talent Intelligence platform description

Candidates undergo a chatbot-driven assessment that uses their responses to gauge their personality and cognitive skills, generating "results". A "profile" of essential job competencies is created by a predictor tool, which analyzes the job description or the performance and psychometrics data of existing staff. The "results" are then evaluated against this "profile" to produce a "match", a metric forecasting potential performance. This metric ("match") is applicable to all areas of talent management, such as hiring and internal movement.

Purpose

The audit results shown below were produced by code4thought according to the requirements of NYC Local Law 144 at the request of Bryq regarding their use of the tool, Bryq's Talent Intelligence platform and does not indicate an opinion on whether the tool is, in fact, an Automated Employment Decision Tool under this law. This report demonstrates a subset of the general disparate impact analysis performed by code4thought that relates to the NYC Local Law 144. This document is for information purposes only.

The audit below was performed using historical data from between 01/01/2025 and 31/12/2025 gathered from multiple employers provided by Bryq to the independent auditor, code4thought.

Data description

The dataset provided to code4thought by Bryq consisted of 11049 candidates. Score was produced using Bryq's Talent Intelligence platform, an AEDT which provides a chat-bot driven assessment for a candidate's fit for a given position. Dataset contained also 4 different IDs (app_id, can_id, job_id, company_id), information about assessment and survey dates and gender and ethnicity of the candidate.

- No missing values were found in the dataset.
- No significant presence of outliers was detected.

Bias Audit Analysis Methodology

Linear Regression based norming was selected to establish transparent, interpretable relationships between job roles and assessment scores as follows:
First, "job_id" was established as our independent variable and "score_old" as our dependent variable. Then the categorical variable "job_id" was transformed into binary indicator variables using one-hot encoding and the first class of the categorical variable is dropped to reduce the risk of multicollinearity. After that, an Ordinary Least Squares Regression model was fitted on our defined independent and dependent variables.
In the next step, we got the linear regression model predicted scores as the "predicted_score". Finally, we calculated the normed scores as the difference between "score_old" values and "predicted_score". The range of the outcome after norming is [-40.88, 28.59] and before norming was [12.00, 96.00].

According to the independent auditor's assessment, the data presented is deemed sufficiently representative, and “Scoring Rate” has been identified as the most suitable metric for evaluation purposes. New York City's Local Law 144 mandates particular analyses that are required to be performed:
Scoring Rate and Impact Ratio must separately calculate the impact of the AEDT on:

- Gender categories
- Ethnicity categories
- Intersectional categories, that is the combination of Gender and Ethnicity categories

New York City Local Law 144 (“NYC LL 144”) definitions

- **Scoring Rate**: the rate at which individuals in a category receive a score above the sample’s median score, where the score has been calculated by an AEDT.
- **Impact ratio:** $\frac{scoring\ rate\ of\ a\ group}{scoring\ rate\ of\ the\ most\ selected\ category}$
- **Excluded categories:** if a category represents less than 2% of the data used for the bias audit, it can be excluded from the required calculations. However, the calculations must include all other categories.

Data Preprocessing

- For Gender data, “Transgender”, “Other” and “Non-binary” categories were excluded from the analysis
- For Ethnicity data, “Native Hawaiian or Other Pacific Islander” and “American Indian or Alaska Native” categories were excluded from the analysis
- After the preprocessing, dataset consisted of 10728 candidates

Audit Results

Ethnicity Categories	Sample Size	Scoring Rate	Impact Ratio
Asian	3591	48.343	0.922
Black or African American	1770	47.571	0.907
Hispanic / Latino	950	50.210	0.958
Two or more races	571	51.313	0.979
White / Caucasian	3846	52.418	1.000

'Native Hawaiian or Other Pacific Islander' and 'American Indian or Alaska Native' categories represent less than 2% of the individuals. Their results have been excluded from the analysis.

Gender Categories	Sample Size	Scoring Rate	Impact Ratio
Male	6184	50.566	1.000
Female	4544	49.230	0.974

'Transgender', 'Other' and 'Non-binary' categories represent less than 2% of the individuals. Their results have been excluded from the analysis.

Gender Category	Ethnicity Category	Sample Size	Scoring Rate	Impact Ratio
Male	White / Caucasian	2220	53.784	1.000
	Hispanic / Latino	545	53.578	0.996
	Black or African American	796	45.980	0.855
	Two or More Races	292	49.315	0.917
	Asian	2331	48.520	0.902
Female	White / Caucasian	1626	50.553	0.940
	Hispanic / Latino	405	45.679	0.850
	Black or African American	974	48.871	0.909
	Two or More Races	279	53.405	0.993
	Asian	1260	48.016	0.893