

1. **Accuracy**: Accuracy measures how often the ATS correctly identifies qualified applicants and excludes unqualified ones. It's calculated as the number of correct classifications (true positives and true negatives) divided by the total number of classifications.
2. **Precision**: Precision focuses on the positive predictions made by the ATS and assesses how many of them were correct. It's calculated as the number of true positives divided by the total number of positive predictions (true positives + false positives).
3. **Recall**: Recall, also known as sensitivity or true positive rate, measures the ability of the ATS to identify all relevant applicants. It's calculated as the number of true positives divided by the total number of actual positives (true positives + false negatives).
4. **F1 Score**: The F1 score is the harmonic mean of precision and recall and provides a balance between the two metrics. It's particularly useful when precision and recall need to be balanced. It's calculated as $2 * (\text{precision} * \text{recall}) / (\text{precision} + \text{recall})$.
5. **False Positives (FP)**: This metric measures the number of unqualified applicants who were incorrectly identified as qualified by the ATS. Reducing false positives is crucial to avoid missing potential candidates.
6. **False Negatives (FN)**: False negatives represent qualified applicants who were incorrectly rejected or overlooked by the ATS. Minimizing false negatives is essential to avoid missing out on strong candidates.
7. **True Positives (TP)**: True positives are the number of qualified applicants correctly identified as such by the ATS. Maximizing true positives is a key goal to ensure the system recognizes strong candidates.
8. **True Negatives (TN)**: True negatives are the number of unqualified applicants correctly identified as such by the ATS. Maximizing true negatives helps reduce unnecessary workload for hiring managers.
9. **Area Under the Receiver Operating Characteristic (ROC-AUC)**: The ROC-AUC is a measure of the overall discriminative power of the ATS. It plots the trade-off between true positive rate and false positive rate and provides a single value to assess classification performance.
10. **Processing Time**: This metric measures the time it takes for the ATS to process and rank job applications. Faster processing times are generally preferred to ensure a timely hiring process.
11. **User Satisfaction**: This metric assesses the satisfaction of hiring managers and recruiters with the ATS. User feedback and surveys can be used to gather information on ease of use, system reliability, and overall satisfaction.
12. **Bias and Fairness Metrics**: To ensure fairness and reduce bias in hiring, it's essential to measure and address disparities in the treatment of applicants from various demographics. Metrics like demographic parity, equal opportunity, and disparate impact can be used to evaluate fairness.

13. **Candidate Experience**: The ATS should also be evaluated based on the experience it provides to job applicants. Metrics related to the ease of application submission, communication, and transparency can be valuable in this context.
14. **Conversion Rate**: Conversion rate measures the percentage of applicants who successfully complete the application process and move on to the next stage of recruitment. Higher conversion rates are typically desired.
15. **Retention Rate**: If the ATS is used to track employee performance and retention, this metric measures the percentage of candidates hired through the system who remain employed for a specified period. High retention rates can indicate the quality.