Industry Case Studies

Resources Industry
Construction Supervisor

Challenge: A global leader in the resources industry, providing services related to the production of various minerals, natural gas and oil, wanted to improve their selection procedures for Construction Supervisors. The organization expressed interest in selecting future applicants based on their predicted performance of important competencies.

Solution: To accomplish this, Hogan conducted a criterion-related validation study (N = 63) to validate the Hogan Personality Inventory (HPI), the Hogan Development Survey (HDS), and Hogan competencies (Safety, Leadership, Planning and Organizing, Management Performance, Trustworthiness, Work Attitude, Stress Tolerance) for predicting Construction Supervisor performance. The HPI identifies personal characteristics needed for successful sales performance, while the HDS identifies personality-based performance derailers.

Specifically, Hogan developed scale-level algorithms derived from the meta-analytic synthetic validity coefficients in Hogan's archive. For each competency algorithm, Hogan selected HPI and HDS scales based on their proven validity in predicting that competency over a large number of archival studies. Then, Hogan weighted relevant scales according to their relative power of prediction to arrive at unique algorithms for each of the seven competencies. Lastly, Hogan tested the performance of the algorithms on a small sample of client incumbents and established cut scores accordingly.

Result: Research results confirmed that the HPI and HDS-based algorithms accurately distinguished between high and low performing Construction Supervisors. Strong performing Construction Supervisors scored significantly higher on the following competencies: Safety, Leadership, Planning and Organizing, Management Performance, Trustworthiness, Work Attitude, and Stress Tolerance. As a result, these individuals appear resilient and self confident, driven and achievement-oriented, dependable, organized, insightful, resourceful and open-minded. Candidates who satisfied screening guidelines based on the HPI and HDS based competency algorithms were over three times more likely to be a high performer.

These results highlight the HPI, HDS and Hogan competencies' ability to screen in high-performing Construction Supervisors and screen out candidates unlikely to perform well in the role.