



CASE STUDY: Reducing Turnover in Engineering Roles

THE CHALLENGE

A leading U.S.-based engineering and environmental services firm faced excessive turnover in highly skilled engineering positions—traditionally low-turnover roles. Increased demand for engineers and economic pressures like inflation contributed to declining retention rates.

THE SOLUTION

To address this, the company implemented HR Avatar assessments to measure personality traits and interests among both new applicants and current employees. After analyzing the data at 12 and 24 months, specific traits correlated with retention rates were identified, helping refine hiring decisions.

KEY FINDINGS

- **12-Month Retention (Figure 1)**

Several categories of engineers scoring high on **Leader Mindset** and **Integrity** showed significantly lower turnover.

- **24-Month Retention - Power Engineers (Figure 2)**

In addition to Leader Mindset identified in the 12-month findings, those who scored high on the **Realistic** and **Enterprising** interest scales showed significantly less turnover.

- **24-Month Retention – Nuclear Engineers (Figure 3)**

The characteristics correlating with lower turnover were lower scores in the **Dealing with Uncertainty** and higher scores in the **Artistic, Investigative, and Realistic** competencies. Given the risk avoidance requirements of nuclear engineering projects, having a lower tolerance for uncertainty seemed an intuitive finding.

ONGOING STRATEGY

While initial findings were statistically significant, ongoing data collection will further refine hiring insights. Future adjustments to assessment strategies will enhance efficiency while maintaining predictive reliability.

RESULTS

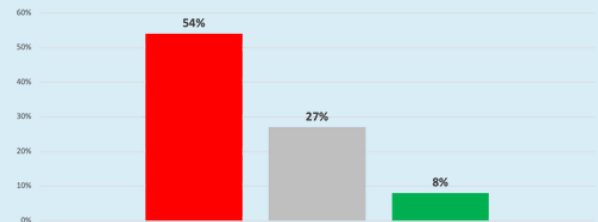


Figure 1 - Turnover during first 12 months for low and high scorers on Leader Mindset and Integrity

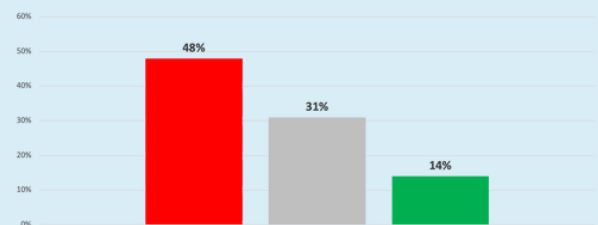


Figure 2 - Power Engineers turnover during first 24 months for low and high scorers on Leader Mindset, Realistic, and Enterprising

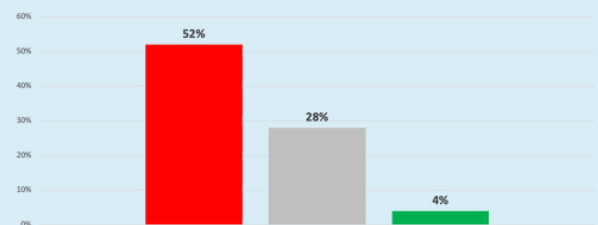


Figure 3 - Turnover during first 24 months for low and high scorers on Dealing with Uncertainty, Artistic, Investigative, and Realistic

RED = LOW SCORERS, GREEN = HIGH SCORERS