

Transportation

Pilots

Challenge: A regional airline wanted to improve their Pilot selection process. This particular airline faced a growing demand for its service and sought to increase the number of flights on its schedule. They presented Hogan with a unique challenge as their incumbent pilot population consisted of only 14 pilots, yet wanted a precise and targeted process for screening new applicants into the Pilot job.

Solution: Hogan conducted a criterion-related validation study on the entire Pilot incumbent sample. Incumbent pilots completed the Hogan Personality Inventory (HPI) and the Hogan Development Survey (HDS), which are the industry standard in measuring both bright and dark side personality factors. Supervisors rated these pilots on thirteen performance dimensions, including an overall performance rating, a total appraisal score, and a relative performance ranking among all 14 pilots.

Result: Research demonstrated that high performing pilots remain calm under stress and pressure, are leader-like and self-confident, approachable and perceptive, and compliant with rules and regulations. These characteristics correspond to several HPI scales, most notably Adjustment, Ambition, Interpersonal Sensitivity and Prudence. Furthermore, several HDS scales predict Pilot performance. Specifically, high performing Pilots are emotionally mature (low Excitable), not easily distracted (low Colorful), steady and disciplined (low Imaginative) and make good decisions and think before they act (low Mischievous). Individuals passing the profile are twice as likely to be rated as a high performer compared to those not fitting the HPI and HDS profile.

Three years later, Hogan reviewed and updated the Pilot profile to maintain its efficiency and effectiveness. Because the original study was based on a small number of pilots, Hogan collected additional performance data from 88 incumbent pilots. The performance data included supervisor ratings of overall performance, whether or not the pilot currently worked for the airline, and if he or she had been terminated.

Hogan found trends similar to the original study as strong performers had higher Adjustment, Ambition, Interpersonal Sensitivity, and Prudence scores compared to poor performers. However, strong performers also had higher Learning Approach scores than poor performers. In addition, Hogan found that high performing pilots are confident and rational (low Cautious), open to coaching (low Leisurely), good team players (moderate Dutiful), and make good decisions and think before they act (low Mischievous).

Hogan updated the Pilot profile to maximize its effectiveness in identifying higher performing Pilots. Individuals meeting the updated profile were nearly four times more likely to be rated as a strong performer by their supervisor and three and a half times more likely to be currently employed at the airline compared to those not meeting the profile. Also, individuals not meeting the profile were over twice as likely to have been terminated compared to those meeting the profile. Overall, these results indicate that slight modifications every few years are needed to maintain the efficiency and effectiveness of the profile.