Mining Industry

Management Positions

Challenge: Hogan worked with a global mining, metals, and petroleum company to improve their selection process for screening applicants into seven management positions. Because some jobs showed similarities during the job analysis process, Hogan chose to organize the positions into five job families.

Solution: Hogan employed a two-step approach for conducting a validity study. First, Hogan conducted a job analysis by conducting interviews and collecting data using the Job Evaluation Tool (JET). Then, Hogan used validity generalization strategies (i.e., meta-analysis and synthetic/job component validity) to identify combinations of Hogan Personality Inventory (HPI), Hogan Development Survey (HDS), and Motives, Values, Preferences Inventory (MVPI) scales most predictive of successful performance in each job or job family. The HPI is a measure of everyday, normal personality tendencies, the HDS measures characteristics that can derail or inhibit performance, and the MVPI assesses an individual's core drivers and values.

Result: Combining empirical evidence and expert judgment, Hogan developed separate profiles to predict performance in each job family. Table 1 shows the scales selected for each job family's profile.

Job Family 1 (General Managers and Head Function Managers) results suggested that the scales shown in Table 1 will help screen in candidates who are likely to maintain composure under stress or pressure, are hard-working self-starters, and are detail oriented and adhere to regulations, policies, and procedures, plus (a) characteristics related to being hard to upset, open-minded and approachable, and self-reliant, and (b) work-related values which include helping others and the use and appreciation of concrete, measurable data.

Job Family 2 (Engineering Managers and Maintenance Managers) results indicated that the scales shown in Table 1 will help screen in candidates who are likely to maintain composure under stress or pressure, are hard-working self-starters, and are detail oriented and adhere to regulations, policies, and procedures, plus (a) characteristics related to being open-minded and approachable, decisive and willing to accept challenges, and self-reliant, and (b) work-related values which include achievement and influence and the use and appreciation of concrete, measurable data.

Job Family 3 (Production Managers) results suggested that the scales shown in Table 1 will help screen in candidates who are likely to be hard-working self-starters, generally communicate in a positive, upbeat manner, are detail oriented and adhere to regulations, policies, and procedures, and are also motivated to stay up to speed on technology and changes to regulations, plus (a) characteristics related to being hard to upset, practical and task-focused, and self-reliant, and (b) work-related values which include achievement and influence and the use and appreciation of concrete, measurable data.

Job Family 4 (Function Managers) results suggested that the scales shown in Table 1 will help screen in candidates who are likely to maintain composure under pressure, hard-working self-starters, detail oriented and adhere to regulations, policies, and procedures, and are also motivated to stay up to speed on technology and changes to regulations, plus (a) characteristics related to being considerate and understanding, practical and task-focused, and self-reliant, and (b) work-related values which include achievement and influence and the use and appreciation of concrete, measurable data.

Job Family 5 (Project Managers) results suggested that the scales shown in Table 1 will help screen in candidates who are likely to be hard-working self-starters, are detail oriented and adhere to regulations, policies, and procedures, and are also motivated to stay up to speed on technology and changes to regulations, plus (a) characteristics related to being hard to upset, decisive and willing to accept challenges, and self-reliant, and (b) work-related values which include financial consideration and the use and appreciation of concrete, measurable data.

Overall, by implementing personality assessments into the selection process, the mining organization should be better able to select employees with the personal tendencies related to success in their given roles.

Table 1 Scale Selections for Job Family Profiles

Scale	Job Family 1	Job Family 2	Job Family 3	Job Family 4	Job Family 5
HPI					
Adjustment	X	X		X	
Ambition	X	X	X	X	X
Sociability					
Interpersonal Sensitivity			X		
Prudence	X	X	X	X	X
Inquisitive					
Learning Approach			X	X	X
HDS					
Excitable	X		X		X
Skeptical	X	X			
Cautious		X			X
Reserved				X	
Leisurely					
Bold					
Mischievous					
Colorful					
Imaginative			X	X	
Diligent					
Dutiful	X	X	X	X	X
MVPI					
Aesthetics					
Affiliation					
Altruistic	X				
Commerce					X
Hedonism					
Power		X	X	X	
Recognition					
Science	X	X	X	X	X
Security					
Tradition					