



DETERMINING LEADERSHIP  
— POTENTIAL —

White Paper  
Determining Leadership Potential  
Quantitative Study  
Summary & Recommendations

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### About this White Paper

This white paper was crafted by Dr. Kimberly Janson & Dr. Melody Rawlings. This paper is a summary of a study conducted during the second half of 2020. The study was a quantitative global survey that was designed to capture the knowledge of how leaders are determining leadership potential. This study follows a quantitative case study conducted in the real estate industry on the topic of determining leadership potential. The purpose of this white paper is to provide survey participants and other interested parties a summary of the survey findings. A third study has since been conducted. That study consisted of interviews with more than 50 CEOs on determining leadership potential. These studies and additional research and expert practitioner advice is culminating in a book called – which will be published by Routledge Publishing in the late second quarter of 2022.

The paper includes an executive summary at the beginning. Following, each section goes into more depth about the findings from the research study. It includes summaries of the research and the statistical tests performed in each section. The paper wraps with a set of recommended steps from the author based on their extensive expertise. These recommendations are offered as a transition to help make the research actionable.

### About the Authors

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## Executive Summary

We have a leadership crisis. There are those in management and leadership roles who impact people and business in negative ways and are detrimental to the vision, mission, and goals of an organization. Something needs to change.

- PwC's 20<sup>th</sup> *Annual Global CEO Survey* indicates 77% of the CEOs identify this topic a top priority (Steffens, Fonseca, Ryan, Rink, Stoker, & Nederveen 2018)
- Sub par leadership efforts cost an average organization 7% of sales (Armstrong, 2019)
- With an estimated \$166 billion annual spend on leadership development in the USA alone, organizations must transform these mission-critical programs to create real and lasting impact. (Westfall, 2019)
- The Corporate Executive Board has indicated that today there is a 77% increase in the amount of time it takes to fill roles externally as compared to the prior three years
- It is more cost-effective to develop high potentials internally than bring them in from the outside (Craig, 2015)
- There is a leader shortage in the future. Over 10,000 baby boomers will turn 65 every day for the next 20 years (Hewitt, 2013)
- Researchers have learned approximately 50% of managers and senior leaders are unsuccessful in their work efforts, and half of that number will be fired (Gaddis & Foster, 2015; Piip & Harris, 2014)
- Some researchers estimate the cost of a failed leader to be half a million dollars while others indicate that range should be \$1.5 to \$2.7 million for each leader when factoring in the hidden costs; Another estimate has surfaced from researchers suggests the cost of a bad hire ranges from 25% to 200% of the individual's salary (Conger, 2014).
- Many leaders are poor at identifying and selecting high potential employees
- There is a tremendous amount of variation in how people determine leadership potential (Janson, 2020)
- Anywhere from 9-23% of turnover is due to poor leadership (McDonald, 2020)
- 77% of people with bad leaders are planning on leaving as compared to people with strong leaders, only 18% are considering leaving (Cultivate, 2020)
- Only 2 in 10 people assert that their manager engages them in a way that is motivational (Workforce Solutions and Continuing Education at Lord Fairfax Community College, 2021)

The crisis is clear, and the evidence is compelling. To address these issues, improving the ability and success of selecting people who can be successful in these roles would make a profound difference.

Highlights the survey are below:

- **Purpose:** Assess criteria and tools being used to determine leadership potential
- **Validity:** a beta test was performed with a small population to validate the instrument. The survey was completed by 566 participants with 85% coming from the U.S. and the remaining participants coming from across the globe.
- **Leadership Blueprint:** the study was anchored in the conceptual framework of the Leadership Blueprint. This conceptual framework emphasizes intelligence, personality, learning agility, motivation, functional and leadership characteristics as a means to determine leadership potential.
- **Demographics:** while there were slight differences, there were no major and dramatic differences in the data when viewed by demographic differences. The majority of participants were both in their jobs and at their companies 1-3 years, Directors were the most common title but 20% of participants were CEOs. There was a high number of participants who had bachelor, masters, and PhD degrees. More than three quarters of the participants were between the ages of 41 and 65 years old. Companies most represented had revenue of \$1 billion or more and many industries were represented. Most people completing the survey had responsibility to assess talent, manage high potentials, and/or recruit high potentials.
- **Measurement:** the most frequent measurement identified of success in this space is a robust pipeline



- **Defining Leadership Potential:** an open-ended question was answered by identifying positive characteristics of leaders, pointing to the demonstration of behaviors, and some spoke about the future nature of leadership potential. The top characteristics identified were people who were strong at talent development, good decision makers, able to motivate, had learning agility, able to lead, inspiring, strategic, had emotional intelligence, communicated well, and influenced others.
- **Criteria:** an extensive list of criteria was offered for participants to choose important criteria they use when determining leadership potential. Top criteria were: emotional intelligence, problem solvers/decision makers, collaborative, communicative, ethical, adaptable, critical thinker, analytical, a high performer/high achiever, and strategic.
- **Tools:** participants were able to choose from a list of tools and the top choices that surfaced were how someone manages others, face-to-face meetings, observation, current performance, new opportunities and challenges, and assessment tools.
- **4 Dimensions:** The survey asked specifically about the use of the criteria from the leadership potential which was intelligence, personality, motivation, and learning agility. There was a tremendous difference in answers when participants were asked broadly about these dimensions and whether they choose them as key criteria vs. when they were asked directly about each of these criteria. The table below illustrates this tremendous difference.

	This column shows the number of people who identified each item when asked, "What criteria do you use to determine leadership potential?"	This column shows you the number of people who answered yes when asked do you use each of these criteria	Percent Increase
Intelligence	9	73	711%
Motivation	13	86	561%
Personality	2	78	3800%
Learning agility	11	87	690%

- **Intelligence:** When asked directly, intelligence was identified as being used to determine leadership potential by 73% of participants. It carried a weight in their decision an average of 4.1 out of 5. Top factors people look for are critical thinking, strategic thinking, emotional intelligence, intellectual curiosity. Intelligence is assessed most frequently by survey participants via observation, results and checking references. As an aside, the higher the degree of the survey participant, the more important intelligence was as a criteria.
- **Motivation:** When asked directly, motivation was identified as being used to determine leadership potential by 86% of participants. It carried a weight in their decision an average of 4.22 out of 5. Top factors people look for proactiveness, persistence, effort, and focus. Motivation is assessed by observation by 94% of participants.
- **Personality:** When asked directly, personality was identified as being used to determine leadership potential by 78% of participants. It carried a weight in their decision an average of 3.94 out of 5. Top factors people look for are specific traits, derailing traits, intensity of traits, and absence of traits. Personality is assessed by observation by 93% of participants.
- **Learning Agility:** When asked directly, learning agility was identified as being used to determine leadership potential by 87% of participants. It carried a weight in their decision an average of 4.97 out of 5. Top factors people look for are change agility, self-awareness, people agility, results agility, and mental agility. Learning agility is assessed by observation by 90% of participants. As an aside, the higher the degree of the survey participant, the more important learning agility was as a criteria.
- **Challenges:** an open ended question was asked to determine what challenges people face. Top themes were level of incompetence in this work, lack of time, lack of familiarity with tools, and lack of company focus



on this priority. Only one-third of participants were satisfied with their level of competence in determining leadership potential.

- **Assistance:** An open ended question was asked to capture what assistance participants would like to help them be more successful in this space. Top themes were a more structured approach that was planful with people having a path that included development plans and stretch assignments as well as leadership development programs. Another theme was for this to become a key priority for CEOs, senior leaders, and the company and be embedded in the culture. A third theme was that participants were able to become more competent in using valid, objective, data driven assessments. Lastly, more time allocated to this work was another major theme.
- **Virtual:** an open ended question was asked about the challenges in determining leadership potential in a virtual work environment. More than 76% of participants said it is more difficult to determine leadership potential in a virtual environment. Key themes of challenges were lack of opportunity to observe people, lack of interactions, and difficulty in communicating including the challenge of body language and limited interpersonal connectivity.

This serves as the executive summary. The next sections provide more detail on each of the items covered in the executive summary.

## Purpose of the Study

The impact of poor managers and leaders is tremendous. Beyond the frustration it causes, absenteeism, lost opportunity, turnover, and reduced productivity are byproducts. The costs are staggering. Almost every survey will show you that the number one reason people leave jobs – around the world – is the relationship with his/her manager.

This global quantitative survey was designed to query what criteria and tools people are using to determine leadership potential. Along with open-ended questions about criteria and tools, the survey sought to understand the use of specific criteria that was extracted from the conceptual framework offered in the Leadership Blueprint (Church & Silzer, 2014). Those criteria were intelligence, personality, motivation, and learning agility. With nearly 600 people completing the survey we have some strong results.

We need to stop this widespread and critical issue. It stands to reason that if we improved our placement of people, we would have fewer poor leaders and managers. This was the intent behind why this study was conducted. Exploring how people are determining leadership potential and understanding patterns of behavior regarding these practices was the purpose of the global survey. The objective of this study was to get a clear picture of current assessment strategies, values and challenges encountered when determining leadership potential. More specifically, there were three major portions to the study: query of current criteria and assessments being used, understanding of challenges encountered, and the use of the specific criteria 1. intelligence, 2. personality, 3. motivation, and 4. learning agility.

## Validity of the Survey

The survey was constructed and tested for validity with a sample size representative of the target population. The survey was sanctioned by the International Review Board, the governing body for all research involving human subjects. The survey was taken by 566 people from around the world. About 85% of participants were from the U.S. and the rest being from across the globe. Demographic questions were optional. Many participants skipped a few questions whether it be demographic questions or other questions. Because of this, each analysis had a different sample size. Each variable was considered separately and only the missing values for that specific analysis were omitted. The overall sample size was over 200 for every analysis and was sufficient to meet the estimated power



estimates established at the beginning of the analysis. No 'non-serious' responses were identified. Data was determined to be good quality

## The Leadership Blueprint

There are a large variety of frameworks are available to assist in determining leadership potential. One framework, the Leadership Blueprint, has emerged as a resource for this task (Kotlyar, 2018). The importance of this work and the lack of convergence in the field prompted the creation of this comprehensive and integrated approach.

The Leadership Blueprint, designed by Silzer and Church (2014), is a systematic vehicle through which organizations can assess the viability of their employees for leadership potential. The Leadership Blueprint, and or most of its components, is already being used in organizations, such as Citibank, Eli Lilly, Right Management, and PepsiCo, based on research conducted by Church (2015). PepsiCo conducted an extensive rollout of this framework, beginning with a validation of the model in 2014, translating it into 11 languages, and cascading it to over 3,000 employees to serve as the foundation of development work across the organization (Church & Silzer, 2014; Church & Rotolo, 2016). Approximately three-quarters of the companies surveyed are using elements of the Career Dimension, and a little over half of the surveyed companies are using elements of the framework (Church, 2015).

This Blueprint is a credible frame of reference for evaluating decisions, such as whether someone can make career ladder jumps two levels above where they are currently based. MacRae and Furnham (2014) purport that the components of the Leadership Blueprint provide the most synthesized conceptual framework available with real world applications. It is generally considered easily understood and greatly resonant for key senior leaders (Silzer et al., 2016). The Leadership Blueprint is a comprehensive model created after an extremely comprehensive search through theories and research, and it is based on input from actual company practitioners. It is the result of a deep analysis and synthesis of academic theory and research, an analysis of use from consulting companies, an analysis of literature reviews and benchmark studies, and an examination of the practitioner content that has identified high potentials over the last 50 years (Church & Trudell, 2016).

The Leadership Blueprint has three dimensions, including the Foundational elements of personality and cognitive; the Growth elements of learning ability and motivation; and the Career elements of leadership and functional capabilities (Church & Conger, 2018). One of the biggest positive differentiators of the Leadership Blueprint is that empirical data supports its validity and combines a foundation in theory (Church et al., 2015).

The Foundation Dimension of the Leadership Blueprint focuses on intelligence and personality. People are born with both components (Church, 2014), and according to Efron (2018), they can thank their parents for them. A major premise of this dimension is that its components are largely unchangeable (Efron, 2018). This is not to say that behaviors cannot be modified. However, because they are so consistent across an individual's life, they are very strong factors to consider when assessing leadership potential.

The next component of the Leadership Blueprint is the Growth Dimension. The components of this dimension—learning ability/agility and motivation enable employee success. People who rate lower on these two components are less likely to be committed to ongoing improvement (MacRae & Furnham, 2014). People with high learning agility are more likely to seek and use feedback, seek new opportunities, and look for ways to advance themselves (Church, 2014). These components either enable or limit the growth and trajectory of an individual and can be a reasonable predictor of that individual's inclination to adapt and learn in the future. These components are less likely to change until a person has a significant life event or clear impetus to change because they are changeable only if the individual has the desire to change, unlike either personality or intelligence, which are largely fixed (Church & Silzer, 2014). High motivation, drive, and initiative have been linked to successful leaders therefore, the



Growth Dimension is an essential component of determining leadership potential because it is a strong predictor of viability—whether an individual can learn, change, and grow successfully over time (Piip & Harris, 2014).

The last component of the Leadership Blueprint, the Career Dimension, focuses on leadership ability and technical expertise (Church & Silzer, 2014). These are traditional elements also seen in many other leadership potential frameworks, and they have been widely used to predict future career success (Dugan & O’Shea, 2014). Indicators of strength in these two areas come through assessing a person’s career progression, determining his or her approach to maintaining functional acumen, his or her previously demonstrated experience leading with and through others, etc. (Dugan & O’Shea, 2014). The two components are considered extremely developable areas (MacRae & Furnham, 2014).

This practical model was used as a backdrop to the construction of the survey. The model is a practical framework that resonates quickly with leaders. While open-ended questions were asked to purely ask how people thought about leadership potential in terms of tools and criteria, the survey later contained questions specifically about the use of these dimensions.

## Overview & Demographics

The highest number of respondents came from people who were at companies and in their positions, one to three years (46%). The most common role from respondents were Directors with twenty percent of participants being CEOs. To develop a calibrated perspective, we asked how many levels below the CEO the respondents were. Both two and three levels below the CEO came in at the same, highest level. The highest number of degrees were masters (45%), followed by bachelors (36%) and a surprisal high number of doctorates (14%).

Nearly half (46%) were between the ages of 51-65 years old with a total of 76% of respondents being between 41 and 65 years old. While offering the options to identify differently only two participants chose “prefer not to answer”. The population was nearly split with female at 46% and male at 42%. On average, the most respondents were from people with one to four direct reports (34%), closely followed by five to ten direct reports (30%), and about one-fifth (20%) of respondents having no direct reports.

Companies that had revenue of more than a billion (32%) were most represented in the results with companies having than less than \$10 million (26%) being second largest respondent group. The most respondents came from companies with less than 50 employees (25%), with 1001-10,000 and over 10,000 employees coming in as a close second and third (23% each). After numerous statistical testing, the results were extremely consistent across the covariates and are considered very generalizable because of the little variation across covariates.

The industries for which we had sufficient observations to consider were manufacturing, retail trade, information, finance and insurance, real estate, rental and leasing, professional, scientific, and technical services, educational services, health care and social assistance, and public administration. Any industry category that had fewer than 8 responses was put into the “Other” category. There was a three-way tie for highest level of representation between professional/scientific/technical services, educational services, and arts, entertainment, and recreation all representing 12% of the respondent group.

When asked what their role was in determining leadership potential, there was a cluster of responses. The majority (66%) of respondents indicated they were responsible for assessing and developing talent, 57% responsible for identifying potential leaders, 54% responsible for managing high potentials, 50% responsible for recruiting or placing high-potential employees.

The most common measurement of success of determining leadership potential identified was a strong pipeline of talent (71%). Additional measurements of success were succession plan executed (45%), strong financial results





(38%), minimal negative impact on employees such as poor results and turnover (37%), and minimal removal of leaders 25%.

### ***The Science...***

This portion of the analysis utilized logistic regression, multivariate regression, and non-parametric rank tests, and post-hoc hypothesis tests. When looking to see if this was related to how competent they felt in DLP, there was no significant difference ( $\chi^2(7) = 5.83, p = .44$ ), implying that there is no relationship between what people do with the information and how competent they think they are at DLP. This might be related to the fact that many individuals felt they could always improve, no matter their level current of competence.

## How do You Define Leadership Potential?

An open-ended question asked survey participants how they would define Leadership Potential. There were 411 unique comments. Those comments were sorted into themes. There was 75 times in which a theme had more than five comments to it and many with less than five. Talent development, motivates, and learning agility tied as the top themes with 40 comments each addressing these three items. Decision making with 39, inspiring with 38, and the ability to lead had 37 comments rounded out the next three themes. Communication and influence tied with 34 comments. There was a drop off for the last three which were listening with 23, strategic skills and emotional intelligence both with 20 comments each. The Word cloud below illustrates the most common themes that emerged.



The vast majority of responses were a description of characteristics that good leaders possess. There were several comments that focused on demonstrated behaviors and a small amount that addressed people already in a leadership role. Those, however, did not answer the questions. There were comments (12%) that addressed potential. A sampling of comments that addressed the actual definition of leadership potential, ones that were future focused, are as follows:

- A leader who: a) has a proven track record of strong performance across a variety of settings/roles; b) has the abilities (e.g., intellect and learning agility) to do more; and c) has the desire (i.e., ambition) to expand leadership responsibilities.
- The likelihood that an individual has the ability, knowledge, experience, natural ability, EQ to grow in their role or areas of responsibility in an organization or position of authority.
- Leadership potential involves the combination of personality and intellectual traits / abilities that set up employees to advance and succeed in leadership roles
- Person who exhibits the characteristics, mindsets, behaviors, and abilities to become or advance in formal leadership positions.
- A leader who has the potential to assume responsibilities that are 1-2 levels above their current.



## What Criteria Is Used

Participants were asked to select their top 5 criteria for determining leadership from a long list of options. Criteria making the top ten were emotional intelligent (34%), problem solver/decision maker (26%), collaborative, communicative (22%), ethical, adaptable, and authentic, critical thinking in a three-way tie (20%), ethical was next in ranking (18%), and high performing/high achiever, and strategic also in a three-way tie (17%).

From those options, they were asked to pare down the list to their top 2 criteria. Interestingly, the top 10 responses for both questions only differed by one response with learning agility making the top two list with 42 of respondents choosing it.

## Tools

Of the 'Top 3' tools identified when asked what tools they use; the 5 most popular choices were: how they manage key constituents (40.3%), face-to-face meetings (31.7%), observation (28.5%), current performance (27.8%), and provide new opportunities/give new challenges to test employees (25.9%). Regarding observation, all levels except CEO and one level below CEO rated it highly?.

Interestingly, 4 levels below the CEO were the only group to have 'past performance' and 'matrix of skills' in their top 10. CEOs were the only ones to identify 'get to know them/interview' and 'gut feeling' in their top 10. Stretch assignments were chosen by 21% of participants but no CEOs selected this option as a top ten choice. Conversely, learning without prompting was in the top ten for CEOs and one and two levels below the CEO but no one else. Assessments rounded out the choices occurring in the top ten for all groups except 5+ levels below the CEO, (in the top 3 for 14% of total respondents).

Assessment tools are also used periodically to determine leadership potential, according to the study results. The top assessment tools identified were 360 (58%), Meyers Briggs (50.4%), and DISC (41.3%). IQ (9.6%) and Watson Glaser (7.0%) were much lower. In the Other category, many individual tools were mentioned, including Hogan (>5%).

*The science...* Tools utilized was not found to be significantly different by organization level ( $\chi^2(15) = 16.2$ ,  $p=0.372$ ) or number of direct reports ( $\chi^2(15) = 5.52$ ,  $p=.987$ ), meaning the assessments used are consistent at all levels and for leaders with all numbers of direct reports. Statistically, organizational level and tools are not dependent, they are independent of each other (per test performed which Chi Square, p-value 0.454).

## Use of Intelligence, Personality, Motivation, and Learning Agility

When specifically surveyed whether these criteria, intelligence, personality, motivation, and learning agility (IMPLs), were used in determining leadership potential, 87% said yes to learning agility, 86% said yes to motivation, 78% said yes to personality, and 73% said yes to intelligence.

In the questions that broadly queried what criteria is used to determine leadership potential, only 33 respondents put intelligence in their top 5 choices. Personality was not chosen in top five, with only 9 people choosing it, but emotional intelligence (EI) is often associated with personality, and EI was rated top criteria. Motivation was not in the top five, but it was chosen by 49 people in the study as a critical criterion.

This illustrates that while not top of mind when listing criteria used and unprompted, when upon reflection and asked directly, the vast majority of participants indicate it is critical criteria they use.



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Intelligence	9	73	711%
Motivation	13	86	561%
Personality	2	78	3800%
Learning agility	11	87	690%

Table 1.0 Comparison of Unprompted vs Prompted Responses for Intelligence, Personality, Learning Agility & Motivation

When asked to rank these four criteria, the average ranks are below. Note a lower number indicates a higher rank.

- 2.26 for Motivation (Most important)
- 2.38 for Learning Agility (Second most important)
- 2.68 for Intelligence (Tied for least important)
- 2.69 Personality (Tied for least important)

***The Science...***

A two sample proportion test was performed on each of the four IMPLs dimensions: intelligence ( $Z=-18.2, p < 0.001$ ), motivation ( $Z=-20.5, p < 0.001$ ), personality ( $Z=-21.4, p < 0.001$ ), and learning agility ( $Z=-20.9, p < 0.001$ ), were all found to be significantly different, meaning we have evidence that there is a much higher report of using these criteria when asked specifically if it was utilized in their DLP process. A standard logistic regression model was run for each individual of the four criteria, including the covariates length in position, length at company, highest degree, number of levels below CEO, number of Direct Reports, number of employees, approximate revenue, industry, gender, and country/geographic location. Each followed a forward-backward stepwise selection process, to determine which covariates were significant and should be included in the model. A Multivariate Analysis of Variance (MANOVA) analysis was run to test if how the much the IMPLs weighed into their decision varied by different demographic variables. The MANOVA model was selected to account for the possible correlation in the IMPLs factors: level in company and age were omitted from the analysis to avoid collinearity. This model was followed up by post-hoc analysis for significant terms. The post-hoc analysis utilized a Tukey adjustment to adjust for multiple comparisons. A Friedman Non-parametric rank test was performed on the data where individuals were asked to rank the four dimensions from 1 to 4. There was a statistically significant difference in rank for each IMPLs, ( $\chi^2(3) = 28.907, p = 0.000$ ). Post hoc analysis with Wilcoxon signed-rank tests was conducted with a Bonferroni correction applied, resulting in a significance level set at  $p < 0.0125$  to keep the family-wise error rate controlled at a significant level of  $\alpha = 0.05$ .

## Intelligence

When asked, 73.23% of participants said they DO use intelligence when DLP. Intelligence is more likely to be used to DLP when someone held position his/her for several years (most used 4-7 and 10+ years) and obtained higher education. The most important identifiers of intelligence were critical thinking (70.40%), followed by strategic thinking (69.31%), and emotional intelligence (66.43%). Although emotional intelligence is not a true measure of intelligence, it is often associated with intelligence.

***What do you look for?***



Of the individuals who do use intelligence, the top 5 answers to this question were:

- Critical Thinking (70.4%)
- Strategic thinking (69.3%)
- Emotional Intelligence (66.4%)
- Intellectual Curiosity (56.0%)
- Can generate and manage complex ideas (55.2%)

The profile of what people look for regarding intelligence is not specific to their organizational level. It is consistent across the board.

### ***How do you assess?***

The vast majority of people (89%) use observation to assess potential. Coming in second at nearly 80% was the results people achieved. There was a drop off to the third item to word of mouth garnering 26% of the votes. Of note, testing was 13%.

### ***How much does it weigh in?***

For any participants who selected that they do use intelligence in DLP, the survey results reported the average importance score for how much intelligence weighs into your decision-making process as 4.10 on a 5-point Likert scale where 1 is 'unimportant' and 5 is 'very important'.

It seemed like there was a tendency for people to select leaders who are like them. We have evidence to suggest the education effect: the more intelligence an individual has correlates with how likely they are to select leaders using intelligence as a criterion. The post-hoc comparisons that were significant are highlighted below.

Many people specifically mentioned they would like a quantitative, or formulaic, way to measure intelligence- a process. Currently only 14.4 % use assessments to determining leadership potential and when asked what they wanted to help them, they named assessments.

Individuals who have been in their position longer are more likely to use intelligence when DLP. However, this is not a linear trend. Those who have been in 4-7 and 10+ years are much more likely to use intelligence in DLP than those who are new in their positions. Those who have been in their position 1-3 years and 8-10 years are more likely to use intelligence than those who are brand new, but the magnitude is smaller.

**Conclusion:** The importance of intelligence is consistent across our covariates.

### ***The Science...***

This intelligence indicator was also modeled using logistic regression to see which covariates were correlated. The final model for intelligence was statistically significant ( $\chi^2(7) = 19.046$ ,  $p = .00804$ ) included length in position ( $p = .0214$ ) and highest degree ( $p = .056$ ). The model explained 10.9% (Nagelkerke  $R^2$ ) of the variance in intelligence. The specificity, how many were classified as 'yes' actually responded 'yes', was 98.4%, and the sensitivity, the percent of individuals classified as 'no' who actually said 'no' was 6.3 %. When the model applied to the "test" data set to validate the model, 80.8% of responses were predicted correctly. Overall, the model is significant, but if the association does not appear to be incredibly strong or compelling as we had hoped. For "How much does it weigh in?" the MANOVA model was fit using a backwards stepwise process- the covariate with the largest non-significant p-value was removed one by one until the final model had only significant terms. The final model contained 2 variables- approximate revenue (*Pillai's Trace* = .301,  $p = .004$ ) and highest degree (*Pillai's Trace* = .169,  $p = .0348$ ). The post-hoc analysis for intelligence revealed no significant pairwise differences. A Chi Square test of Independence was run to see if there was an association between organization level and what they look for regarding intelligence- but was found to be non-significant ( $\chi^2(35) = 14.7$ ,  $p = 0.999$ ). A Chi Square test of independence was performed to test if there was an association between organizational level and how individuals



assess intelligence. This was also non-significant ( $\chi^2(25) = 13.9, p = 0.963$ ), which implies there is no association between intelligence assessment methods and organizational level.

## Motivation

### ***What do you look for?***

Survey participants told us that 86.47% use motivation to determine leadership potential. There was a balanced approach of judging motivation—which was consistent across position levels.

- Proactiveness (82.15%)
- Persistence (75.08%)
- Effort (70.15%)
- Focus (63.08%)
- Other (summary): commitment, resilience, drive

### ***How do you assess?***

Observation was selected by 94.4% of participants. No other assessment method came close, though Assessment and Reference/Word of Mouth were both very close to each other: 40.2% and 39.9% respectively. The lowest three selections were Scenarios (25.2%), Self-report (21.2%), and Other (4.1%). Many of the other options involved interaction or conversation with the individual they are assessing.

### ***How much does it weigh in?***

For any participants who selected that they do use motivation in DLP, the survey results reported the average importance score for how much motivation weighs into your decision-making process as 4.22 on a 5-point Likert scale, where 1 is 'unimportant' and 5 is 'very important'.

Participants were then asked to rank these attributes. The ranking was as follows: Proactiveness, Effort, Focus, and Persistence. This ranking is slightly different than the ranking in the previous question, but in both rankings, Proactiveness was the highest in both.

**Conclusion:** The importance of motivation is consistent across our covariates.

### ***The Science...***

When a logistic regression was run for motivation, The final model for motivation selected gender as the only covariate. While this was the best model, neither the covariate gender ( $p = .1463$ ) or the model ( $\chi^2(1) = 12.126, p = .1448$ ) were statistically significant. The model could only explain explained 1.5% (Nagelkerke  $R^2$ ) of the variance in motivation. The MANOVA model was fit using a backwards stepwise process. The final model contained 2 variables- approximate revenue (*Pillai's Trace* = .301,  $p = .004$ ) and highest degree (*Pillai's Trace* = .169,  $p = .0348$ ). The post-hoc analysis for motivation revealed no significant pairwise differences. In a Chi Square test for independence, organizational level and what participants look for regarding motivation were found to be independent variables ( $\chi^2(20) = 9.16, p = 0.981$ ). This means we have a consistent profile of what individuals look for across all organizational levels. A Friedman Non-parametric rank test was performed on the ranked data. There was not a statistically significant difference in rank for each IMPLs, ( $\chi^2(4) = 2.56, p = 0.634$ ). Because of this, no post-hoc analysis was performed. Based on this information, we have evidence that each element is equally important components in what individuals look for regarding motivation. A Chi-square of independence was performed to see if organizational level and motivation assessment methods were associated. This test was found to be non-significant ( $\chi^2(25) = 9.87, p = 0.997$ ), suggesting the assessment methods are consistent across all organization levels.



## Personality

Responses indicated that 77.8% use personality to determine leadership potential. In general, evidence to suggest that people with fewer direct reports are more likely to consider personality.

### ***What do you look for?***

Responses were consistent across organizations levels

- Possess specific traits (74.5%)
- Derailing personality traits (50.7%)
- Intensity of traits (45.2%)
- Absence of traits (34.7%)
- Other (summary): examples of specific traits they possess

### ***How to assess?***

- Observation (92.9%)
- Assessment (40.1%)
- References/ Word of Mouth (37.8%)
- Other (summary): interactions, conversations, feedback from others

### ***How much does it weigh in?***

For any participants who selected that they do use personality in DLP, the survey results reported the average importance score for how much personality weighs into your decision-making process as 3.94 on a 5-point Likert scale, where 1 is 'unimportant' and 5 is 'very important'.

**Conclusion:** The importance of personality is consistent across our covariates.

In the logistic regression, the final model for personality selected number of direct reports as the only covariate. While this was the best model, the covariate Direct Reports ( $p=.05212$ ) or the model ( $\chi^2(5) = 10.716, p = .0573$ ) were only marginally significant. This model explained 6.9% (Nagelkerke  $R^2$ ) of the variance. Since all factors were marginally significant, individual interpretations of the levels of Direct Report were not analyzed. This is all speculative, but perhaps when there are too many direct reports, personality is not as important of a factor. However, when you only have a small number of direct reports, it is very important to make sure personality is a considered factor. The MANOVA model was fit using a backwards stepwise process- the covariate with the largest non-significant p-value was removed one by one until the final model had only significant terms. The final model contained 2 variables- approximate revenue (*Pillai's Trace* = .301,  $p=.004$ ) and highest degree (*Pillai's Trace* = .169,  $p=.0348$ ). The post-hoc analysis for personality revealed no significant pairwise differences. Chi Square test of independence was performed to see if the breakdown of what to look for varied based on organization level. The results were non-significant ( $\chi^2(20) = 14, p = 0.8315$ ), implying the personality elements are consistent across all position levels.

## Learning Agility

Responses indicated 86.6% of participants use learning agility to determine leadership potential. Only 14% use assessments to determine leadership potential overall (in top 10) but 46% use assessments to determine learning agility.

In general, evidence to suggest that people with higher education more commonly seek out learning agility. Additionally, companies with revenue of 510 million-1 billion view learning agility as more important than companies with small revenue (0 to 50 million), and the largest companies (greater than 1 billion).



***What do you look for?***

- Change agility 76.9%
- Self-awareness 74.4%
- People agility 70.0%
- Results agility 53.1%
- Mental agility 56.6%
- “Other” summary: being able to adapt, crisis agility

***How do you assess?***

- 90.7% Observation
- 45.8% Assessment
- 34.3% References/Word of Mouth
- 33.6% Scenarios/Case Studies
- 17.5% Self-report
- 5.0% Other

***How much does it weigh in?***

For any participants who selected that they do use learning agility in DLP, the survey results reported the average importance score for how much learning agility weighs into your decision-making process as 4.07 on a 5-point Likert scale, where 1 is ‘unimportant’ and 5 is ‘very important’.

**Conclusion:** The importance of learning agility is consistent across our covariates.

***The Science...***

In the logistic regression analysis, the final model for Learning Agility selected highest degree as the only covariate. While this was the best model, the covariate Highest Degree ( $p=.0825$ ) and the model ( $\chi^2(3)=6.33$ ,  $p=.097$ ) were only marginally significant. This model explained 4.6% (Nagelkerke  $R^2$ ) of the variance. Since all factors were marginally significant, individual interpretations of the levels were not analyzed. However, it is interesting to note that the jump from a High School degree to a bachelor’s was the largest jump. Perhaps this suggest that learning agility is an ability more commonly sought by those who have received a college education, no matter how high. However, we do not have conclusive evidence to suggest this. The final model contained 2 variables- approximate revenue (*Pillai’s Trace* = .301,  $p=.004$ ) and highest degree (*Pillai’s Trace* = .169,  $p=.0348$ ). The post-hoc analysis for learning agility revealed there was a significant difference in how much learning agility weighs into the DLP decision based on company revenue ( $p=0.0048$ ). Looking at the pairwise comparisons, there is a statistically significant difference between companies in group ‘5’ (appx revenue 510 million to 1 billion), and with companies with much lower revenue, group 1 (less than 10 million), group 2 (10-50 million), and companies with largest revenue- group 6 (greater than 1 billion). The p-values are for the three groups are .001, .004, and .031, respectively. A Chi Square test of independence was performed to see if this breakdown varied based on organization level. The results were non-significant ( $\chi^2(20) = 7.58$ ,  $p = 0.99$ ), implying what participants look for regarding learning agility elements is consistent across all position levels. A Chi Square test of independence was performed to see if assessment method for Learning Agility varied based on organization level. The results were non-significant ( $\chi^2(20) = 11.5$ ,  $p = 0.933$ ), implying how participants assess learning agility is consistent across all position levels.

## Challenges in Determining Leadership Potential

One third, 31.4%, are unsatisfied in level of competence in determining leadership potential. Most dominant factors include lack of time (40.4%), unfamiliar with latest tools and information (43.9%), and 29.8% said company doesn’t focus on it



### ***Competence Level***

When asked whether they were happy with their competence level, only 31.4% agreed. Multiple participants noted they were dissatisfied because they always feel they can do better.

Reasons provided as to why they were unhappy were unfamiliar with latest tools and information (43.9%), lack of time (40.3%), company doesn't focus on it (29.8%). Ranked 4<sup>th</sup>, with 25% of participants selecting "Other" - a few common themes emerged: I can always improve (12/29), changes based on leaders, need more practice, no objective definition. Those who did engage in this work, the most common stated purpose (69%) was to work with senior management for leadership and career development purposes. One out of four people indicated they did not know whether their future was being discussed with senior leaders nor knew if their boss was creating a development plan for them.

Those who are dissatisfied with their level of competence are more likely to select clarity of definition and tools as their biggest challenge in DLP than those who are satisfied. Those who do feel satisfied with their level of competence are more likely to select employees lacking self-awareness as their most difficult challenge in DLP than those who are not satisfied with their level of competence.

### ***Everyone wishes that they had:***

- more time (57.26% dissatisfied) with reasons being competing priorities (82.7%) and short-term focus (44.2%)
- help, tools, support by the company, talent to help do it, leadership to set the tone, quantitative process on how to do it better, consistent assessment/ measurement tools
- many are concerned with the "Peter Principle"

Only 57.3% of participants are satisfied with the amount of spent on determining leadership potential. Competing priorities (82.7%) and short-term focus (44.2%) were the top reasons given as to why more time is not spent. When asked what help they would like, they indicated consistent assessment/measurement tools, quantitative process, formal programs, and more time to dedicate to the work.

### ***The Science...***

A Chi Square test of Independence was run to see if the most difficult challenge was different for those who were satisfied with their competency in DLP vs those who were not satisfied in their competency for DLP ( $\chi^2(8) = 20.44, p = 0.0088$ ). This is statistically significant, meaning there is an association between perceived competence and the challenges they identified. There is no statistical evidence as demonstrated by a Chi Square test ( $\chi^2(15) = 16.2, p = 0.371$ ) that people satisfied with their level of competence in this area do any more or less with the information they receive regarding DLP than those dissatisfied with their competence level.

## **What Assistance Would You Like?**

An open-ended question was asked seeking to identify what areas of assistance participants wanted to enable them to be more proficient in determining leadership potential.

The largest areas of comments were in needing a structured approach. A total of 82 comments were offered in this space. People are looking for training on how to do this work well. They want a structured data-based approach that is inclusive of diverse points of view. Participants consistently indicated they want a plan and pathway for high potentials as an output that includes stretch assignments and opportunities for growth. Comprehensive leadership development programs were identified as a great need by many. Proactive and effective communication was raised numerous times as a critical factor.





The second major area of need, with 46 comments, was in this becoming more of a focus and priority for the company. Requests for deep engagement from the CEO and senior leaders as well a link to the strategic plan were represented in numerous comments. Many comments referenced this being embedded as a cultural priority.

A third area of focus in the comments, with nearly 50 comments, was the topic of assessments. People want effective, data drive, objective assessments. They want appropriate assessments for the work. They want to be trained in how to use them and an understanding of what they do. Assessments surfaced throughout this study as a major area of opportunity.

A fourth area that surfaced in the comments, with 17 comments, was the need for time. Participants indicated that this should be made a priority area of focus and consequently more time needed to be allocated to this work. Some comments included a need for better resource allocation against work was required with a constant demand of doing more with less being a detriment to this work.

With ten comments each, changing the talent pool, measurement, and coaching were the next areas of focus. People want to both be able to get rid of the talent that is ineffective and have a stronger approach to recruiting top talent. Many referenced the need for good metrics to accurately track progress to create accountability. Additionally, several comments were dedicated to the need of providing ongoing coaching to high potentials. The only other theme that surfaced, with seven comments, was the need to be transparent with the results and with conversations with employees.

A sampling of the themes that emerged from the hundreds of comments offered are below:

- We just need to grow the business to create opportunities for people to grow into leadership positions.
- We spend significant time on identification.... perhaps a new tool to help do that more efficiently and accurately
- Development of a strong, evidence-based talent management program that supports high potential leaders once identified with a mixture of coaching, mentoring, sponsorship, and opportunities to stretch and learn new skills.
- Name this as a strategic priority and imperative
- Common language and definitions around potential
- Providing more tools that have proven effectiveness
- Better support from HR with executing on the employee development plans.
- In addition to greater self-identification, I would like to see us do better at consistent tools, diversity, and consistent, cross leader, assessment. Too often leaders pick candidates who look/act like them.
- Hard to answer. Please everyone leaves me alone long enough to think about who the future leaders of our company should be and allow me to dedicate the time to mentor them properly.
- Explaining the suitable tool for me to determine a successful leader
- Specific valid tools
- Our company needs to better their tools and their ability to determine leadership potential. The newer tools need to be introduced and utilized rather than using older tools which don't always work in today's world.
- The opportunity to use testing services to help better pinpoint strengths & weaknesses of key leaders.
- Better Tools
- It's always such a qualitative assessment, right? It would be helpful if a company quantified the process somehow and everyone knew where they stood.
- Have an actual codified succession plan and talent development program. It's largely informal.
- Our parent company has strict hiring and firing guidelines which do not allow for taking chances on personnel with potential or releasing personnel that will not grow with the organization.
- More tools, emphasis and rewards to the manager who has a team member promoted, company focus on promoting from within, uncovering talents within
- I would say building a sense of urgency with my leadership team on this.



- Greater discussion at the executive level on potential leaders
- Promoting the right people on time. No delays or procrastinating.
- Avoid nepotism. Bad leaders in organization tend to promote those closest to them.
- Development plans, resources to provide them to develop. Company lacks programs and resources other than "do more with less". Safe environment to stretch people without fear of failure and criticism.
- Additional short-term opportunities for temporary leadership positions would give me more time for trial and error.

## Determining Leadership Potential in a Virtual World

An open-ended question was asked what difficulties exist in this work as it relates to working virtually. Respondents widely agreed, 76.0%, that determining leadership potential will be more challenging in a virtual environment due to lack of observation, interactions, and communication, difficult environment in general. Most comments addressed concerns overall while a subset addressed concerns as it relates to working in a new virtual model rather. The greatest source of concern was in the lack of opportunities to observe people. With 75 comments on just this topic, the lack of observation opportunities in how people worked with clients or did their work in general were identified as issues. There are very few opportunities to observe in a virtual environment, as highlighted by these survey participants. This correlates with the most frequent way in which people determine leadership potential, identified in an earlier question, being observation.

The next biggest challenge identified, with 53 comments, was the lack of interactions. Less daily interaction, no interactions, lack of coaching opportunities, lack of personal interactions were all varieties of the concern that highlighted the fact that much of leadership potential determination comes through interactions but formal and information. The concern is that the virtual environment at best makes this difficult and at worst, eliminates this as a vehicle to determine leadership potential.

The third biggest area of concern, with 37 comments, was in communication. These comments centered on the lack of opportunity to discern body language. Without physical cues, it is difficult to get a read on people. It was offered that people show up differently in person than they do through technological means of video conference or phone calls. The lack of chemistry or the difficulty in creating effective interpersonal connections was also identified among the communication barriers.

A sampling of comments is below:

- You miss all the rest. Part of determining leadership potential is getting unsolicited feedback while managing and interacting. You do not have the advantage of observing management style, 360 interactions, how they manage completing priorities in a resource challenged environment; (human, financial and physical: plant, tools, and equipment) outside of virtual meetings.
- It is not challenging for "familiar" talent; however, it could be challenging as we are onboard new/external talent. It is possible, though! Those who are accustomed to working in a global environment with a highly dispersed workforce will find this easier. At my company, though, we have had a fairly traditional outlook on work and flexibility. So, many/most of our leaders are not very skilled in leading without direct, in-person observation.
- People can conduct themselves differently in video / over the phone than in person
- I'd imagine that determining leadership potential virtually with a workforce that typically works remotely is not overly difficult, but we've found determining potential remotely to be hard with a workforce that typically works onsite. This is due to the fact that under normal circumstances, leaders and teams are interacting face to face and working on items that often require in- person assessments and input.



- 1/ The virtual work environment is new to many 2/ Fewer observation points (especially casual and unplanned) in the new virtual work environment
- It is harder to see a person in action. However, I still believe it is possible to determine leadership potential virtually, as long as the company has some experience working virtually.
- Lack of casual coaching and feedback opportunities
- It is difficult to see how things are getting done. Not just what.
- Less spontaneity and more "structured" situations, not everyone blossoms in this environment. Some people are better in-person than online.
- People can hide behind screens; limited interpersonal engagement
- Face time and personal interactions are important. Also physically checking in to check progress on current work.
- Hard to create a trust, hard to read people through video
- Less exposure leads to gaps in knowing
- Personality does not always represent itself in person as it does virtually.
- Virtual environments don't allow for the give and take and back and forth that occurs in a room - it's one person at a time and playing off one another is challenging.
- Things seem to get pushed to the side more in a virtual work environment or easily forgot about.
- It is difficult to hold staff accountable. Communication is different in a virtual environment and requires more effort in making personal contact with individuals.
- Extreme limitations on my ability to observe and interact daily with my departments and individual contributors. While it is easy to see some who have stepped up in certain ways, it is hard to get a well-rounded assessment with regular one on one and group interactions
- Fewer casual interactions with junior team members
- Less personal interaction
- Missing social cues that can be observed face to face

## Study Limitations

While evaluating the success of the participants in determining leadership was not one of the primary objectives of this study, one of the major limitations in this field of study in general, is the inability to identify how successful an individual is at determining leadership potential. Specific to this survey, the question asking if they felt satisfied with their ability to determine leadership potential, was confounded by participants who feel they 'could always improve'. To get a clear picture of what success looks like, more time is needed, as well as input from leadership experts and those professionals who have been working long enough to have had many attempts to determine leadership potential. However, as mentioned before, the intent of this study was to quantify and compare the current methods utilized by individuals to determine leadership potential, so this is only a consideration for future research.

The other potential limitation of this study was the generalizability due to sampling methodology. Attempts were made to sample companies randomly, but there was an overwhelming majority of participants who were within the network of the team performing the study: a homogenous convenience sample instead of a probability sample. However, the data were examined to see if there was a significant difference between the data collected from different referral sources (Facebook, LinkedIn, etc.). The result was not significant, meaning we have no referral effect. Additionally, as argued by Jager et al., (2017) this type of sample does have merit (2017). Finally, in the context of the generalizability, the population from which the data was collected is going to be the same population for which the conclusions are desired to make the generalizations.



## Expert Reactions and Advice

Synthesize this study and based on over a combined 50 years of practitioner and academic experience, the following recommendations are offered:

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## References

- Armstrong, Steve. "The High Cost of Poor Leadership." *Making Lives Better by Building Better Leaders* (blog), March 15, 2019. <https://stevenarmstrong.ca>.
- Church, A. H. (2014). What do we know about developing leadership potential. *OD Practitioner*, 46(3), 52-61.
- Church, A. H., & Silzer, R. (2014). Going behind the corporate curtain with a blueprint for leadership potential. *People & Strategy*, 36(4), 50-58.
- Church, A. H. (2015). The pursuit of potential: Six things you need to know about defining potential in your organization. *Talent Quarterly*, 6, 29-35.
- Church, A., & Trudell, C. (2016). Leading Talent Management into the Future.
- Church, A. H., & Conger, J. A. (2018). So You Want to Be a High Potential? Five X-Factors for Realizing the High Potential's Advantage. *People & Strategy*, 41(1), 17-22.
- Church, A. H., Rotolo, C. T., Ginther, N. M., & Levine, R. (2015). How are top companies designing and managing their high-potential programs? A follow-up talent management benchmark study. *Consulting Psychology Journal: Practice and Research*, 67(1), 17.
- Church, A.H., and C.T. Rotolo. "Lifting the Veil: What Happens When You Are Transparent with People about Their Future Potential? ." *People & Strategy* 39, no. 4 (2016): 36–40.
- Conger, J. A. (2014). Addressing the organizational barriers to developing global leadership talent. *Organizational Dynamics*, 43(3), 198-204.
- Craig, M. (2015, July). Cost effectiveness of retaining top internal talent in contrast to recruiting top talent. In *Competition Forum* (Vol. 13, No. 2, p. 203). American Society for Competitiveness.
- Dugan, B.A., and P.G. O'Shea. "Leadership Development: Growing Talent Strategically." *SHRM-SIOP Science of HR White Paper Series*, 2014.
- Effron, M. (2018). 8 Steps to High Performance: Focus on what You Can Change (ignore the Rest). *Harvard Business Press*.
- "Fact Check: The Cost of Poor Leadership." Workforce Solutions and Continuing Education at Lord Fairfax Community College, June 3, 2021. <https://lfcworkforce.com/fact-check-the-cost-of-poor-leadership/>.



Gaddis, B. H., & Foster, J. L. (2015). Meta-analysis of dark side personality characteristics and critical work behaviors among leaders across the globe: Findings and implications for leadership development and executive coaching. *Applied Psychology*, 64(1), 25-54.

Hewitt, A. O. N. (2013). *Building the right high potential pool*.

Janson, K. M. (2020). *How Does Assessment Of Leadership Potential Differ Between Organizational Levels?*(dissertation).

Kotlyar, I. "High-Potential Programs: Why Still a Gap?" *Journal of Leadership, Accountability & Ethics* 15, no. 1 (2018): 60–73.

MacRae, I., & Furnham, A. (2014). *High potential: How to spot, manage and develop talented people at work*. Bloomsbury Publishing.

McDonald, Sonia. "Can You Afford the High Cost of Poor Leadership?" Web log. *Leadership Headquarters* (blog), December 31, 2020.

Piip, J., & Harris, R. (2014). Leadership talent identification and management. In *Workforce Development* (pp. 213-231). Springer, Singapore.

Silzer, R., Church, A. H., Rotolo, C. T., & Scott, J. C. (2016). IO practice in action: Solving the leadership potential identification challenge in organizations. *Industrial and Organizational Psychology*, 9(4), 814-830.

Steffens, N. K., Fonseca, M. A., Ryan, M. K., Rink, F. A., Stoker, J. I., & Pieterse, A. N. (2018). How feedback about leadership potential impacts ambition, organizational commitment, and performance. *The Leadership Quarterly*, 29(6), 637-647.

"The Measurable Cost of Poor Leadership." Cultivate , January 24, 2020. <https://cultivate.com/the-measurable-cost-of-poor-leadership/>.

Westfall, C. (2019, June 21). *Leadership development is a \$366 billion industry: Here's why most programs don't work*. Forbes.