



MOTERE

CONSULTING

ADAPT. EXECUTE. TRANSCEND.

**A STATISTICAL MODEL OF
HIGH PERFORMANCE & LEADERSHIP**

Stephen Long, PhD

Motere Consulting is a performance enhancement firm that helps manage risk and enhance value through management assessment and management development services. Stephen Long, PhD built a statistical model of human performance and leadership through field research while he served as Head of Performance Psychology in the Human Performance Lab at the US Air Force Academy and the Director of the Peak Performance Clinic at the University of Kansas. Dr. Long conducted field research and developed applications for high performance, strategic execution, choking under pressure and performance plateaus. His model has been successfully applied to business, athletic, academic, military and artistic performance where his clients average 115% improvement in financial performance with a zero failure rate.

As founder and president of Motere Consulting, Dr. Long applies an educative consulting model where he has helped companies from across industries realize a significant improvement in performance through his proprietary model consisting of behavioral analyses, educational tools and counseling techniques. Through his work with champion athletes, top salespeople and corporate executives, Dr. Long has helped raise individual and team productivity from poor or adequate to outstanding.

A risk management expert in human capital and a primary source, Dr. Long's 30 years of experience and expertise has earned him a reputation as one of the world's leading experts in performance psychology. Armed with a legacy of success from a broad array of industries, Dr. Long's expertise in behavior change, psychometrics and belief systems equips clients with the skills that are neglected by other consulting firms leaving executives with temporary improvement. Dr. Long's model provides rapid improvements followed by long-term success.

A leader in the practical applications of performance psychology, Dr. Long has consulted with 26 championships teams on the international, national and conference levels. His athletic clients include Olympians, national champions, All-Americans, all-conference athletes, conference players of the year, a state champion, a world champion, a Heisman Trophy finalist and an NFL's most valuable player. Dr. Long has consulted with several major college football programs and the United States Olympic Committee.

Identified as one of North America's top-10 applied performance psychologists by an independent study conducted at the University of Utah, Dr. Long is a highly sought after speaker by Fortune 1000 firms, mid-size companies, sales organizations and non-profits. His articles have appeared in dozens of magazines worldwide read by hundreds of thousands of people.

Dr. Long began his career as a college football coach at the University of Virginia and the University of Delaware. He earned his PhD from the University of Kansas where he was honored as the Most Outstanding Doctoral Student. In his free time Dr. Long enjoys fly fishing, competes as a master's swimmer and is an accomplished marathoner. Author of two critically acclaimed books, [GOLD! Mastering the Psychology of Execution](#) and [Executive Presence: High Performance Leadership for the 21st Century](#), Dr. Long demonstrates strategic execution and high performance relies more on learned, deliberate competence significantly more than natural ability or intelligence.

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INTRODUCTION

Why is it that after a performance review of two recent hires holding similar backgrounds and ability levels it's apparent one has developed exceptionally while the other has barely progressed at all? Consider two organizations that hold similar resources. Why is it one has gained significant market share edge while the other one finds itself fighting for survival? What about two managers who have an equal amount of experience and success, but one guides a group to superiority while the other leads a group that languishes in mediocrity? How can it be that — despite similar inputs — the resulting outputs are completely different? Why does one execute strategy consistently whereas the other fails?

The following explains why. What many believe to be abstract, unmanageable and impossible to acquire has been proven to be concrete, measurable and learnable. Consistently high performing people, organizations and leaders have acquired a belief system Dr. Long quantifies, then develops individually and organizationally. Dr. Long's statistical based performance enhancement model is based on his field research where he focused on strategic execution, high performance, choking under pressure and performance plateaus. The model is proven to improve performance through appropriate application of educational tools and strategies, counseling techniques and measured from a valid and reliable psychological inventory.

Motere's model has two components:

1. Management Assessment
 - A. Psychological Inventories
 - B. Behavioral Analyses
2. Management Development
 - A. Educational Strategies
 - B. Counseling Techniques

At the core of the model is an inventory that measures a person's belief system enabling them to execute strategy consistently to the best of their ability. Beliefs are powerful because they dictate our behavior. Performance is a behavior and behavior is important, but it's only a reflection of our beliefs. The purpose of the Management Assessment component is to identify the strengths, weaknesses and blindspots of a person's belief system enabling them to execute strategy. The purpose of the Management Development component is to leverage effective beliefs and change ineffective beliefs. A carrot and stick approach is not applied, but rather behavior change occurs due to natural forces.

Motere's model analyzes and measures potential for strategic execution. First, through our management assessment tools, it's been proven that most people - 98% - hold a mindset that prevents them tapping into their potential completely. Second, research shows strategies only deliver between 63% - 77% of what they promise. This is called the Strategy/Execution Paradox. So when things go south how do you

know whether it's the strategy or the management team? The objective of our analyses is to empower clients to distinguish between which lever to pull. Benefits of Motere's behavioral analyses include:

- Reveals Potential Exposure
- Identifies & Manages Dysfunction
- Turns Uncertainty into Risk
- Provides Appropriate Oversight
- Controls the Nuisance Variable

Motere provides three behavioral analyses measuring the behavioral factors of strategic execution, followed by executive coaching and educational workshops to ensure strategy is executed.

Most people develop habits and possess a belief system that reduce their chances of success and the ability to execute strategy to its potential. Motere's model enables people to reverse bad habits, then develop an effective belief system to think and act effectively in performance situations. Performance behavior is changed and improved by learning how to think effectively to execute strategy consistently through our proven model. The most compelling component of the model is it's measurable. Our valid and reliable instrument — the Competitive Intelligence Assessment[©] (CIA) — accurately measures individual and collective belief systems. The CIA measures the effectiveness of a person's belief system to execute strategy and perform regardless of a situation. In other words, how successful people are in developing their inherent giftedness and utilizing their available resources.

HABIT DEVELOPMENT

Habits — what people do and how they think — are a result of a complex process. People develop habits through behaviors. When a person repeats a behavior enough times that behavior becomes a habit — good or bad. Behaviors don't manifest out of thin air; there's an origin. The origin is a skill, but skills are just like behaviors and habits — they can be effective or ineffective. Simply, effective skills lead to effective behaviors leading to effective habits. Motere's tools and strategies build performance and leadership skills leading to productive behaviors. When these behaviors are rewarded and repeated they become habits leading to consistent execution. On the other side of the coin it's similar, but more intriguing. Habits such as laziness, complacency and faulty decision-making through fear, frustration and stress lead to ineffective behaviors, unproductive habits and inconsistent performance. What creates these inadequate strategic execution habits are not tools, but rather human nature. When people are engaged in competitive, stressful activities it's natural to experience doubt, be impatient and lose focus. Our model hacks human nature where anyone can learn to execute strategy consistently to the best of their ability. Consistent high performance is available to everyone and every organization — not just the most talented.

FIELD RESEARCH

Two phases of research developed the model. The first phase focused on identifying the underlying constructs and developing a valid and reliable psychological inventory. The second phase focused upon developing practical performance and leadership applications to improve and strengthen belief systems of individual/organizational performance. Both research phases were conducted simultaneously while serving as the Director of the KU Peak Performance Clinic at the University of Kansas followed as the Head of Performance Psychology within the Human Performance Lab at the US Air Force Academy.

Phase I - After examining prior research an initial instrument was administered to college Division I track & field athletes (N=100) across the nation. Coaches (N=18) were asked to select from each team they coached (purposive sampling) two student-athletes they found who executed strategy consistently to the best of their ability through a skill set guideline. They were also asked to select two other student-athletes who executed strategy inconsistently making the least of their potential. Performance was not a discriminator. For instance, a student-athlete may only earn one point at the conference meet, but that student-athlete executed strategy to the best of their ability — this student-athlete would be categorized as “High Skill.” Another student-athlete may have been a conference champion, but the coach believed this student-athlete underperformed and should have accomplished more such as earning All-American status, winning a national championship or even should be competing on the international level. These student-athletes were classified as “Low Skill.” All responses were confidential.

Data was calculated and conclusions drawn once all subjects completed the instrument. Three primary results were found. First, High Skill student-athletes scored significantly different as compared to Low Skill athletes at a .001 level of significance. Meaning, the way in which High Skill student-athletes think and act has less than one-one thousandth of a percent the results occurred by chance. Therefore, it's extremely improbable people who execute strategy consistently to the best of of their ability think and act the same as people who don't. Not only people who execute strategy consistently act differently, they think differently. People who execute strategy consistently hold a different belief system than other people. This finding proved empirically that a model could be built — it's just not a concept — it's a proven psychological theory. Validity of the instrument was found to be .93 and reliability was found to be .88 (minimal acceptance scores for both validity and reliability are .70). The instrument (CIA) developed to measure the model is valid and reliable.

Second, demographic variables including race, gender, age, recruited status (financial rewards), event and socioeconomic status showed no significant influence on CIA scores:

The Gender variable showed males are no better able to execute strategy consistently to the best of their ability than females. Women and men have the same capability to execute strategy to the best of their ability.

The Race variable showed people of different racial backgrounds be they White, Black, Asian, Hispanic, Native American, or Multi-Racial have no advantage.

Age was not identified as a predictor. Experience is often assumed as a predictor of performance, but it was proven age has no influence. It cannot be assumed that a more experienced person has learned to think effectively in competitive situations. It can be inferred the willingness to learn the skills of the model is more important than age in determining who executes strategy consistently to the best of their ability.

Recruited Status refers to whether a student-athlete was awarded an athletic scholarship or walked-on to a track & field program. Whether the athlete received financial aid or not wasn't a predictor. This is important in understanding how financial incentives can be properly or improperly applied to execute strategy. The finding states that incentives do not significantly influence people to develop a belief system enabling them execute strategy consistently to the best of their ability.

The Event variable refers to the event the track & field athlete competed in. This was an critical variable in determining if the model could be generalized to other sports initially and then eventually to the general population. Unlike many sports, track & field athletes demonstrate a more diverse skill set. Track & field athletes include endurance athletes like distance runners, power athletes like sprinters (sprints & hurdles), throwers (discus, hammer, shotput, javelin), jumpers (long jump, triple jump, high jump, pole vault) and multi-event athletes (decathlon). Since the event demographic variable was not proven to be a significant influence it was inferred the model could be generalized to other sports. This led to generalizing the model to other performance activities outside of sports.

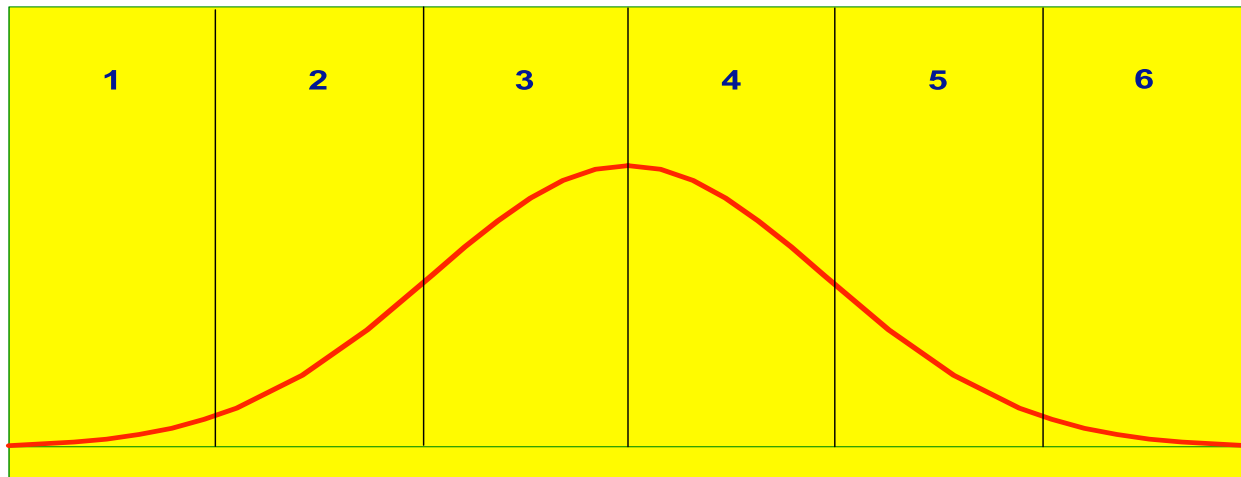
Socioeconomic Status was not proven to be a significant influence on the model. Whether a person is from the city or the country, or from an affluent family in the suburbs or raised in poverty in the backwoods, anyone is able to develop a belief system enabling them to execute strategy consistently to the best of their ability.

The demographic variables indicate the ability to execute strategy to the best of one's ability is not inherited or based on their environment, but rather is a choice to learn no matter where a person comes from, what gender they are, what race they are and what they are tasked to do.

Third, a factor analysis was conducted due to the complexity of the original construct. Originally, 13 subscales were devised and a factor analysis was conducted in order to carry out a multiple regression. A factor analysis revealed one factor accounted for 34.2% of the variance with no other subscales a

significant factor. Therefore, a multiple regression that was planned to identify the most important factors was not necessary. What originally was thought to be factorially complex was proven to be factorially simple. The model is based on a stand-alone theory measuring how effectively people execute strategy to the best of their abilities.

Three years later another factor analysis showed a second version of the CIA measured the model more efficiently than the original version. In addition, six distinct levels were found identifying it as a developmental model. Data fell into a bell shaped curve showing a normal distribution. People who score in Level 6 (2%) acquired a belief system enabling them to execute strategy consistently to the best of their ability — they use their thoughts and emotions as tools for success and high performance. According to the research findings thoughts and emotions limit the performance of most people. Levels 1-5 comprise 98% of the population where people develop beliefs and habits that restrict their inherent talents and gifts limiting their ability to execute strategy consistently. People scoring in levels 1-2 acquired more intense dysfunctional and ineffective habits. People in levels 3-5 may have similar habits, but are not as severe. The second research phase concentrated on developing educational tools and counseling techniques to enhance performance and develop leadership.



ANOVA	Factor Analysis	Reliability	Validity	Discriminant Analysis	Chi Square
19.98 @ .001	34.2	Test-Retest--.78 Cronbach Alpha--.88	0.93	.69--.74--.63	$P \leq .002$

A comparative study of Olympic athletes was conducted to assess norms established by division I student-athletes and international level athletes. Six federations of the United States Olympic Committee participated in the study (n=97). Members of the USA Women’s Volleyball, USA Wrestling, USA

Baseball, USA Taekwondo, USA Bowling and USA Badminton teams completed the Competitive Intelligence Assessment[©]. Three findings were noted. First, no significant differences existed between the six Olympic programs. Second, no significant difference was found between scores and the demographic data supplied by the Olympic athletes. Third, all scores established a bell curve similar to the college athlete population with six standard deviations. However, the Olympic athlete population mean and range was significantly more discriminating than the college athlete population — the mean was higher and the range was narrower. For instance, a college athlete scoring in Level 6 (highest) may only score in Level 5 when included in the Olympic athlete population. As a result it can be inferred if a person wants to compete on a higher level they're going to have to change their beliefs and how they think in competitive situations if they want to increase their chances of executing strategy consistently to transition effectively. If not the increased challenge results in inconsistent performance at best, and at worst, failure.

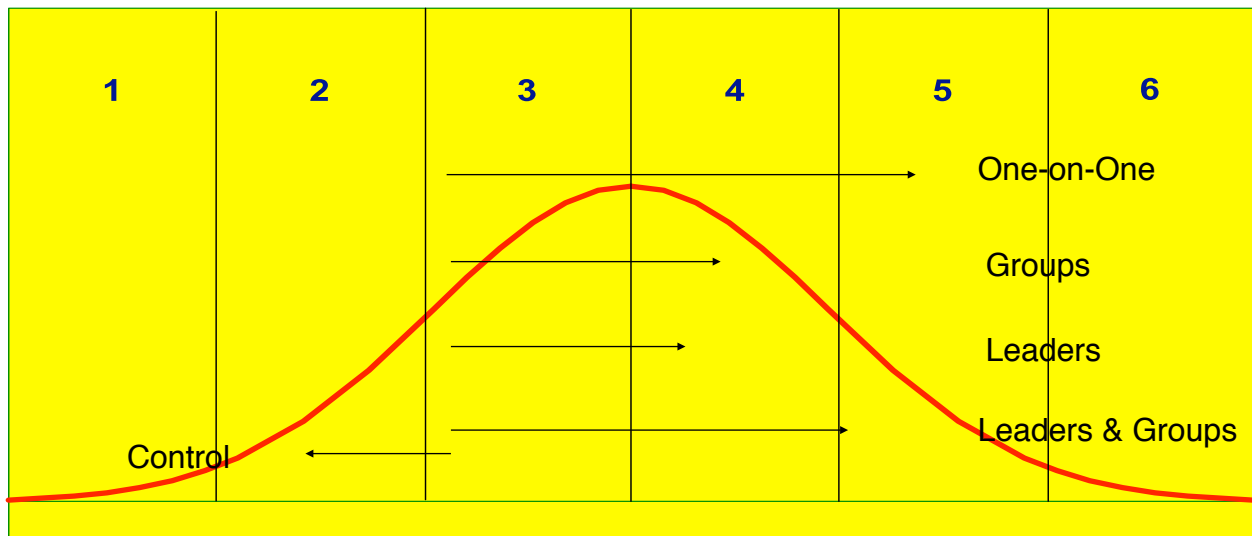
Phase II - Field research continued and efforts focused on building a catalog of educational tools and counseling techniques (N=4125). Creating educational programs was the next logical step in model development due to the validity and reliability of the CIA and the factor analysis showing it is a single stand-alone theory.

Five groups were assessed and evaluated. Pre-tests were administered, applications were provided and followed with a post-test after an educational program was completed. The first group was INDIVIDUALS. Subjects were given performance applications individually and CIA scores improved by an average of 2.3 levels. For example, a person who was provided performance applications may have a pre-test score located in level 3. This person on average improved their CIA score to a low position in level 5. The Individuals group demonstrated a strong positive correlation to performance improvement.

The second group was GROUPS. Performance applications were provided in a group setting (seminars and workshops) and Groups improved CIA scores by an average of 1.3 levels. A strong positive correlation was shown between the model and group performance improvement.

The third group, LEADERS, was provided with leadership applications and a 1.1 improvement in CIA scores resulted. A positive correlation to performance improvement was found. The fourth group, GROUPS & LEADERS, where performance applications were provided to Groups and leadership applications were given to Leaders resulted in 1.8 level improvement in CIA scores. A strong positive correlation was shown between performance improvement and the model.

The fifth group, a CONTROL group, leaders and groups received no performance or leadership applications. A decrease in CIA scores of .72 levels resulted. No correlation was found between the decrease in CIA scores and performance improvement (or regression).



Results from the first group, INDIVIDUALS, indicate this category received the greatest benefit. Similar to executive coaching, the one-on-one educational and counseling dynamic have been proven to be more effective than group teaching. The second group, GROUPS, received a strong benefit from group teaching without the benefit of leadership influence. Groups learn skills through the applications of an experiential learning method. The third group, LEADERS, showed strong skill improvement. Leadership skills were augmented and educational applications were integrated into practice plans. The difference between the Group category and the Leader category was found not to be significant. The fourth group, LEADERS & GROUPS, a 1.8 level improvement resulted where performance and leadership applications were provided. A significant difference was found between the Leaders category but not between the Group category. It was concluded it's more effective to include more people who produce results and contribute rather than exclude people. The fifth group, the CONTROL group received no educational applications and a decrease in CIA scores was found, but no correlation was found between performance and the model. This indicates an awareness issue. People who choose not to participate in educational development assume there won't be a difference in performance primarily due to past experience. No correlation means performance sometimes improved and sometimes it decreased. Leaders who chose not to participate (those included in the control group) indicate a mindset that performance improvement is not within their power — otherwise known as a Fixed Mindset — indicating a lack of control where mismanagement and poor leadership results. Also, because a decrease in CIA scores was experienced indicates the model is dynamic — people don't stay the same unless they

master skills. Individuals and groups improved performance who were provided with educational applications when skills were acquired. Groups regressed that were not provided with educational applications.

Three primary findings from Phase II were found:

1. The model is developed through an experiential educational methodology
2. A positive relationship was found between model development and consistent strategic execution
3. The learning process was accelerated through model development.

The third finding is important and requires clarification. People enter an activity with natural instincts — they’re naturally talented to execute a specific task. Just like everyone else, athletes are coached to acquire learned instincts — acquired skills to execute strategy. As people acquired the skills of the model, behaviors and habits they also mastered technical and strategic skills in less time. By mastering technical and strategic skills in less time coaches were able to introduce more advanced skills and concepts in order to facilitate group performance. Teams would face the same problems throughout the year unsuccessfully without the acquisition of the models’ tools. The model was proven to be a force multiplier for additional performance endeavors. Meaning, developing the skills of the model enabled groups to move more efficiently from Point A to Point B.

FINDINGS

Classifications. Individual student-athletes from the University of Kansas and cadet-athletes from the Air Force Academy were categorized into four classifications. Applied research was conducted where each individual sought help to improve performance, however for different reasons. Each person was assigned into one of four classifications.

Classification	Rate	Defintion
High Performance	21%	Performing at a stable and acceptable level. However, the individual expressed interest in applying the model’s educational tools and strategies to improve performance
Strategic Execution	42%	Unacceptable performance due to an inability to execute strategy consistently
Performance Plateaus	29%	Improvement followed by a plateau in performance for an extended time period
Choking Under Pressure	8%	Failed to meet expectations causing a significant negative consequence for suboptimal performance

People sought to improve performance where three of the four circumstances are considered reactive, dysfunctional or ineffective. Only people in the High Performance classification sought help when they didn't need it, but chose to be proactive to experience continuous improvement and growth.

Individuals were provided educational tools along with counseling to improve performance. All people in each classification improved performance showing a zero failure rate. However, it cannot be reported that specific tools and counseling techniques were appropriate for any of the particular four classifications. It was found that all of the model's educational tools and counseling techniques were effective in improving performance regardless of the classification.

It's noted that approximately a 4:1 ratio was established in favor of people who were trying to fix something over people who were proactive in improving performance. This finding demonstrates the importance of satisfaction to initiate change. Seventy-nine percent of people, as compared to only 21%, explored a different path to improve performance only when they came to a point of dissatisfaction. Although each classification was found to improve performance, the vast majority required a strong degree of dissatisfaction to initiate the process. Leaders who instill a growth oriented culture attract and hold followers who experience dissatisfaction sooner and at lower levels. This shows a stronger pursuit of excellence, rather than a compliant acceptance of mediocrity.

Factors. Research results were found in accord with the four classifications.

Factor	Question	Findings
Psychological Profile	Could a psychological profile be identified to determine if a particular person would benefit from the program?	Personality Needs Attribution Defiance Vision
Triggers	Outside of the four classifications, could a specific motive be identified as the primary reason to improve performance?	Mindset Motivational Needs Orientation
CIA Scores	Do CIA scores predict attitudes and behaviors that prohibit optimal and consistent performance?	Perceptual Abilities Principles Values Mindset Feedback

Excellence. A distinguishing feature of the model is the pursuit and realization of excellence. As opposed to other models and concepts where the focus is on rehabilitation and the removal of dysfunction leading to mediocrity, Motere’s model empowers people to experience excellence within their performance field. The question, ‘What are the attributes that enable people to experience and sustain excellence individually and organizationally?’ was asked to identify the primary components that lead to sustained excellence.

It was found the four components are related and influence each other. However, two findings were significant:

1. Continuous improvement is dependent upon having a clear purpose leading to self-initiated learning.
2. The ability to lead and manage others is significantly compromised unless one is able to lead and manage themselves effectively.



Populations. Five populations were studied and the effects on performance due to the model’s applications. The most notable finding is the model holds a zero failure rate. Any person who has applied the model has improved performance to one degree or another.

Population	Effects	Behavior Change
Business	115% improvement in financial performance	Increased Activity Creativity Problem Solving Decision Making Efficiency Critical Thinking Continuous Learning Transition & Change
Athletics	26 Championship Teams 36 All-American and All-Conference Selections 4 Conference Players of the Year 1 World Champion 1 National Champion 1 State Champion 1 NFL Most Valuable Player	Same
Academic	GPA - average improvement of 1.1 MPA (Military Grade Point) - average improvement of .56 1 NCAA Post Graduate Scholarship Award Recipient 1 Truman Scholarship Award Recipient 1 Goldwater Scholarship Award Recipient 1 Harvard Kennedy School of Government Scholarship Award Recipient	Same
Military	3 F-16 Pilot Certifications 8 Air Force Commando Qualifications	Same
Artistic	3 Graduate School Admissions	Same

CONCLUSION

Three components were found integral to Motere’s statistical model of human performance and leadership.

1. Behavioral Analyses
2. Catalog of Educational Tools and Strategies
3. System of Counseling Techniques

The model challenges several assumptions that are proven costly to organizations. People are the most expensive resource within any organization where they inherently create waste and inefficiencies. Talent is a resource that is evaluated, purchased and consumed. Talent is not a myth and it’s not overrated. However, in the pursuit of talent the need to maximize that talent is overlooked. Motere’s model has shown that although talent is required, it only needs to meet a threshold. The model provides a means to distinguish between talent and strategic execution skills. Organizations are now able to evaluate, acquire

and develop a component of human capital that was previously only identifiable after years of employment. People who execute strategy consistently are significantly more valuable than people who possess more talent, but who execute strategy inconsistently.

A similar issue was found regarding strategy. Business leaders who chase the perfect strategy are guilty of the same mistake as chasing talent. Again, strategy is not a myth and it's not overrated. However, in the pursuit of the perfect strategy leaders overlook the need to execute strategy. The model shows that as long as strategy is sound, it doesn't have to be perfect when leaders demonstrate the ability to execute strategy consistently.

Motere's model is proven to enhance performance, develop leadership and reduce the gap between strategy and execution. By doing so, the model also reduces waste and inefficiencies that are naturally created. Increased savings and enhanced earnings are strongly correlated. Inefficiencies are controlled and production improves. As opposed to other models where the focus is on one or the other, Motere's model reduces waste while also improving performance.

Stephen Long, PhD | 719.532.0230 | steve.long@motereconsulting.com
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