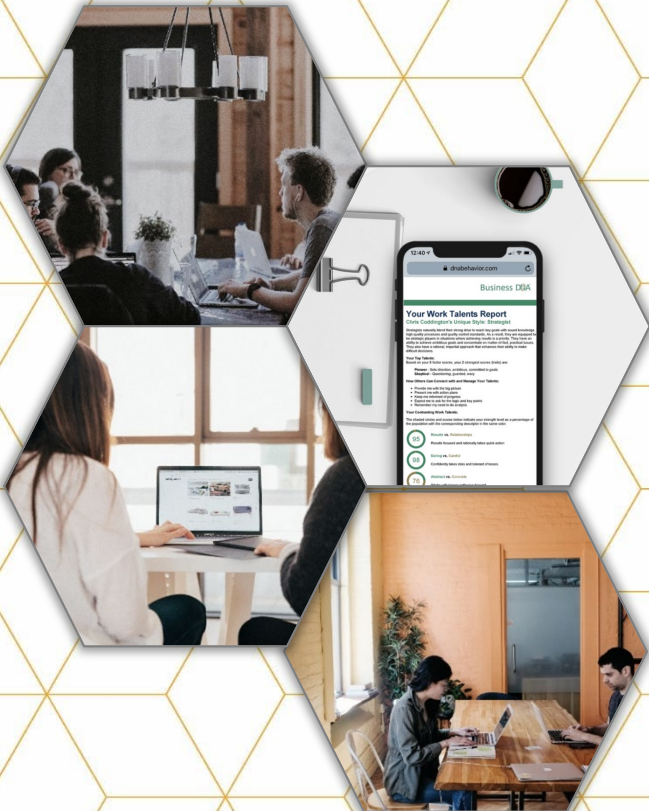


Behavioral Variability Reduction Techniques



Appendix D: Behavioral Variability Reduction Techniques

Depending on the types of decisions your organization makes and their level of subjectivity requiring human judgment, a combination of the steps outlined below will be integral to building a disciplined decision-making process that reduces the behavioral Variability and the cost that comes with it.

It will be important that there is a strong buy-in and commitment to reducing Behavioral Variability by the CEO, relevant C-Suite leaders, and the Board of Directors.

Cognitive Reflection Mindset

1. Firstly, individuals and organizations making high-stakes decisions must recognize the need to check their intuition with a process of cognitive reflection, even if it is for a short period. For instance, by:
 - a) Re-setting your mindset,
 - b) Getting into a calm mental space,
 - c) Asking more questions and
 - d) Obtaining more objective data and information, including completing the DNA Natural Behavior Discovery Process by all the people involved in the decision-making process.

DNA Natural Behavior Discovery

2. Completing the DNA Natural Behavior Discovery (within 10 to 12 minutes) at <https://dnabehavior.com/start-a-free-trial/> is a key step in the cognitive reflection stage to help uncover human behavioral differences that may influence decision-making.
3. The power of the DNA Natural Behavior Discovery is that it provides over 500+ objective behavior and money insights about people which may not be intuitively known, or at least pinpointed as to what they are, without a lot of interactive experiences over a lengthy period.
4. Importantly, the DNA Natural Behavior Discovery will with a 91% scientifically proven accuracy level, measure a person's automatic "go to" pattern of making decisions throughout their life-time, particularly when under pressure.
5. Further, the DNA Behavior Discovery precisely measures the Biases that will impact each person's decisions that could be:

Behavioral Variability can be reduced by:

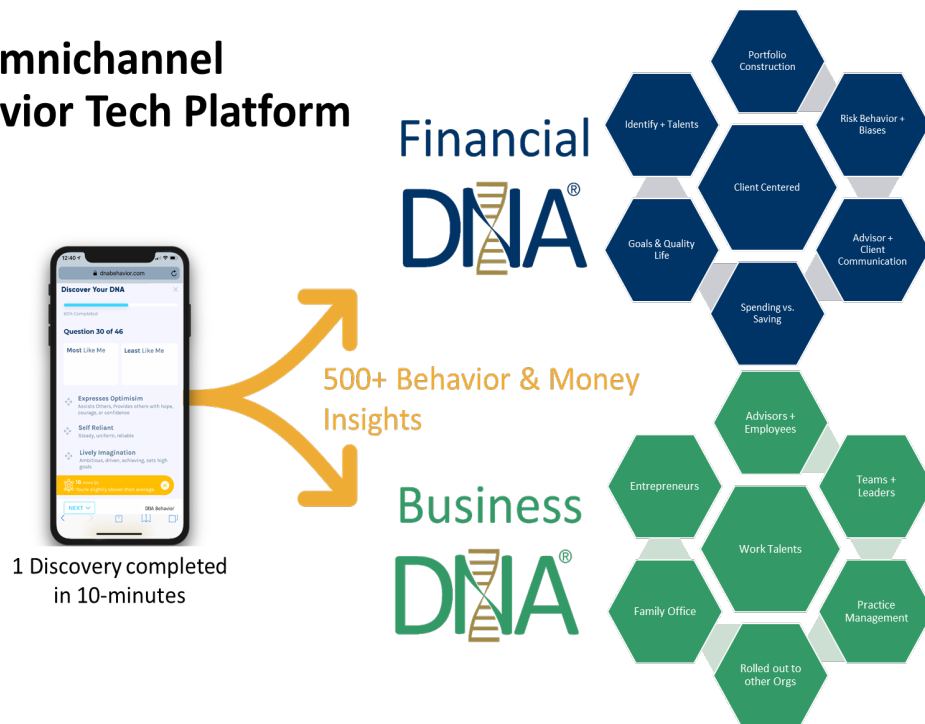
- A Cognitive Reflection Mindset
- DNA Natural Behavior Discovery
- Behavioral training programs
- Using algorithms based on the best 5 judge's decisions
- Correcting predictions
- Selecting better judges
- Independent opinion formation
- Using a digital decision-making twin

Completion of the DNA Natural Behavior Discovery is a key step in the cognitive reflection stage to help uncover human behavioral differences which may be influencing decision-making.

DNA Behavior®

- a) Systemic if a group of decision-makers shares the same Biases (e.g., they are all pioneering Initiators) and have a consistent decision-making pattern.
 - b) Non-Systemic Noise because the panel of decision-makers all have different Biases (which a diverse team would be) leading to more scattered decisions.
 - c) However, it is to be expected there will be Noise in some cases because the individual decision-makers make variable decisions for random reasons on similar facts compared to their usual pattern.
6. Identifying a person's financial behavior style sets the DNA Behavior apart because it inherently recognizes the energy of money itself can cause significant Behavioral Variability because of the emotions and motivations it triggers in many situations.
 7. To ensure greater consistency in the interpretation and application of the DNA Natural Behavior Discovery, the DNA Behavior AI tool "Ask Gene" will be used for frequently asked questions.
 8. Further, DNA Behavior provides greater technological power by deploying the DNA API into other AI-based systems and human interactive business platforms.

An Omnichannel Behavior Tech Platform



Behavioral Training

9. Participation by the decision-makers in organizational behavioral training programs addressing personal awareness and emotional intelligence. Please visit: <https://dnabehavior.com/dna-training/>
10. Our training provides techniques and resources for deploying behavioral orientated interviews, coaching and facilitation processes using behavioral questions.

Gene Decision Method and Decision Hygiene

11. For more complex recurrent or singular decisions involving multiple dimensions, the "Gene Decision Method" can be implemented utilizing a structured decision-making methodology which delays the premature exercise of intuition (Refer Appendix E).

The "Gene Decision Method" provides a structured decision moderation process requiring the consideration of behavioral and factual information ahead of exercising intuition.

12. The Gene Decision Method should be customized for the type of decision being made, such as hiring (refer Appendix I), assessing risk in financial planning, buying businesses, and generally for team and family facilitation in making significant and complex decisions.

13. The Gene Decision Method should include the following "decision hygiene" methodologies which serve as a form of prevention against Noise:

- a) Remove individual expression from decisions.
- b) Think statistically and take the outside view of the decision from other professionals who have similar reference cases.
- c) Structure judgments into several independent tasks that are sequenced in a way that prejudgment does not get in.
- d) Resist premature use of intuition until it is properly informed with the right evidence.
- e) Obtain independent judgments from multiple better judges and then aggregate those judgments.
- f) Mitigate the impact of "group thinking" being influenced by an authority bias shaping other people's independent thinking.
- g) Favor relative judgments and relative scales than those that call for absolute judgments (e.g. To what degree % do you think some event or circumstance will happen?)
- h) Consider implementing judgment guidelines to reduce Variability between judges.

Implement a decision hygiene methodology which includes:

- Removing individual judgments to mitigate authority bias
- Using statistics and outside opinions
- Breaking up problems into independent decisions
- Obtaining multiple independent judgments
- Resisting premature intuitions
- Favoring relative judgment scales
- Implementing judgment guidelines

Decision-Making Moderator

14. Noise and Biases can be detected in real-time by having a "Decision-Making Moderator" present in meetings to identify signs of Bias (Refer Appendix F) and ensure more disciplined decision process management.

Corrective Predictions

15. Corrective predictions can be made to de-bias the decision-making process by increasing knowledge real-time to improve judgments or tame the Bias before they affect judgments (Appendix G).

Predictive Judgments Using Formulae

16. Replace human judgments with algorithms based on the best five judge's decisions.
17. The accuracy of a person's subjective assessments is inferior to formulae. The predictive simple linear models of judges consistently outperform the judges they modeled in 77% of cases. Therefore, simple algorithmic models can reduce behavioral variability. However, algorithms have their limitations and can create separate challenges of their own, which need to be addressed.
18. The simple rule algorithmic models should be constructed using:
 - a) Using 5 to 8 best predictive variables which are selected from the decisions of a panel of the best five judges.
 - b) Using equal weight models because they are not susceptible to accidents of sampling.
19. Each rule should be structured to produce a mechanical prediction computed using multiple regression computations. The multiple regression produces a score which is the weighted average of the predictors. The predictor which is correlated more closely with the target gets a larger weight. For instance, this is why in hiring there needs to be role benchmarks used on a mechanical basis.
20. While experts will want to bring in complex factors (one off's etc), they add little value and will generally not outperform the simple model. Although there will be instances where the subtle rules will be valid making a simple model not as accurate in those limited cases. But the issue is whether the subtle rules are in fact, valid.
21. So, then the issue becomes "broken leg exceptions," which are decisive circumstances when there needs to be a manual override over the simple model. The advantage of machine learning is that it is capable of finding these exceptions in large data sets. This includes combinations of variables that might otherwise be missed.
22. However, while algorithms may be superior, they are not used because of a lack of trust, particularly if there is a perceived mistake.

Research shows the predictive simple models of judges consistently outperform the subjective assessments judges they modeled in 77% of cases. This is notwithstanding the judge may have more information. A formula will always return the same output for any given input.

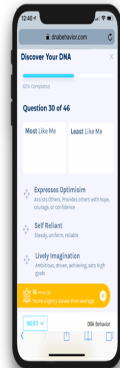
Selection of Better Decision-Makers (Judges)

23. Select a panel of the best five judges with the right expertise for the required judgment (better trained, more intelligent, have the right cognitive style, more experience and capability to apply their intelligence).
 - a) It is important that the better judges are open-minded and actively search for new information that can contradict their prior beliefs.
 - b) They are methodical in integrating that information into their current perspective and are therefore willing and eager to change their minds as a result.
 - c) Leaders also need to remain open to counterarguments and to know they may be wrong.
 - d) Better management of the judges with training and working in complementary teams.
 - e) Awareness of whether their behavioral style will cause them to overestimate or underestimate the probability of an event happening systematically.
 - f) Ensure there is diversity in the judging panel with different backgrounds/skills
 - g) While they work together as a team, be able to aggregate their independent decisions into a benchmark.

Digital Twin Technology

24. We advocate that a customized digital twin be used to test the subjective decisions which are intuitively made against an algorithmic benchmark or standardized response based on the expert panel's decisions.
25. Knowledge of the DNA Natural Behavior Style of the experts used in the digital twin may provide a further level of insights as to how different experts make decisions.
26. The digital twin can be used to help decisions in many judgment call areas, including:
 - a) Risk and asset allocation
 - b) Advisor-client matching
 - c) Product selection monitoring
 - d) Compliance
 - e) Hiring and talent selection

Managing Noise: DNA + "GENE" AI



1 Discovery completed
in 10-minutes

500+ Behavior & Money
Insights



Gene Digital Twin³

What Portfolio Risk is Appropriate?
Financial DNA Risk Group (1-7)
Client's Market Perception
Goal Setting Attitude
Decision Making Confidence
Age
Financial Experience
Life Experiences
Values and Beliefs
Financial Education
Answer = 1-7 Risk Group

AI and Machine Learning

27. Deploy automated functional business processes using AI and machine learning.
28. However, we would caution that AI is only as good as the variables that a person can input.
29. Therefore, with machine learning processes, the AI performance needs monitoring with human review.
30. Also, the business workflow will often require human interaction points because people will want to have a discussion or an ability to override the AI when there is decision-making complexity.
31. Nevertheless, AI with carefully structured algorithms using the insights from this guide can increase accuracy in overall decision-making, which involves human judgment.

There should be structured touchpoints for humans to review AI output and have the ability for human interaction before judgment is finally exercised.

To learn more about DNA Behavior International and the solutions we offer, please visit:

www.dnabehavior.com

If you have any questions or would like to discuss with an executive on our team, please email us at:

inquiries@dnabehavior.com

