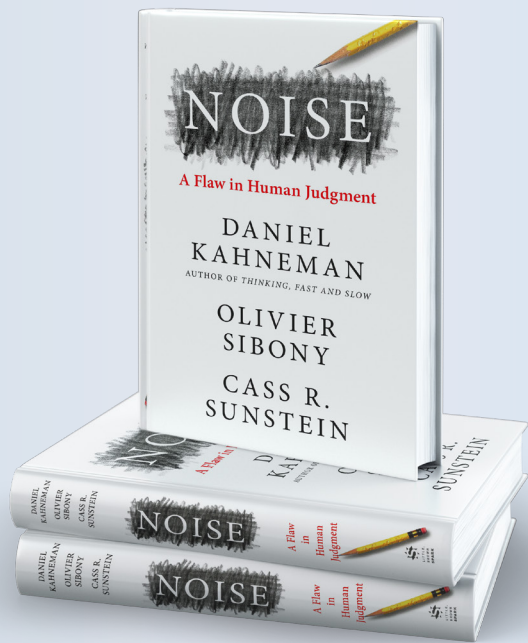


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Noise

By Daniel Kahneman

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Little, Brown Spark

Improving Decision Making through Noise Reduction

Everyone knows that humans are flawed by our very nature. Our inability to be absolutely perfect is a feature that is inextricable to our humanness. For the most part, this imperfection is neither positive or negative—it just is. However, one of the stickier ways it shows up is in how we make decisions and judgments. When it comes to leveling judgment, humans are susceptible to what the authors call “noise” and this noise can be extremely detrimental.

Two different medical doctors can review the exact same case, described in the exact same chart, with identical language and history. Those two doctors can, and often do, reach a different diagnosis. A judge overseeing identical evidence and prior convictions of an accused person can level a completely different judgment than a different judge in a different court. Similar examples are common in corporate customer service, human resources and personnel, forensic science, and more. To make matters worse, individuals’ judgments or behavior can be vastly different from day to day and even from morning till night.

Authors Daniel Kahneman, Olivier Sibony, and Cass R. Sunstein define noise as “variability in judgments that should be identical.” *Noise: A Flaw in Human Judgment* offers readers a fascinating look at this phenomenon, backed by research and illuminated with real scenarios, and “simple remedies” that can improve decision making through the reduction of noise. Both bias and noise contribute to flawed judgment, however most of the study in the subject has been focused on bias. In *Noise*, the authors attempt to “redress the balance” of both components of error so that organizational decisions can be made with limited influence by the noise factor.

Finding Noise

When looking for noise, we may be surprised to find how common it is. In fact, the authors propose that “wherever there is judgment, there is noise—and more of it than you think.” One of the most prime opportunities for noise to reveal itself is in the realm of criminal sentencing. Judicial discretion is the idea that judges should and must be given latitude to take all factors



of a particular case and a particular defendant into account when determining an appropriate sentence for the crime. Defendants should be entitled to “draw attention to the details of their situation” rather than be treated the same as every other similar crime and similar defendant. The details matter, so we have always believed. That core value of judicial discretion was called into question in the 1970’s when “startling evidence of noise” was made apparent.

Famous judge and human rights advocate Marvin Frankel made the public aware of noise in the criminal justice system with the release of his groundbreaking book and in his appeals to the United States Congress. He shined light on what he called “almost wholly unchecked and sweeping powers” of federal judges resulting in “arbitrary cruelties perpetrated daily.” His book became “one of the most influential in the entire history of criminal law” and after its success, Frankel went on to chair large-scale studies that provided the empirical evidence necessary to affect change. The study recruited fifty judges from mixed districts to sentence hypothetical cases from identical documents and information. The results were astounding.

Sentences ranged widely for the same crimes by a factor of ten years and more. In sixteen of the twenty cases, there was not a single instance of unanimity among judges as to whether a defendant should receive incarceration at all and if so, what the length of the incarceration should be. The results were so eye opening that many similar studies followed. When the evidence was presented to Senator Edward M. Kennedy, brother to John F. Kennedy, the influential member of the senate was “shocked and appalled.” After years of pressing the senate to act on legislation addressing the problem, Senator Kennedy was instrumental in the en-action of the Sentencing Reform Act of 1984. That act was both a recognition of noise within the criminal justice system and an attempt to reduce its impact and make sentencing more fair.

Judge Frankel and those who followed his pursuit for rebalancing the impact of noise on judgment effectively conducted a noise audit. A noise audit can be implemented in any organization, public or private, to determine the extent to which noise is clouding the judgment of decision makers. In the corporate world, this can expose opportunities to reduce costs and increase fairness.

A noise audit requires the gathering of decision-related data that can be compared to reveal “unwanted variability.” This is accomplished by having “multiple individuals judge the same problems” and comparing the results. Whereas most of the decisions in a particular set should fall within a relatively small range, noise leads to a much larger than expected range. Once the existence of noise is clearly demonstrated, steps can be undertaken to reduce its impact.

A Practical Process for Improving Judgments

Now that the authors have laid down the research and evidence behind noise and how they impact judgment, they get into the more practical side of things. Through a technique they

call “decision hygiene” readers will learn how to “improve judgments and prevent error” caused by these flaws. Efforts to eradicate the influence of noise are discussed in a variety of sectors including “medicine, business, education, government, and elsewhere.” For lasting noise reduction and more reliable decision making, readers are offered a system the authors call “mediating assessments protocol,” which is “a general purpose approach to the evaluation of options that incorporates several key practices of decision hygiene.”

Once a noise audit has been conducted to ascertain the level of noise impacting judgments and whether or not the problem needs to be addressed, solutions can be attempted to solve the problem. “Replacing judgment with rules and algorithms” is an option that should be considered and can go a long way at reducing noise all together. However, rules are not perfect and algorithms are not “a universal substitute for human judgment.”

Instead, leaders should work to improve the judgment capabilities of those engaged in decision making. The approach the authors have developed and that they recommend is “decision hygiene,” which includes four strategies: judgment guidelines, shared scale grounded in an outside view, structuring complex judgments, and mediating assessments protocol, or MAP.

Judgment guidelines: In order to improve results from judgment, an organization must first ensure that they have the most able individuals in positions to make those judgments. Selecting the right people and providing the right training are major contributing factors to reducing noise. Beyond that though, criteria for making judgments should be established that can be followed by all decision makers. One prolific example from medicine is in the Apgar score, which was developed in 1952 by the obstetric anesthesiologist Virginia Apgar.

Prior to the introduction of this scorecard, a newborn baby’s level of distress was a matter of personal opinion by the attending doctor or midwife. This led to countless errors in judgment and the loss of infant lives. The Apgar scorecard asks the evaluator to measure the baby’s skin-color appearance, pulse, reflexes, muscle tone, and respiration. Taken together and assigned a numeric value, the evaluator and team of medical professionals can far more accurately determine if a newborn is in distress or stable. Tools like the Apgar “exemplify how guidelines work and how they reduce noise.”

Guidelines do not eliminate the need for human judgment but they do assign a clear set of criteria on which a human judgment should be formed. They “decompose a complex decision into a number of easier sub judgments on predefined dimensions.” Shared scale grounded in an outside view: Nearly every organization evaluates the performance of their people at regular intervals. The problem is that these reviews are frequently tied to a rating scale and those scales are inherently noisy. The rater’s personal values, circumstances on the particular day the rating is conducted, and the relationship between the rater and the person being evaluated all impact the end result. On top of that, the modern knowledge-based workplace is tough to objectify. Different people in similar roles face variable challenges that must be viewed subjectively. These problems are



Reduction of noise should not be reached at the expense of flexibility.”

well recognized and result in most employees having a strong disdain for the entire performance-evaluation process.

There are a few common tactics to even the score when it comes to scale rating. Aggregation serves to get an average from a large amount of data rather than allowing a single rater to score the scale. This helps to reduce, but not eliminate, noise. Forced ranking is also employed, which asks raters to place those being evaluated on a scale that compares each individual to the others. This can reduce noise to some extent but the loss of morale makes the practice unpopular. A better strategy is to “ensure a common frame of reference.”

Scales should be “anchored on descriptors that are sufficiently specific to be interpreted consistently.” On top of that, “frame-of-reference training” should be provided to promote consistent scoring from rater to rater. Raters can be taught to compare their own ratings to an “anchor rating” that is viewed as the true rating, which becomes an anchor point on the scale. This serves as the “outside view” from which raters can more fairly assign their own rating.

Structuring complex judgments: The typical candidate interview for a position within an organization is a ripe opportunity for noise. Most interviews are unstructured in that the person conducting the interview asks the candidate a series of questions and allows the candidate to do the same. The main goal of the interview is to determine whether or not the candidate will be successful in the position but unfortunately, unstructured interviews fail miserably in that index. Assessing a candidate’s viability in a position is a complex judgment call and therefore, it requires a more structured approach.

Aggregation comes into play but in order to be valid, the evaluation of each candidate must be performed independently without any knowledge or exposure to the evaluations of others. After evaluations are made independently the data can be aggregated to form a clearer and more accurate picture of the candidate’s viability. Taking it further though, the process should include three principles of structure: decomposition, independence, and delayed holistic judgment. Decomposition “breaks down the decision into components” that aim the judgment to the most important cues, much like subjudgments do in guidelines. Independence “requires that each assessment be collected independently” to eliminate influence from one element to the other. Delayed holistic judgment allows the decision makers to rely on their intuition, as intuition is recognized as valid in decision making, but reliance on it should be delayed.

Mediating assessments protocol (MAP): An all-encompassing method that was designed to mitigate noise in organizational

decision making is the mediating assessments protocol, or MAP. It includes the decision hygiene strategies already introduced and can be “applied broadly” and be adapted for use in various ways at organizations from a multitude of sectors.

MAP is a procedure that is “inspired by the similarity between the evaluation of a strategic option and the evaluation of a job candidate.” MAP requires all decision makers to develop a complete list of assessments that must be made on all the different aspects of the strategic option in advance of any decision makers coming together to actually make the decision. Each assessment should be made separately and distinctly from one another to avoid influencing the other, just as is the case with a candidate interview. Only after these vital components are completed should the decision makers come together to discuss the proposal at hand.

This process has many key advantages. MAP “maximizes the value of information by keeping the dimensions of the evaluation independent of each other.” When processing information with the end goal of closure in mind, decision makers are naturally inclined to formulate their debate based solely on first impressions. Independent evaluation makes sure that the conclusion reached is not impacted unduly by one aspect over another. Further, this method allows for divergent viewpoints to come forth, leading to greater discussion and debate before reaching a final conclusion.

At the heart of this pursuit to reduce the impact of noise is the idea that all people and all decisions that have significance to people should be made with dignity and respect. We all want to be treated fairly with the full picture of our human experience taken into account. Mercy is not bound by rules and therefore, it is noisy but it provides something invaluable. It “ensures that people feel that they have been treated with respect and that someone has listened to them.” Noise-reduction strategies should not be crude in the attempt to make judgments more accurate or fair. Reduction of noise should not be reached at the expense of flexibility, which reflects the changing times, attitudes, or experiences.

In *Noise*, the authors set out to explain why so much noise exists and what can be done to minimize it. Noise will never be eliminated and that is not the desired effect. Noise is part of the human condition and rather than be stamped out, it should be mitigated for the highest good. Being human, most decision makers feel very confident in their judgments, whether they turn out to be accurate or not. Formalizing noise-reduction helps decision makers and the organizations they serve better able to come to sound, reasonable, fair decisions, to the betterment of all.