



Data is the Means, not the Answer

By Greg Lemiska and Patrick Hanck

Decisions lie at the heart of business performance; Bain estimates a 95% correlation between decision effectiveness and financial results¹. But, business decisions are challenging, even under ideal conditions. In extreme situations like an M&A transformation, they can be extraordinarily complex and consequential. Worse yet, stressors present in the environment of a significant transformation further complicate decision-making. Role changes, long hours, new relationships, and shifting processes are some elements that create a hostile environment for sound decision-making.

How can leaders make sound decisions in an environment that is adverse to good decision-making?

The act of considering data triggers a superior thought process for decision-making that avoids natural flaws in our thinking.

Mental shortcuts work in stable environments.

Our brains utilize mental shortcuts and biases for fast and efficient decision-making. Tennis players use this system to anticipate an opponent they've played in the past. Doctors use this system to efficiently and accurately diagnose patients with common ailments. Sound decisions are possible in familiar environments without consciously

¹Bain & Company. 2010. <u>Score your organization</u>



working through the underlying logic. When experts attempt to explain these near-instant decisions, explaining their logical steps requires effort. Robin Hogarth refers to this as "Informed Intuition" in his book *Educating Intuition*.² Business leaders employ the same technique.

Daniel Kahneman explores these concepts in his book *Thinking, Fast and Slow,* which refers to intuitive thinking as "System 1" and describes insightful examples of where System 1 thinking fails.³

	System 1	System 2
Trigger	Automatic	Deliberate
Speed	Near-Instant	Slow
Effort	Effortless	High, Requires Concentration
Basis	Pattern Recognition	Reason, Data & Analysis
Thinking Style	Intuitive, Heuristics	Logical and Systematic
Weakness	Emotion, New or Changed Rules	Cognitive Biases, Slow Speed
Strength	Routine Decisions, Fast Speed	Complex Problems, New Environments

Business leaders develop advanced System 1 thinking to run their organizations. Common examples include KPI-based decision points like revenue per head, days sales outstanding, inventory days on hand, call center abandon rates, or marketing campaign impressions. An efficient and effective organization will create automatic behaviors based on recognizable patterns. In a stable environment, these systems allow for efficiency, delegation, automation, and scale.

Successful shortcuts fail when environments change.

When environments or rules change, the standard course of action triggered by one of these patterns may no longer be the right course of action. A resupply point may suddenly be too much or too little to prevent a supply chain interruption. A higher call center abandon rate may be acceptable to a new customer market. The previous days sales outstanding target may not be enough to capture the value of an M&A deal hypothesis. Negative customer feedback may have a different root cause.

² Robin M. Hogarth. 2001. Educating Intuition

³ Daniel Kahneman. 2011. *Thinking, Fast and Slow*



Because System 1 triggers automatically from patterns, it will fail if a pattern occurs for a different underlying reason, at another time, or fails to appear at all.

Success in a changing environment requires a trigger for critical thinking.

Leaders must think deliberately and critically to succeed in a new or changing environment - what Kahneman calls "System 2". System 2 requires significantly more time and energy than System 1. Stressed leaders are already biased against spending effort rethinking what exists, especially if an old mental shortcut was successful. Kahneman points out that one of the most common triggers for System 2 is a failure caused by System 1. In a high-stakes business transformation with a hard deadline, there is very little time to spare for mistakes, failures, or the resulting rework.

Business leaders need to trigger System 2 to prevent System 1 failures. Pausing to consider data is a highly effective trigger.

Considering data is not simply looking at a dashboard of KPIs. It is thinking about the data behind the KPI, the factors in the environment driving the data, or how data might change after making a decision. This mode of thinking is System 2. Once in this mode, a decision-maker can explore beyond the data to reason out the implications and consequences of a decision, creating better outcomes.

The inability to automatically switch to System 2 is a natural flaw in human thinking, present throughout history.

Mythology provides an excellent example of a single critical decision subject to bias, emotion, and a sudden change to the environment - the story of the Trojans accepting a wooden horse from the Greeks. Why would the Trojans fall for such an obvious trap?

It's important to note that according to legend, the Trojans were under siege by the Greeks for ten years before the horse ploy (perhaps not unlike the leaders of an organization subject to acquisition). The Trojans had been operating in a wartime environment and had likely adapted System 1 thought processes critical to maintaining their defense. They were exhausted, surprised, nervous, and hopeful when the siege suddenly lifted. This swirl of emotions clouded their collective



judgment; they failed to recognize how their environment had changed and fell victim to several logical fallacies:

- **Confirmation bias** led them to see the horse (the emblem of Troy) as a reward for their resilience and as the end of a war they wanted to be over.
- **Overconfidence** from the long defense of their city vs. a strong opponent
- **The sunk cost fallacy** made them unwilling to consider that their struggles and sacrifices had not deterred their enemy.
- **Groupthink** exacerbated the situation, as the collective desire for peace and victory overrode individual concerns and dissenting voices.
- **Neglect of Probability** caused the Trojans to disregard the high probability of a Greek trap (Odysseus was a character well known for cunning).

The Trojans failed to recognize their biases and engage System 2 thinking. There was undoubtedly data that could have triggered a better thought process:

- The sudden change of tactics with no apparent cause
- The unusual size and construction of the horse
- The Greek history of cunning
- The untimely death of certain critical characters

They might have made a different decision if they paused to consider these systematically. Of course, the Trojans in the legend should get some leniency from modern-day leaders, who have far more data and analysis about their environments than mythical Trojans. But the lesson holds: mistakes that are obvious in retrospect are not evident in moments of great stress and change. **System 2 thinking is not automatic, and System 1 is susceptible to logical fallacy in a fluid environment.**

Our clients face changing environments during an M&A event. They are subject to their own set of biases, emotions, and habits. Success hinges on overcoming the potential pitfalls of change with System 2 thinking. The following are examples of leaders who leveraged to influence decision-making, enabling better outcomes.

Modern leaders can overcome bias by considering data.

In the post-close integration,, a client recently implemented a new order-to-cash process. Upon going live, their team experienced process failures that blocked customer shipments. Leaders quickly blamed the new process and planned to rip it out and recreate the old process.



Selective Abstraction is a cognitive bias that focuses on only one aspect of a complex situation, often a negative or troubling detail, while ignoring the broader context.

A deeper look into the failure mode data found that the process was sound - the failures were user errors. The result changed the proposed path from ripping out the new process to doubling down on change management and training efforts. This reconsideration avoided an emotional decision that could have added cost and delays.

Another client was evaluating the allocation of resources during their transition period. A prominent hardware engineer loudly advocated prioritizing complex manufacturing processes that required more time in the schedule. He convinced some leaders that any disruptions to manufacturing would cause significant disruptions to the customer base.

Confirmation bias is the tendency to search for, interpret, favor, and recall information in a way that confirms or supports one's prior beliefs or values. It leads to ignoring or undervaluing information that contradicts one's beliefs.

The engineer took great pride in a system he helped create and wanted to protect it. However, upon considering the data, the leadership team realized that hardware sales impacted only 5% of customers, and the trend was declining. Upon engaging in conversations about the data, leadership was able to focus resources on more objectively essential capabilities.

Many of our clients experience fear as go-live dates and TSA deadlines approach. We frequently reframe conversations about delaying go-lives in the face of genuine consequences like TSA penalties. Leaders are reluctant to push ahead even when the potential cost of the risks is less than the cost of delay.

Status quo bias is the tendency to prefer things to stay the same or to adhere to a previous decision. It involves resistance to change and a preference for the familiar, often due to overestimating the risk of adverse outcomes.

Leaders can overcome these fears with a data-driven readiness report that clearly explains what parts of the business are ready, which are not, and their relative priorities. This report is available from day one and steadily changes as activities lead up to the go-live. When the go/no-go decision happens, leaders avoid the status quo bias with an accepted, objective process to review the data and aid decision-making.



Make the act of considering data a habit in decision-making.

Leaders must trigger System 2 before System 1 fails to create better outcomes in a changing environment. Here are two quick recommendations to set leaders up for success:

1) Educate yourself on cognitive biases.

Knowledge is power. Understanding and becoming familiar with cognitive biases will help you identify and ultimately react/remedy your or your peer's cognitive biases. You can create a heuristic for recognizing bias. The best source of learning cognitive bias is from the founders Amos Tversky and Daniel Kahneman. They introduced the term in the early 1970s and have written several books on the subject: *Thinking, Fast and Slow, The Essential Tversky*⁴, and *Judgment Under Uncertainty: Heuristics and Biases*⁵, which are excellent resources.

2) Create a habit of data-oriented decision steps.

Here's an easy-to-remember checklist:

The DATA Checklist for System 2 Decision-Making:

Dive into Data

- Consider and gather available data
- Focus on the most critical and reliable information

Analyze Objectively

- □ Briefly analyze the data for key insights
- $\hfill\square$ Objectively consider what biases might influence interpretations

Think Critically (System 2!)

- $\hfill\square$ Consider outcomes, implications, and consequences
- □ Challenge assumptions and explore alternatives

Act Reflectively

Make a data-influenced decision

⁴ Tverksy, Amos. 2018. The Essential Tversky

⁵ Kahneman, Daniel, Paul Slovic and Amos Terksy. 1982. Judgement Under Uncertinty: Heuristics and Biases.



□ Take a moment to review if the decision feels balanced and justified

Data will not always have the answer, but it will always be a means to enter a better decision-making process.

Sometimes, the data provides insights that challenge assumptions and give clear direction. Those that set themselves up with better data will undoubtedly have better outcomes than those that don't.

There will be times when data is unavailable or needs to be clarified. Leaders will still have to leverage their instincts in challenging situations. Leaders who are more aware of the biases and possible logical fallacies that come alongside their instincts will have better outcomes than those who aren't.

Considering data will always have value because of its impact on the decision-making process and the thinking behind it. This act will have the most value during transformation when conditions are not conducive to critical thinking, yet the decisions will have long-term consequences.

Data isn't instrumental to decision-making because it may have the correct answer; it's critical as a means to a better thought process behind those decisions.