



Defining the Problem Before Solving It

Why More Data Isn't the Answer to Better Decisions

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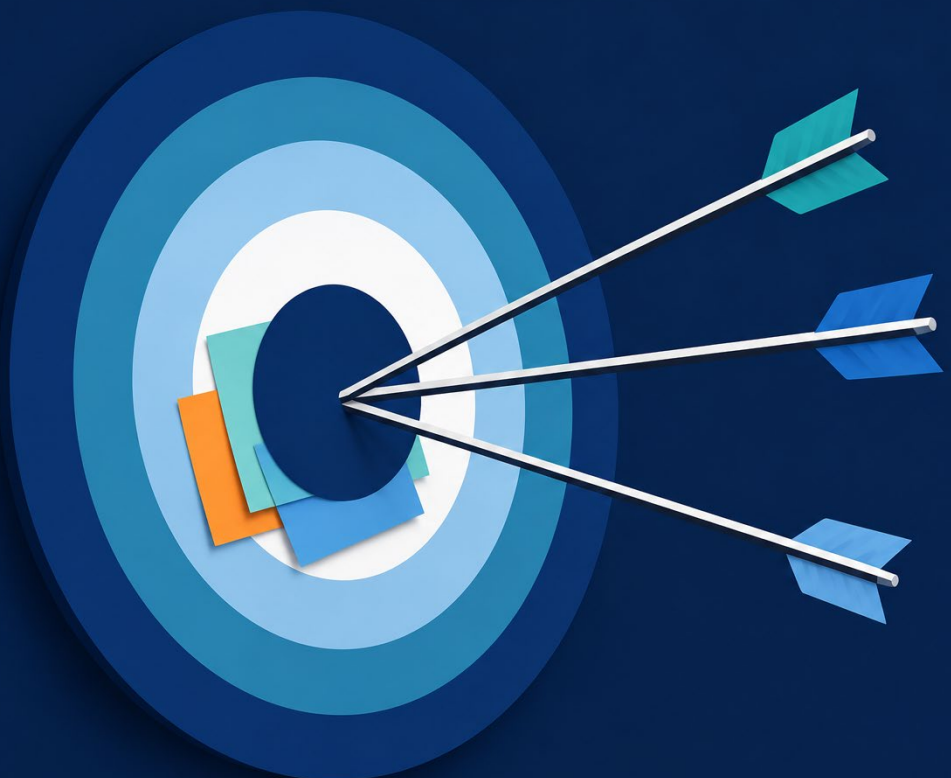




Table of Contents

Executive Summary..... 1

Overview..... 1

The Challenge 1

Momentum Perspective 2

Implications..... 4

Key Takeaways 4

About the Author 5

About Momentum 5

Executive Summary

Organizations today operate in an environment defined by unprecedented access to data. Dashboards, reporting tools, and analytics platforms provide leaders with more information than ever before. Despite this abundance, many organizations continue to struggle with ineffective decisions, misaligned strategies, and solutions that fail to deliver meaningful impact.

This paper presents the perspective that problem definition is the most critical and most frequently overlooked step in data-driven decision making. By prioritizing clarity upfront, organizations can better align their data, focus their analysis, and make decisions that lead to more effective and sustainable outcomes.

Overview

Data has become central to how organizations operate. From tracking customer behavior to measuring operational performance, organizations increasingly rely on data to inform decisions at every level. Advances in technology have made it easier than ever to collect, store, and analyze vast amounts of information.

While this shift toward data-driven decision making has created significant opportunities, it has also introduced new challenges. The emphasis on collecting and analyzing data has, in many cases, outpaced the discipline required to define what questions that data should be answering.

As a result, organizations often find themselves overwhelmed by information but lacking clarity. Metrics multiply, dashboards expand, and analysis becomes more complex, yet decision-making does not necessarily improve. In fact, the abundance of data can obscure what truly matters.

In this context, the issue is not whether organizations have enough data, but whether they are using the right data for the right purpose. Without a clearly defined problem, even the most sophisticated data analysis can lead to misleading or incomplete conclusions.

The Challenge

Organizations rarely fail due to a lack of data. Instead, they struggle because they are often solving the wrong problem. This challenge typically manifests in several consistent ways:

- **Problem Framing Misalignment:** Leaders and teams frequently begin with assumptions about what needs to be solved. Clients may request specific analyses, tools, or solutions without fully understanding the root cause of the issue they are experiencing. This misalignment means that effort is directed toward addressing symptoms rather than underlying problems.
- **Data Misapplication:** With large volumes of data available, it becomes easy to select metrics that support an initial assumption rather than challenge it. Teams may analyze what is readily available instead of what is most relevant. As a result, data is used to reinforce existing beliefs rather than to uncover meaningful insight.
- **Ineffective Solutions:** When the problem is not clearly defined, the solutions designed to address it are unlikely to succeed. Organizations may invest in new tools, processes, or initiatives that fail to create impact, not because they are inherently flawed, but because they were built to solve the wrong problem.
- **Decision Noise and Confusion:** An overabundance of data can create confusion rather than clarity. Leaders may struggle to identify which inputs matter most, leading to delayed decisions, conflicting interpretations, or misplaced confidence in incomplete information.

Across each of these challenges, the common thread is not the absence of data, but the absence of clear, intentional problem definition.

Momentum Perspective

At Momentum, a consistent pattern emerges across client engagements: organizations frequently begin with a proposed solution before fully understanding the problem they are trying to solve. As a result, one of the most critical early steps in any engagement is to reframe and clarify the problem itself. Rather than immediately analyzing available data or executing against a predefined request, Momentum prioritizes a structured approach centered on clarity:

1. **Define the Problem Clearly:** Establish a precise understanding of the issue at hand. This involves questioning initial assumptions, identifying desired outcomes, and distinguishing between symptoms and root causes. On even the smallest of contracts, Momentum takes this approach: we begin by defining the problem we need to solve. One contract in particular was a small engagement that focused on supporting operational activities. This same contract had very little staffing, making continuity of service the most

significant risk. Once that risk was identified we focused only on the information that would help us manage it effectively.

2. **Identify the Factors that Matter:** Determine which variables are truly relevant to the problem. Not all available data is useful for every decision, and focusing on the wrong inputs can lead to misleading conclusions. This shift in perspective changed the questions we asked. Instead of concentrating specifically on productivity measures on that particular contract, we evaluated factors that directly influence continuity and stability. For example, we examined cross-training coverage, onboarding progress, documentation maturity, vacation coverage plans, and knowledge transfer between team members. By identifying these as the factors most closely tied to the business problem, we were able to make more informed decisions about resource planning and risk mitigation.
3. **Align Data to the Decision:** Use data intentionally to inform the defined problem. Analysis is guided by purpose, ensuring that insights generated are directly applicable to the decision being made. This approach reflects a fundamental shift in thinking: data should support decision-making, not define it. By ensuring that the right question is being asked before analysis begins, we help organizations significantly improve the quality and effectiveness of their outcomes. In practice, this often requires revisiting and challenging the original request. Clients may initially seek answers to a specific question, but through structured problem definition it becomes clear that a different question, one more closely aligned with the true issue, needs to be addressed.

On that same contract, we needed to onboard an additional consultant to support the work. Rather than simply measuring whether work is getting completed, Momentum proposed a structured cross-training approach that would create redundancy across critical functions. We also partnered with the team to document operational workflows and establish standard procedures reducing institutional knowledge held by a single individual. These actions were driven not by an abundance of data but by a deliberate effort to identify the root problem and gather only the information necessary to solve it. As a result, the contract became more resilient, better positioned to handle staff absences and less vulnerable to the interruptions that often happen on small teams.

Momentum does not start with data in search of meaning. We start by defining the decisions that must be made, identifying the factors most likely to influence those decisions and then focusing on only the data necessary to evaluate those factors. In this way, we do not deliver outstanding service on a consultant-by-consultant basis, we deliver excellent service across an entire contract.

Implications

Recognizing problem definition as a critical step in decision-making has several important implications for organizations:

- **Leaders must challenge initial assumptions.** The first framing of a problem is not always the correct one. Taking time to validate and refine the problem can prevent significant downstream inefficiencies.
- **Data strategies should be decision-driven.** Data collection and analysis should be aligned to specific decisions, not performed indiscriminately. More data is valuable, but only when it is relevant.
- **Organizations must prioritize clarity over volume.** The goal is not to reduce data availability, but to improve focus. Clear prioritization of what matters leads to more actionable insights.
- **Problem definition should be iterative.** As new information emerges, organizations should revisit and refine their understanding of the problem to ensure continued alignment.
- **Effective decision-making requires discipline.** The ability to pause, question, and define before acting is a critical capability in a data-rich environment.

Key Takeaways

- Organizations do not suffer from a lack of data; they suffer from poorly defined problems.
- More data can improve decisions, but only when it is aligned to the right question.
- Misaligned problem definition leads to ineffective solutions, regardless of data quality.
- The most critical step in analysis is determining what problem is actually being solved.
- Data should inform decisions, but clarity should guide what data is used.

Organizations today operate in a world of big data. However, more data does not always mean better outcomes. Slowing down and fully defining the problem allows organizations to refocus on the data that matters and speed up as they solve problems.

About the Author

Connor Townson is a Junior Business Analyst at Momentum, Inc., where he supports organizations in improving decision-making, problem-solving, and operational effectiveness. His work focuses on helping clients bring clarity to complex challenges by aligning data, analysis, and strategy to the problems that matter most.

About Momentum

Momentum Inc. is a management and technology consulting firm focused on helping organizations move forward with clarity and confidence. We combine technology expertise with a people-first approach to deliver transformation that is practical, sustainable, and aligned to real business outcomes.

Our core service areas include:

- Management Consulting
- Process Improvement
- Product and Project Management
- Implementation Support

We partner with clients across public and private sector organizations to bring structure, clarity, and execution discipline to initiatives ranging from strategy through implementation.

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