Organizations usually analyze problems from the top down or the bottom up.

Both approaches are useful — but both have blind spots.

Over time I've found the most effective analysis happens in a collaboration between the two.

Where Real Analysis Happens

The Interaction Between Top-Down and Bottom-Up Thinking

Early in my career I attended a meeting about an enterprise system that was nearly ready to go live. The consulting firm leading the project was presenting the rollout. From the team's perspective, the system was essentially finished.

That's when I asked what I thought was a simple question:

> "How does the system handle lot control?"

The room went quiet.

The partner paused for a moment and finally declared defiantly, "That is not in the system."

For the plant I was working at this was not a minor detail. The business depended on tracking batches (lots) of chemicals through production, storage, and distribution. Without lot control, this system simply couldn't support our operations.

The giant binder of detailed requirements landed on the table with a resounding *thud*.

> "We already have *all* executive sign-offs on this!"

What followed was not a small correction. The project — an $18 million SAP implementation for a multi-billion-dollar company — was stopped in its tracks and substantially redesigned.

That moment — with less than a year and a half out of college — has stayed with me throughout my career.

Over the years I've encountered versions of that same dynamic in many different environments — ERP implementations and integrations, manufacturing systems, data architecture projects, and business process redesign efforts.

Organizations tend to approach project analysis from one of two directions.

Neither approach is wrong.

But each has blind spots.

Top-Down Analysis

Top-down analysis begins with strategy, (in the best cases).

Leaders define objectives, scope a solution, and move toward implementation through structured planning and requirements gathering. This approach brings clarity and alignment. Large projects necessarily require direction from the top in an effort to coordinate teams, funding, and timelines.

But top-down processes also create intrinsic momentum.

Once requirements are documented and approvals are granted, it becomes surprisingly difficult for operational realities to interrupt that plan. The system may look complete on paper while quietly missing something essential.

Bottom-Up Analysis

Bottom-up analysis starts from operations and its data.

Analysts examine the data, the processes, and the day-to-day mechanics of how work actually gets done. From this perspective, solutions grow organically through observation and iteration. This approach often reveals problems that strict top-down planning misses.

But it carries a different risk.

Analysts can become absorbed in the operational details of the system — tables, legacy app functionality, edge cases, transaction flows — until the original strategic objective fades from view. I sometimes think of this failure mode as the **Dungeon Problem**. The analyst descends deeply into the operational layers of the system, determined to understand everything before proposing a solution.

But once you're down there, it's hard to get back up. You become a brilliant cartographer of the **Dungeon** — but can never return to the surface with the map.

Where Real Analysis Happens

In practice, the most effective analysis emerges through the continuous exchange between these two perspectives.

Strategy provides direction.

Operational observation provides reality.

Each iteratively informs the other.

Over time, that interaction forms a feedback loop: insights from operations affirm or challenge strategic assumptions, while strategic intent shapes what the organization chooses to measure and improve upon.

Each cycle provides feedback — sometimes affirmation, sometimes correction — reinforcing what works and revealing what does not.

I've seen this dynamic produce remarkable results.

In one manufacturing environment, linking real-time plant-floor data with planning and financial systems directly transformed how decisions were made. Production leaders and operators could see operational performance as it happened, while finance and leadership gained visibility into the drivers behind cost and throughput.

The overall system did not appear in an instant, fully formed. It evolved incrementally — each step guided by both strategic objectives and operational discovery.

I've seen similar dynamics elsewhere.

At a leading global skincare company, the COO kicked off a major initiative this way:

"Here's what we need. Have at it — and let me know if you run into any trouble."

That clarity of direction, combined with the freedom to iterate, allowed the solution to grow organically — and rapidly — while staying well aligned with the company's strategic goals.

The Real Work of Analysis

Technology, methodologies, and tools change constantly. Over the decades I've watched waves of systems, platforms, and analytical techniques come and go. But the underlying challenge remains remarkably consistent.

Organizations struggle not because they lack data or intelligence, but because strategy and operations often drift apart.

Top-down thinking without operational insight risks elegant systems that don't work.

Bottom-up analysis without strategic guidance risks brilliant detail that leads nowhere or, at best, to a patchwork of (urgent) fixes.

The real work of analysis happens in the feedback between strategy and operations — where plans meet reality, and reality reshapes the plan.