SIMCEL



ONE MODEL, ONE TRUTH

BRIDGING THE GAP S&OP – FP&A

A structural architectural flaw is costing enterprises millions in planning overhead and margin precision. Discover the simulation-native architecture built to finally solve it.

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EXECUTIVE SUMMARY

Enterprise planning has a *structural* problem.

Most enterprises today run Integrated Business Planning with two disconnected categories of tools: **S&OP platforms** such as o9 Solutions, Kinaxis, Blue Yonder, and SAP IBP and **FP&A platforms** such as Anaplan, Adaptive Insights, and Oracle EPM for financial planning.

The result is two plans that must be manually reconciled over **2–3 week cycles**, producing 'integrated plans' that were never truly integrated.

This is not a process failure. The reconciliation cycle is the predictable outcome of a specific architectural choice, running two separate data models for one planning process. Two models cannot be made to agree without translation, and translation always loses something.

For organizations that have accepted this as the normal cost of doing planning, the business case for change is significant.

This paper examines:

- The anatomy of the reconciliation trap.
- The structural reasons why it cannot be solved within the current two-tool model.
- What a genuinely unified planning architecture makes possible.
- The business case for change and which path forward fits which organization.

$15–20M

A **2% improvement in inventory positioning** for a $500M pharmaceutical company translates to **$15–20M in working capital efficiency**.

$30–40M

A **3% improvement in margin** through better customer profitability management **adds $30–40M to annual EBITDA**.

INTRODUCTION

The Promise That Was…
…Not Kept

1.1 What IBP Was Supposed to Deliver

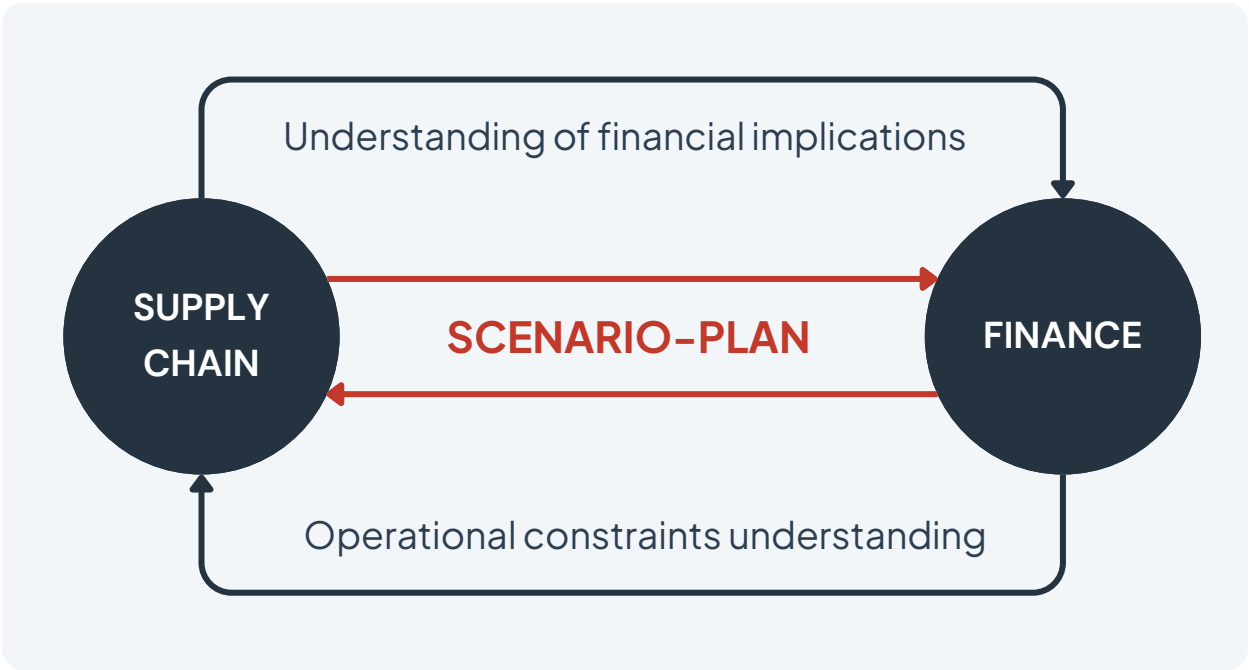
Integrated Business Planning made a straightforward promise: one cross-functional plan, aligned across demand, supply, and finance, that gives executive leadership a single version of business reality from which consequential decisions can be made with confidence.

A single operating plan approved by the executive team. One truth.

For organizations that achieved it, the results were transformative. Faster decisions, tighter financial control, less organizational friction between functions that had historically operated in silos.

Supply chain understood the financial implications of their decisions.
Finance understood the operational constraints behind their numbers.

Leadership could scenario-plan with confidence because all three functions were working from the same model.



1.2 What Most Organizations Actually Got

The enterprise planning technology landscape evolved along two parallel tracks that were never designed to converge.

S&OP platforms

produce volume plans: production schedules, inventory targets, allocation decisions, capacity utilization.

FP&A platforms

Produce financial plans: P&L projections, budget variance analysis, working capital forecasts.

For these plans to be genuinely integrated, the financial outputs must emerge directly from the operational decisions.

Instead, they are computed separately and then reconciled.

The result is not integration. It is coordination with extra steps and a structural tax that every organization running two tools pays every single month.

As one practitioner put it after years of running this process:

> We called it IBP. But we had two plans.
> We just got very good at reconciling them quickly.

1.3 Why this paper exists

This paper is not written to criticize the S&OP or FP&A platforms that currently underpin most enterprise planning operations.
Those platforms are mature, proven, and genuinely capable within the problems they were designed to solve.

This paper exists because the gap between them - the reconciliation overhead, the precision loss, the organizational friction - is increasingly recognized not as a process problem that better tools can fix, but as an architectural one that requires a different foundation.

The question this paper sets out to answer is whether the reconciliation trap is solvable within the current two-tool model - and why the evidence suggests it is not.

THE CORE PROBLEM

Anatomy of the reconciliation trap

2.1 Two Tools, Two Realities

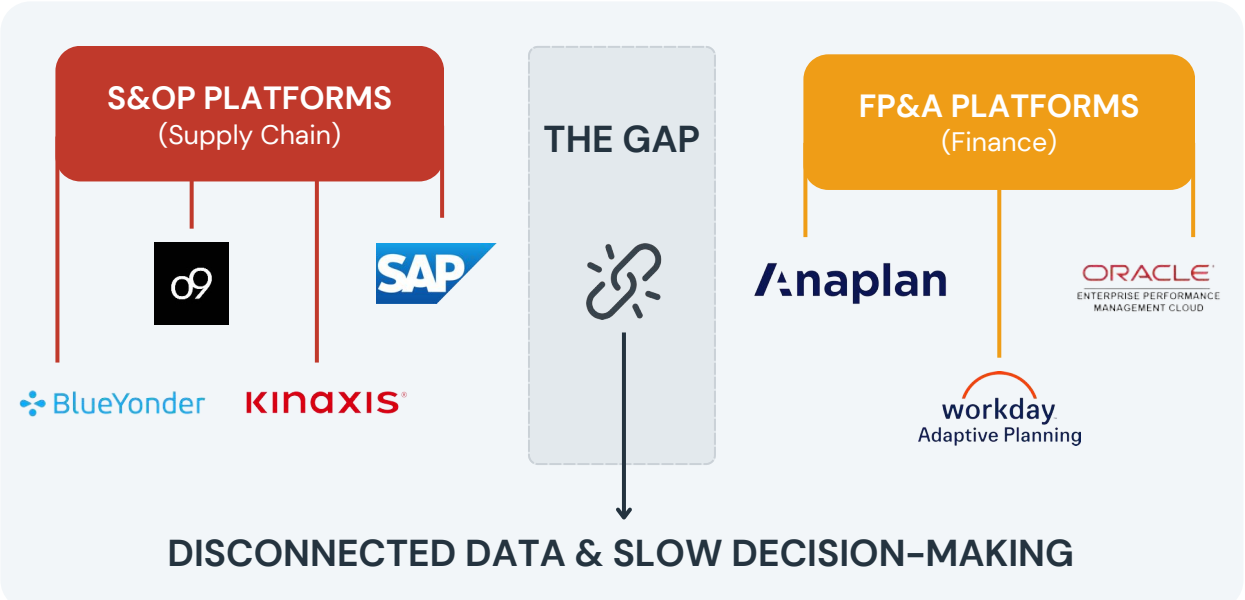
The structural problem is visible the moment you examine what each tool category was designed to compute.

S&OP platforms are built around mathematical optimization – finding the best allocation of constrained resources (production capacity, inventory, distribution networks) against a demand signal. They are exceptionally good at this.

The financial outputs are secondary: costs are applied as fixed coefficients to the volume decisions, and the resulting numbers are exported for FP&A tools to incorporate into the financial plan.

FP&A platforms are built around financial consolidation and P&L modeling. They are exceptionally good at that too. But the supply chain assumptions that drive the financial numbers are inputs, not modeled. The FP&A tool takes what the S&OP tool produces and builds a financial plan on top of it – but the two are not connected in real time. When operational reality changes, the S&OP plan updates. The financial plan does not update automatically. Someone has to reconcile the difference.

The diagram below captures the structural relationship between these two tool categories and the gap that exists between them.

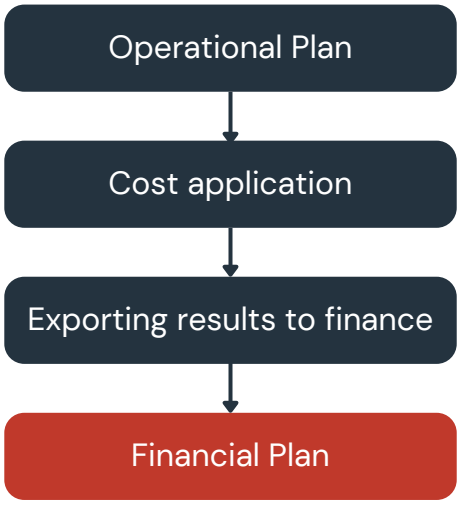


2.2 The architectural root cause

Supply planning drives costs in one direction only.
The operational plan is produced first; costs are applied to it; the result is exported to finance.
Finance builds its plan from that export.

When the operational plan changes, in response to demand shifts, supply disruptions, capacity constraints, and market conditions, the financial plan is no longer current.

The loop must be closed manually, every time, by people.



2.3 The Manual Reconciliation Cycle

The monthly reconciliation cycle is familiar to anyone who has participated in it. The S&OP team produces a volume plan. Finance incorporates it into the financial model.
The two outputs - operational targets and financial projections - do not match, because the cost assumptions applied in the S&OP tool differ from the cost structures maintained in the FP&A tool. The iteration begins and here's what could happen.

Case Scenario

For a **$1B revenue company,** the organizational cost of sustaining this process is significant and measurable:

15–20 FTEs
FP&A team members required

30%
Of that time spent on data reconciliation, not analysis

$150k avg
Fully loaded annual cost per FTE

8–12%
Typical forecast accuracy miss vs 4–6% achievable with integration

$2.25M – $3M

For a $1B company, the FP&A team required to sustain this process carries a fully loaded annual cost of $2.25–3M, with 30% of that capacity consumed by data reconciliation rather than strategic analysis. That is not a planning cost.
That is a structural tax on a broken architecture.

2.4 The Hidden Cost: Financial Precision You Are Not Getting

The reconciliation overhead is the visible cost. Most planning leaders are aware of it even if they have accepted it as unavoidable.

The less visible cost is that even when the reconciliation process is completed, when both plans are aligned, approved, and distributed ; the financial outputs are structurally imprecise in ways that matter to business decisions.

The root cause is in how costs are calculated.

S&OP platforms use cost coefficients.

Fixed per-unit costs for each activity.
Vietnam production costs $10.00 per unit. Transport from Vietnam to Singapore costs $0.80 per unit.

These are **linear assumption**s, the per-unit cost is the same whether you produce 50,000 units or 100,000 units.

In reality, cost is not linear.

Overhead absorption varies with production volume. When a factory runs at 70% capacity instead of 100%, the fixed overhead is spread across fewer units and the true unit cost is materially higher than the standard rate assumes.
When demand spikes and overtime is required, variable costs increase across the entire production run, not just the incremental units.

These dynamics are invisible in a cost-coefficient model. What are the measurable consequences?

$1M in margin	$677k	32% margin variance
Predicted by standard cost accounting	Delivered margin	When the actual operational dynamics were modeled with transaction-level precision

That had nothing to do with forecast error. It was an artifact of how costs were calculated.

Standard Cost vs Absorption Accounting

EXAMPLE

Vietnam factory with $400,000/month fixed overhead + $6/unit variable cost.

At 100,000 units:

Overhead/unit = $4.00
Total unit cost = $10.00
No variance

At 70,000 units:

Overhead/unit = $5.71
Total unit cost = $11.71
$120k under-absorption

The standard cost model saw the same $10/unit regardless of volume. The business delivered a 17% cost overrun that was architecturally invisible until it appeared in actuals.

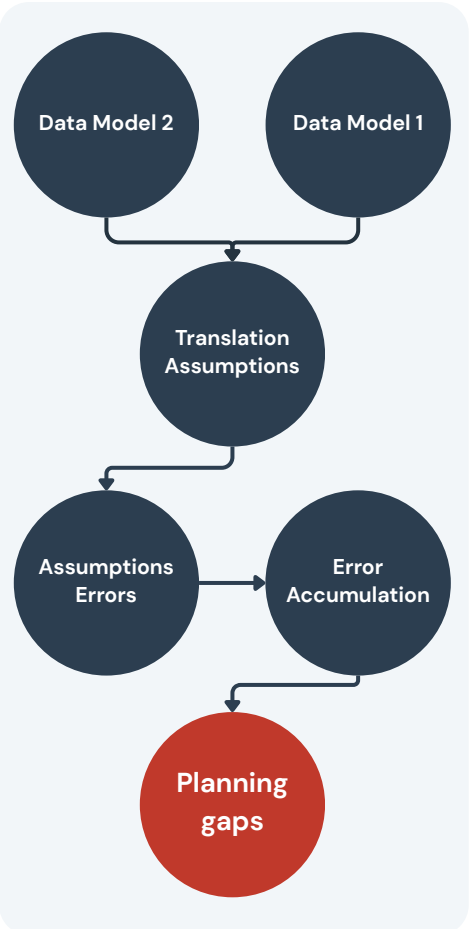
2.5 Why Process Fixes Do Not Work

The natural response to the reconciliation problem is a process response: faster cycles, dedicated reconciliation teams, joint S&OP and finance meetings, shared assumptions documents, more sophisticated Excel models to bridge the gap between tools.

Organizations invest significant time and talent in making this process work better.

None of it works sustainably. Not because the people are not good enough or the process is not disciplined enough, but because the problem is not process. It is architecture.

Two separate data models cannot be made to agree without translation. Translation requires assumptions. Assumptions introduce error. Error accumulates across the planning horizon.



By the time the plan reaches the execution layer, it has passed through enough translation steps that what was approved strategically is no longer what is being executed operationally.

Neither the finance team nor the supply chain team has full visibility into the gap until it shows up in variance reports.

This is the core finding of this paper, drawn directly from the architecture of the systems involved: **the two-tool problem is not a process failure. It is an architectural one.**

No process improvement built on top of two disconnected data models will eliminate the gap between them. It will manage the gap. It will minimize the cost of the gap. But it cannot close it, because **the gap is structural.**

WHAT THE SOLUTION REQUIRES

Five dimensions of architecture control

3.1 The Architectural Diagnostic

Understanding why the reconciliation trap is architectural requires understanding what underlying architecture actually determines in a planning system.

There are **five dimensions** where the architectural choice defines what is possible, and what is not, regardless of how sophisticated the process built on top of it becomes.

Dimension	What it determines	The diagnostic question for your organization
Planning granularity	Product families vs individual SKUs and customers	Can your system plan at SKU and customer level, or does it need to aggregate to make the math tractable?
Time horizons	Which planning levels the system handles natively	Does your IBP plan break down when it reaches weekly execution? Who is responsible for the gap?
Financial precision	How accurately costs and margins are projected	Does your P&L emerge from your operational plan - or is it built separately in a different tool afterward?
Integration scope	Whether demand, supply, and finance share one model	Do your demand, supply, and finance teams work from one model - or three?
AI potential	The ceiling for autonomous planning capabilities	Could your current architecture support autonomous planning agents, or is that structurally out of reach?

The diagnostic value of these five questions is that **they separate symptoms from causes.**

If your planning system cannot answer 'yes' to the financial precision question, then the architecture is the constraint, not the process.

Adding more finance analysts to the reconciliation cycle is treating the symptom.
Changing the architecture treats the cause.

For organizations with mature, separate S&OP and FP&A processes, stable cost structures, and monthly planning cycles where aggregation is acceptable, the current two-tool model has genuine merit. Leading vendors have refined this approach over 20+ years.

The goal of this paper is not to argue it should be replaced universally. It is to diagnose whether the gap it produces is the architectural constraint preventing the improvements that matter to your organization.

3.2 What a unified architecture must produce

If the two-tool gap is architectural in origin, the solution must also be architectural.

No process improvement, reconciliation tool, or faster planning cycle eliminates a structural incompatibility between two separate data models.

The diagnostic question is: what would a planning architecture need to produce, from a single run, for the financial outputs to be inherently consistent with the operational decisions?

The answer defines the requirement.
For the reconciliation trap to be structurally eliminated, not managed, not minimized, but eliminated; a unified architecture would need to produce all of the following from a single model:

A UNIFIED ARCHITECTURE MUST PRODUCE, FROM A SINGLE MODEL:

1. A volume plan by SKU, customer, and period
2. Capacity utilization by facility, production line, and shift
3. A working capital trajectory based on actual transaction flow and payment terms
4. A P&L projection calculated directly from the transaction-level operational decisions, not approximated from cost coefficients
5. A cash flow forecast reflecting actual collection and disbursement timing, not average assumptions

3.3 The architectural implication

The five requirements above are not aspirational. They are the minimum architectural specification for a planning system that genuinely eliminates the two-tool problem rather than managing it.

The question of whether specific planning architectures meet these requirements and why the answer varies depending on how a system is built, is a technical one.

Graph-based optimization systems and multi-paradigm simulation platforms represent two fundamentally different computational approaches to the same business problem.
Those differences have direct consequences for which of the five requirements each can meet natively, which it can approximate, and which it cannot meet at all.

Paper 2 in this series, examines both architectures in technical depth. It establishes where each genuinely excels and where each fails, and provides the decision framework an organization needs to assess whether its current architecture is the constraint or the solution.

For the purposes of this paper, the architectural case is sufficient: the two-tool problem is structural, the requirement for a genuine solution is clear, and the business case for getting the architecture right is significant and measurable.

THE BUSINESS CASE

What precision is actually worth

4.1 The Cost of Imprecision

For organizations that have been operating within the two-tool model for years, the accumulated cost of imprecision is often underestimated because it is diffuse. It shows up as variance in margin that cannot be fully explained. It appears as working capital surprises in months where the plan looked clean. It manifests as planning cycles that take three weeks when they should take three days.

When the architectural constraint is removed (when demand, supply, and finance operate within a single model) the business case becomes concrete and measurable.

Case Scenario - $500M pharmaceutical company.

2,000
SKUs under Management

50
Distribution centers

Inventory Positioning

2%
Improvement in Inventory Positioning

$15-20M
Working Capital efficiency

Customer Profitability Management

with better visibility into true cost-to-serve by customer

3% improvement in margin through better customer profitability management

$30-40M Adds to annual EBITDA

The planning system's architecture determines whether these improvements are achievable or remain aspirational.

A system that computes costs from standard coefficients cannot surface the SKU-level margin dynamics that drive inventory positioning decisions.

A system that reconciles demand and finance in a 2-week cycle cannot respond to the week-by-week working capital implications of promotional planning.

Beyond the financial precision argument, there is an organizational cost that is easier to overlook: when 30% of the FP&A team's time is consumed by data reconciliation rather than analysis, the strategic finance function that leadership is paying for is not the one they are getting. The analysts who should be modelling strategic scenarios, stress-testing assumptions, and surfacing margin risks are instead manually bridging the gap between two tools that should never have been separate.

Precision is not just a financial argument. It is an argument about what kind of planning organization an enterprise is able to build – and what quality of decision support it is able to provide to leadership.

CONCLUSION

The architectural choice

5.1 What This Means For Your Organization

The reconciliation trap is not inevitable. It is the predictable outcome of a specific architectural choice – running two tools for one planning process. Two data models, two computational approaches, two versions of business reality that must be manually aligned every month, indefinitely.

The organizations that have lived inside this model for a long time often cannot see it clearly anymore because the workarounds have become institutionalized. The reconciliation cycle is on the calendar. The joint meetings are scheduled. The people who do the manual bridging are skilled and experienced. The system functions, after a fashion.

But functioning is not the same as performing. And the question this paper poses is not whether the current model can be made to work better. It is whether the improvements that matter – financial precision, decision speed, organizational alignment, AI-enabled planning – are achievable within the current architecture, or whether they require a different foundation.

The evidence is structural. Two disconnected data models cannot produce one integrated truth without translation. Translation always loses something. The only architectural solution to the two-tool problem is a unified model – one where demand, supply, and finance are not reconciled after the fact, but computed together from the start.

5.2 Not Every Organization Needs the Same Answer

The architectural diagnosis does not produce a single prescription. Where an organization sits on the maturity spectrum, what legacy investments it has made, and what its strategic planning priorities are all shape what the right path forward looks like.

Organization Profile	Recommended Path	Why
Mature IBP with significant S&OP sunk investment	Add SIMCEL as financial precision and ITP layer	Additive ROI - no rip and replace required
Mid-market ($200M–$3B) without legacy S&OP investment	Unified SIMCEL platform from day one	No reconciliation overhead. One model, one truth.
Organization where AI/autonomous planning is on roadmap	SIMCEL as primary planning platform	Architecture chosen with AI ceiling in mind from the start

The honest assessment is that large enterprises with significant sunk investment in mature S&OP platforms have a real option: deploy a unified simulation layer alongside existing infrastructure to deliver financial precision and tactical planning capabilities that graph-based systems cannot provide, without requiring a wholesale platform replacement. The integration is clean and the return on investment is additive.

For mid-market organizations - particularly those in the $200M–$3B range that are building or rebuilding planning infrastructure - the case for a unified platform from the outset is more compelling. The two-tool tax begins on day one of a two-tool implementation. Starting with a unified architecture means never paying it.

The question is no longer whether the gap exists. Every organization running two tools already knows it does. The question is whether the gap is being managed or whether it is ready to be eliminated.

5.3 The Opening Question

The next time your planning cycle produces two numbers that do not agree, when S&OP has one answer and FP&A has another, ask:

Is the gap a reconciliation problem or an architecture one?

The answer will tell you everything about what fixing it actually requires.

For organizations ready to move beyond the diagnostic question to the architectural one : How multi-paradigm simulation eliminates the two-tool problem and what the technical foundations of a unified IBP platform look like, the next paper in this series examines both planning architectures in depth and establishes where each genuinely excels.

ABOUT THIS SERIES

One model, One truth

6.1 About the series

This paper is part of a five-paper series examining the architectural foundations of Integrated Business Planning and the implications for financial precision, operational fidelity, and AI-enabled decision intelligence.

PAPER 1 (THIS PAPER)

Escaping the IBP Reconciliation Trap

PAPER 2

Beyond the Knowledge Graph: The Shift from Static Optimization to Dynamic Simulation

PAPER 3

The Fidelity Problem: Why Strategic Plans Break Down in Tactical Execution

PAPER 4

The Hidden Cost of Standard Costs: The Financial Imprecision Your CFO Can't See

PAPER 5

The Path to Autonomous Planning: Why True AI Requires a Simulation-Native Foundation

6.2 About SIMCEL

When sales, supply chain, and finance plan in disconnected silos, strategy separates from execution, leading to slow responses, hidden profit leaks, and missed revenue.

SIMCEL solves this as an Enterprise SaaS platform that integrates demand, supply, and financial planning into a single simulation-based decision engine.
Instead of juggling static spreadsheets, leadership teams can test end-to-end business scenarios and see the exact financial impact from operational execution straight through to the full P&L.
Because SIMCEL simulates actual SKU flows to customers rather than relying on high-level averages, organizations can instantly evaluate critical trade-offs like revenue versus profit margins, or cash flow versus capacity.
Teams can run complex "what-if" scenarios, such as supplier failures, portfolio rationalizations, or sudden demand shifts, in under 60 seconds.

By providing one source of truth, SIMCEL eliminates version conflicts, reduces planning time by 50–75%, and drives a proven 2–20% EBIT gain across the Consumer Goods and Healthcare industries.

SIMCEL

ARE YOU READY TO BRIDGE THE GAP?

Stop managing the gap between your S&OP and FP&A plans. Experience how SIMCEL's unified simulation architecture can give your leadership team one model, one truth, and total financial precision.

BOOK YOUR DEMO

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