

# SUPPLY CHAIN ANALYTICS STAIRCASE: SIX STEPS TO ACHIEVING STRATEGIC OUTCOMES

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## Introduction

More than ever, supply chain executives are looking to drive outcomes typically focused on decreasing costs, improving quality, or increasing speed to customers. A main challenge in achieving outcomes is not having proper insights into the supply chain for taking proper actions to drive outcomes. Achieving results takes operational discipline and consistency that stems from using a data-driven operational approach.

The Supply Chain Analytics Staircase introduces a six-step framework for achieving desired outcomes independent of supply chain strategy.

TO ACHIEVE STRATEGIC OUTCOMES, SUPPLY CHAIN TEAMS MUST LEVERAGE A DATA-DRIVEN APPROACH. THE SUPPLY CHAIN ANALYTICS STAIRCASE INTRODUCES A SIX-STEP FRAMEWORK FOR ACHIEVING DESIRED OUTCOMES INDEPENDENT OF SUPPLY CHAIN STRATEGY.

# I. DATA

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The first step sounds trivial, but it is where we still see many companies stuck. Clients on the "Data" step are trying to determine; what data is needed, where it will come from, how to access it, and how to develop key performance metrics. For operational data, this typically involves data coming from order, warehouse, and transportation management systems to name a few.

In practice, this looks like a warehouse supervisor using the reporting tools packaged within each of these systems. Data is siloed, and visibility is limited to what persists in a single application. While this limited visibility can still be helpful, complete storytelling requires an operator to search for answers across multiple systems and teams. Such as, Warehouse manager

Clients that struggle with this step likely do not have a dedicated analytics team and should look to define a holistic data strategy. Which would comprise the organization structure, the intake and development processes, and the required technologies needed to provide a unified data structure.

# 3. ANALYTICS

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Clients on the "Analytics" step are building the analytics tools to understand how the business is performing. Supply Chain Analysts are likely publishing visuals and reports that inform operations teams about current and past performance. In this step, clients should be defining the metrics that best gauge performance and display those metrics visually or in regular reporting correctly. Common challenges in this step are; gaining alignment on the best metrics, visuals to evaluate performance, and knowing how to interpret the result values.

Clients that struggle with this step should ensure that data engineers have direct access to expert business operators. Therefore, ensuring that the data model developed accurately reflects real-world operations. Partner expert operators with data engineers and watch how that starts to unlock business value almost immediately.

# 2. STRUCTURE

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Clients on the "Structure" step have started to execute their data strategy. Likely have a team of data engineers and analysts working to acquire and make sense of the data across supply chain systems. The common challenge in this step is the amount of effort, expertise, and time to take transactional data and transform it into a cohesive, integrated set of meaningful analytics.

Clients that struggle with this step should be re-evaluating the business intelligence (BI) technologies that are hampering their team's ability to develop analytics faster. With many supply chain systems (e.g., warehouse management systems) leveraging cloud platforms, it's a great time to update to a cloud-based BI tech stack. Modern BI tools allow Clients to develop a standard data model that any data engineer or analyst can access.

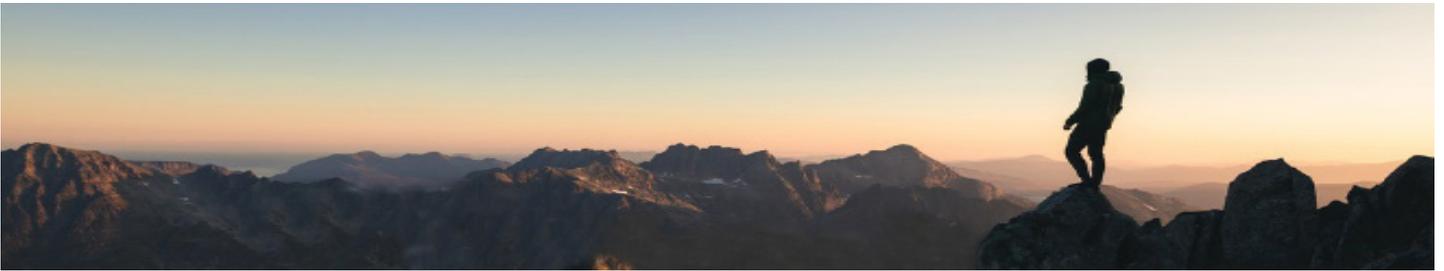


## 4. INSIGHTS

Clients on the "Insights" step are starting to identify patterns, including the cause and effect of various business factors. They can better predict the actions to enact when those patterns are detected. Insights from analyst to executive are becoming visible, and the operation is starting to get more predictable.

A typical pattern we see is when Clients see an increase in customer contact rate asking about the status of their order. Typically, the root cause is a sudden spike in demand sales driven by an overly successful promotional event. Unexpected order volume creates abnormally high backlog of work, which takes longer to process, since planned operational staffing was based on anticipated demand plan.

Clients struggling with this step are typically not using the right analytics tools to unlock operational insights. With Clients using various terminology, definitions, and ultimately engineered calculations, analytics results can confuse and often produce contradictory results. It is essential to leverage industry best practices running the analytics swat team and define the key metrics to evaluate.



## 5. ACTION

Clients on the "Actions" step have identified predictable patterns in their business that are supported by the analytics tools developed and related insights. When a pattern is detected, the analytics swat team takes action, and the results are measured via analytics tools. Modern BI tools should allow for operational alerts to be preset based on the patterns that were derived during the "Insights" step.

Going back to our example insight, Clients should set target order backlogs. Therefore, when an unexpected surge in demand sales occurs, alerts are sent to inform the team about the possibility of operational delays. By proactively alerting supply chain teams, Clients better react and attempt to increase staffing and inform the contact center teams to notify customers proactively.

Clients struggling with this step are typically not aligned on the causal relationships organizationally. If a data-driven approach is used, then the proper set of analytics tools are developed and validated. This allows the insights stemming from those tools to be trusted. Since business processes across the organization influence the supply chain, actions should be aligned cross-functionally and governed accordingly.

## 6. OUTCOMES

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Clients who reach the top of the staircase have taken the proper actions to drive business outcomes. Operational processes are more consistent, predictable, and are course-corrected automatically via analytics and governance. As desired outcomes change based on active strategies, each Supply Chain Analytics Staircase step is revisited and updated accordingly. Client teams spend less time troubleshooting daily issues and more time improving their lines of business.

## SUMMARY

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- Define a data strategy that encompasses the team, analytics development processes, and related modern BI technologies.
- Ensure that the BI technologies allow for developing a standard data model for universal access across engineering and operational teams.
- Partner expert operators with data engineers and watch how that starts to unlock business value almost immediately.
- Define an analytics SWAT team, combining operators and engineers, that uses analytics tools to detect cause and effect patterns during key operational events.
- Leverage best practices for how the analytics SWAT team operates and the analytics tools to use to evaluate operational performance.
- Trust the insights and align operational actions cross-functionally; empower the analytics SWAT team to make decisions.

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SOLUTIONS FOR YOUR  
OMNICHANNEL AND SUPPLY  
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