

Supply Chain: Resolving the Planning Crisis



"Strategy without tactics is the slowest route to victory. Tactics without strategy is the noise before defeat." - Sun Tzu

Supply chains are strategic. They are how companies create and deliver products, propositions and profit. Today's supply networks span the globe while the digital revolution is multiplying both opportunity and complexity. The stakes are high. Those organizations that grasp the bigger strategic picture will be the winners. Unfortunately, just at the crucial moment we see the attention of supply chain planners being diverted from strategy to tactics.

Why? Complexity and uncertainty continue to increase. Product portfolios are expanding to offer wider customer choice while product lifecycles become shorter. Meanwhile, channels are multiplying as e-commerce dominates all industries, making fulfillment significantly more challenging.

Complicating matters, demand signals in the digital world are held in big data. In order to plan, the supply chain planners have to look outside company walls and analyze the ecosystem that is driving the variability and volatility. Clearly, we need a new paradigm where planning and execution go beyond the enterprise and embrace the broader ecosystem. Fortunately, one is at hand. Let's begin by looking in more detail at the reality of supply chain planning today.



Theory and reality

In theory, organizations expect 75% of a planner's time to be spent on medium to long-term decisions. These align the shape of the supply chain to the market opportunity and company strategy. With paradigms changing so fast, strategic alignment becomes ever more crucial. For example, optimization is evolving from node to network. Planning and decision frequency is changing from periodic to real-time. And due to consumers' demands for personalization, the supply chain itself is evolving from one-size-fits-all to a market segment of one. Businesses must dynamically adjust strategies to optimize value, profitability and business goals.

However, the reality is that planners are spending three quarters of their time reacting. The result is inefficient use of planners' time and poorer outcomes as planners focus on short-term issues. There is less opportunity to analyze root causes and the effectiveness of past decisions. Inevitably, inventory rises, penalties are incurred and more time is spent expediting. This is not a satisfactory outcome for planners or the company.

There are other related issues, as well. For example, different planners may respond differently to the same business problem. The analysis of decisions may be held in offline tools while phone and email collaborations may be largely undocumented.

Something has to change.
Organizations expect 75% of a master planner's time to be spent on medium to long term decisions... the reality is that today they are spending three quarters of their time 'reacting.'

Solution A: Hire more planners

Today, the most common solution to digital complexity is to hire more planners Some organizations have increased their planning staff by as much as 50%. If there were a ready supply of planners, it would be, at best, a costly short-term solution. However, the supply of highly trained planners is finite and inelastic.

The reality is that new planners are typically less experienced and possess different profiles. A typical master planner will have decades of experience. The new hires may have had only a few years to learn their profession and have varied experience with technology and practice. Therefore, new planners will be both costly and less productive.

Clearly, adding more planners is not scalable and fails to confront the real issues or realize the new opportunities.

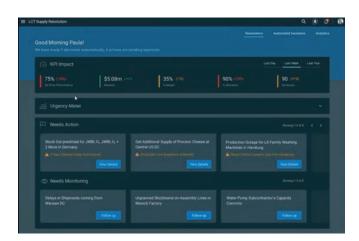
Solution B: A new paradigm: Ecosystem aware, enterprise planning and execution

Imagine a scenario where a digital control tower scans the digital ecosystem in real-time to create a digital twin of the world as it is, which is often not as it was planned to be. It continuously feeds this information into a collaborative planning environment with workflows to resolve supply issues and create optimum business outcomes. Planners will be aware of issues sooner. However, the unexpected will still happen. Production outages, demand surges, stockout and inbound shipment delays will continue to occur. Here is where enterprise planning advances will improve the everyday world of the planner even further.

A planner's typical day may currently look something like this. Last minute events and plans are downloaded into custom, often offline solutions like excel. The planner searches for exceptions such as shortages and delays to begin assessing their impact. This can be a complex and time-consuming task if production or other critical processes are affected and the downstream impact must be calculated. Scenarios may need to be run before best case decisions can be made. Of course, planners do not operate in isolation, and several stakeholders may need to collaborate in decision-making and execution. In fact, actions such as transfers or production swaps may even be made in other departments. The supply chain associate may be acting as a hub in a network. What is needed, therefore, is a system that absorbs the impacts, analyzes the situation and provides an integrated and collaborative self-learning environment.



Imagine a systematic planning environment that automatically provides intelligent exception-clustering at the start of every day, along with ranking, prioritization and end-to-end impact analysis. Moreover, what if that environment provided a stakeholder window that includes key co-decision makers into the process, and if it could self-learn by recording and analyzing the real-world impact of decisions? This would mean that for reoccurring scenarios, recommendations will be more accurate, and in some cases, even automated. This is all made possible by incorporating artificial intelligence (AI) and machine-learning (ML), planning, analytics and collaboration in a single, unified environment.



Supply Resolution

This combination of analytics, collaboration and intelligence is available with Luminate Planning's supply resolution capabilities. Think of it as a co-pilot for the planner. It engages the planner in an integrated planning and supply resolution environment.

The planner's re-imagined day looks like this. It begins with a personalized report. The system has already made some automatic decisions and their impact on metrics is recorded. The system prioritizes the more complex issues requiring the planner's attention based on business impact and will make resolution recommendations. The planner can drill into the impact, timing and history of each issue and run business outcome scenarios on supply resolution alternatives. This high level of integration eliminates the time spent extracting and reworking data in disparate and offline systems. Planners will no longer work in isolation. Collaboration capabilities enable consensus to be reached co-operatively and interactively with appropriate stakeholders.

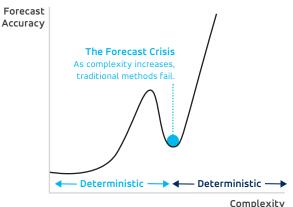
Use Case Details

Automated Resolution Decisions Simulation & Planner Decision Impact Analysis Disruptive Events Shipment Delay, Stock low/out Discussion Simulation & Planner Decision Collaboration for Decision Approval

The Planning Crisis Resolved

To align the organization with an increasingly dynamic market means enabling planners and analysts to spend most of their time on the medium to long-term issues that strategically position the supply chain. Resolving the planning crisis means accepting that there is a better way of working.

Demand: Segment Proliferation **Fulfillment:** Demand Complexity



Number of SKUSs, frequency segments...

Ironically, we can find the solution in the root cause. The tidal wave of data in the digital world pre-empted the crisis as traditional techniques failed to scale. However, in the sea of information, ML and AI reveal the underlying patterns that eluded previous methodologies. It is a probabilistic approach that predicts the future and brings the planning horizon forward so that reactive modes are translated into planned business optimization and opportunity realization.

By enveloping the planner in a collaborative process designed around daily workflow, he or she is freed from the detail and guided to the optimum results in a single and coherent end-to-end environment that integrates planning and execution.

As the digital world progresses, micro-segmentation and enterprise-wide orchestration will place the supply chain as the nerve center of corporate competitiveness. Supply resolution capabilities will free the master planner to strategically align the supply chain to the dynamic reality of the digital market, and to commercially exploit the opportunities of the digital world.

