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The nature of decision-making
in the context of advanced
planning systems



The past five years have been a period of significant learning for organizations navigating through changing consumer trends and global supply chain disruptions. There are numerous models for thinking about how to optimize operational plans, covering the broad scope that is “supply chain.” At its most fundamental level, however, value creation and destruction tend to hinge on two critical factors:

 **The quality of the decisions that you make
How well you can execute on those decisions**

This applies in both the up-front planning context and in response to deviations in the market or supply chain. In this ever-evolving environment, organizations that can identify the decisions that drive the most value for their business and wrap that decision-making with the right support, in terms of people, process, data, and technology, are putting themselves in a position where they can maximize their potential.

Advanced planning systems (APS) can represent a significant step forward in the quality of decisions that organizations make. However, too often the focus is on the delivery of the capability (e.g., demand planning, inventory planning) as opposed to maintaining a focus on the decisions that the capability supports. This can mean that even after the successful implementation of the technology, the actual value-driving decisions are still only partially supported.

In this article, we discuss the expanding value of planners in a volatile business environment, the macro and micro aspects of decisions, and the importance of using a decision-based approach when undertaking an APS implementation.

The value of planners

As the supply chain management landscape continues to evolve, the role of planners is undergoing a significant transformation. Traditionally, planners have been caught in a cycle of constant expediting and firefighting, which often detracts from their ability to focus on strategic, value-creating decisions. It is necessary, therefore, that process and technology are designed with “planner decisions” at the forefront, so that they would be able to shift their focus away from day-to-day operational challenges and toward more strategic decision-making. An APS solution would be a key enabler to ensure that planners have all the right information required to make decisions that drive value for the business.

This shift not only enhances the efficiency of their roles but also increases their overall value to the organization. By easing the time spent on transactional activities, planners can concentrate on strategic initiatives that drive business growth and innovation. As planners transition to this more strategic role, they find greater job satisfaction and engagement, which in turn can lead to higher retention rates.

When planners are empowered to focus on strategic decisions, they contribute more significantly to their organizations, bringing enhanced value and insights. This not only benefits the organization but also enriches the planners’ professional experience, making their roles more fulfilling and impactful. As a result, planners who can operate in this environment tend to have greater passion for their work, leading to a more motivated and committed workforce.

Ultimately, the value of planners is magnified when they are freed from the constraints of constant firefighting and can instead dedicate their efforts to strategic planning and decision-making. This not only can enhance their job satisfaction but also can strengthen their contribution to the organization’s success. As we continue to explore the decision-based approach, it becomes clear that empowering planners to focus on strategic decisions is an important factor in unlocking their full potential and driving sustainable growth.



How planners and businesses make decisions

Every organization creates several business plans, such as merchandising, demand, replenishment, and inventory plans. These plans are the mechanism used to communicate the decisions we make. While every business is unique, there are a finite number of decisions that are made in each of these domains on a periodic basis. Furthermore, some of these decisions are common to almost all organizations (e.g., how much inventory should I carry to “buffer” the variability in my supply chain), while some of them are very specific to a particular industry (e.g., in retail, what store clustering will best orient your product assortment to your localized customer profiles, while in port operations you may consider the optimal timing of major equipment maintenance to balance your production schedule with equipment breakdown risk).

Each of these decisions can be broken down into a layered “stack” of core decision components (e.g., required data, contextual models, forward-looking projections). Whether it is a human planner, a machine/software program, or a combination of both making the decision, these core components are present.

The implementation of an APS represents the opportunity to automate (among other things) much of the low-level decision-making, allowing planners to focus their effort where it delivers the most value. Because of the inherent variability in a real-world business (i.e., you cannot systematize every aspect of an organization), there will always be a spectrum of support that an APS tool can provide. We think about decision support in three categories:



Automated:

Decisions that are wholly contained within the planning system (driven by high confidence in the “engine” making the right decision).



Planner reviewed:

Decisions made by the APS engine that require validation and acceptance by planners, based on a review of factors external to the system (medium confidence of engine making the right decision on its own).



APS influenced, manually driven:

Decisions that are supported by APS outputs, but are wholly not included within the planning system due to low confidence in the planning engine making the right decision, the right system capability not being available, or (most often) that the information/data required is not available at the right level of quality.



So, given that we know decision-making drives value, and there is a spectrum of influence that an APS tool can have depending on the decision, how should we structure an APS implementation so that the technology doesn't distract from the true value lever?

Thinking about APS implementations differently

Traditionally, APS implementations focus on how to design and deliver a set of capabilities (think demand planning, supply planning, merchandise financial planning) with the expectation that the delivery of the capability will inherently drive value. This is true to an extent; however, as we introduced in the previous section, there are decisions that may be missed because they fall outside the four walls of the APS tool. Additionally, there is a large set of decisions that requires the computational power of a planning system and the business knowledge and insights of a human planner. How well this decision support is designed in the APS platform has a direct impact on how quickly, easily, and effectively the planner can make value-driving decisions for the business.

Instead of focusing on technology capabilities only, Deloitte's decision-based approach (DBA) shifts the focus to decisions, whether fully contained in a planning tool or not. The DBA catalogs your key business decisions, identifies those that deliver the highest value based on your supply chain and business nuances, and then shapes the APS design and implementation to sequence for early value and maximize the return on your investment.

This is the first article in a series where we will explore further our decision-based approach, the different types of decisions an organization makes, the fundamental building blocks of decisions, and the path to automation.

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