

Regain Control of Order Fulfillment Processes with Decision Intelligence

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Overview: An Unprecedented Pace of Change

Today, businesses are facing demand volatility and supply challenges at a level never seen before. Despite decades spent optimizing processes, designing organizations, and implementing better and faster solutions, this volatility continues to grow as more complexity, data, and dimensions are added into the mix.

Four distinct trends are converging to drive this volatility:

- Buyers expect more personalized, responsive choices. Although the trust associated with established global brands remains powerful, we are entering a new era of microbrands. An agile “long tail” serves the last mile with diverse offerings that can adapt quickly to changing tastes and preferences in diverse market segments. Companies must find a way to operate at scale, with agility, in this new environment.
- Current supply chains have been built in an era of globalization, free trade, and lean manufacturing. The increasing number of worldwide supply chain disruptions over the past decade—climate change and natural disasters, the global COVID-19 pandemic, trade wars, and the war in Ukraine, to name but a few—have exposed the fragility of these systems. Companies are rethinking foundational assumptions about how they plan, forecast, and operate their supply chains.
- Data is the lifeblood of a modern business, enabling companies to analyze behavior and respond to these changes. But in established global organizations, this valuable resource is locked away in legacy computer systems and outdated business processes, making it difficult or impossible to access data in a timely manner. Digital native companies entering markets can challenge incumbents who don’t have to wrestle with these constraints.
- While the speed and volume of data are growing rapidly, the organization’s institutional knowledge is in decline. Longstanding employees are retiring, depriving companies of years of experience and a wealth of historical knowledge. Those employees are being replaced by younger workers who rarely stay in the same role for more than a few years at a time. A new mechanism is needed to retain and apply organizational knowledge.

These challenges cannot be resolved simply by streamlining your existing systems with the hope that they will deliver the right answers for this new normal. In complex, multipolar global networks, identifying the right process adjustments to deal with these types of challenges is difficult. And, while your organization still needs its systems of record, in many cases those systems are not fast or flexible enough to sustain the real-time data analysis and responsiveness that today’s economy demands.

In order to fulfill demand at the level that customers expect, you need to process more data than ever before and act on decisions at an unprecedented pace, all while balancing your complex supply chain.

Decision Intelligence allows you to leverage the power of integrated internal and external data to achieve business agility. This white paper details how you can overcome market volatility by gaining the ability to make decisions in real time; augment and automate decision-making processes; and recalibrate your business priorities with full visibility of the outcomes when market changes occur.

New Technologies for New Challenges

“Customer service” and “customer-centric supply chains” have been among the hottest trends and focuses for businesses over the last few decades. We have seen a lot of effort to bring structure and discipline into order management operations: shared services, outsourcing, collaboration platforms, and process automation, in addition to process improvements like available-to-promise (ATP), product allocation, backorder processing, and product substitution. While these efforts have yielded great results in terms of reduced costs, shorter cycle times, and greater cycle speed, many companies are still chasing the dream of fully responsive, customer-oriented supply chains and order fulfillment operations.

The world is not what it was 20 years ago. Today, we are inundated with demand and supply volatility; more data and faster information flows than we can process; and more disruptions to local, regional, and global supply chains due to the ecological, economic, and geopolitical challenges mentioned above.

The issues caused by COVID-19 were at their highest in 2021 across markets, but 2022 has seen them continue to impact supply chains². According to the International Monetary Fund, suppliers’ delivery times in the US and EU have slowed considerably, resulting in more backlogs and bottlenecks.

In addition, the rapid growth of online commerce and the creation of omnichannel supply chains also resulted in increased transactional volumes. As a result, manual review, approval, release, or correction steps taken in each transaction are now presenting more significant bottlenecks than ever before.

Simply put: human beings cannot keep up with the volume, complexity, and pace of decision making required for success in today’s world.

The Changing Realities of Work

This new environment demands changes to the way we work. First and foremost among these changes is increasing the pace of decision making. Only with faster, data-driven decision-making processes can your business support a continuous focus on achieving objectives while also (A) maximizing customer satisfaction and (B) allowing the smaller number of experienced employees in today’s workforce to focus on the most difficult issues.

Also, as noted above, we also face the increasingly urgent challenge of finding and retaining skilled and experienced people to provide actionable insights—often replacing more experienced decision makers who have moved on from those roles.

Moreover, the increasing complexity of business operations in the digital world increases our dependency on people, yet talent is in short supply. McKinsey’s survey of global supply chain leaders shows that supply chain digitization increases the need for digital skills—but only 1 percent of companies report having sufficient talent: “99 percent of respondents to that survey said they need more in-house digital supply chain talent to support their current and planned digitization efforts, a tenfold increase on the previous year.”

Common Order Management Operations Challenges

In today's business environment, team members are presented with an ever-increasing amount of information and the need for decisions to be made rapidly based on that information. Unfortunately, your order management team may lack the time, resources, and capacity to model different scenarios and make the best decisions to satisfy multiple stakeholders quickly.

How can you improve the process for customer service managers and their team members, allowing them to start focusing on high-priority fulfillment decisions with the reassurance that there is no backlog of other issues piling up at the same time?

Also, how do you ensure that changes in other parts of the organization are being fully considered, thus avoiding (or minimizing) issues that impact on-time delivery?

Typically, your ERP system(s) will provide the integration and information needed within standard, defined processes. But there are internal challenges that need to be considered which are not supported.

Those scenarios can include:

- How to fulfill orders when a promotion campaign generates risks of shortages
- Which strategy to use to (re)allocate lower quantities of available stock to open customer orders—and, how to record these decisions so that they can be considered next time
- How to deal with unplanned maintenance downtimes, production yield issues, swings in product costing, or a targeted change in the product mix that impacts your order management process or strategy

Other factors that are equally important to the customer service manager include:

- How to reschedule transportation loads to ensure orders can be fulfilled
- How to dynamically adjust transportation planning and schedules to adhere to (or beat) emissions targets
- How to run scenarios to achieve targeted service levels that take into account driver shortages, container shortages, or customs delays
- How to determine what external information from logistics providers or platforms is available, and how to integrate that information into a transactional ERP system

Decision Intelligence vs. Business Intelligence

Decision Intelligence is the solution to these changing realities, and going forward it will be key to addressing the types of challenges outlined above. Decision Intelligence allows the digitization of business processes beyond simple process automation or data mining. It enables your business to move from a paradigm of people making decisions with the support of machines to an era of machines making decisions guided by people.

In addition, Decision Intelligence makes it possible to address order fulfillment challenges rapidly, at scale. Traditional business intelligence focuses on analyzing past performance, whereas with Decision Intelligence your organization draws on past and present data, in real time, to make better decisions today ... and, to digitize, augment, and automate future decision-making processes.

Many organizations have discovered master data quality and consistency issues that have prevented them from achieving the results they expected with traditional BI tools and processes—specifically, a lack of integrated information and insight, and blind spots in existing data analytics capabilities. Today, companies require an all-in-one, comprehensive solution that closes the loop, going beyond surface-level data and analytics to execute decisions by writing back to enterprise systems and data sources.

How Aera Decision Cloud™ Delivers Agility in Order Management

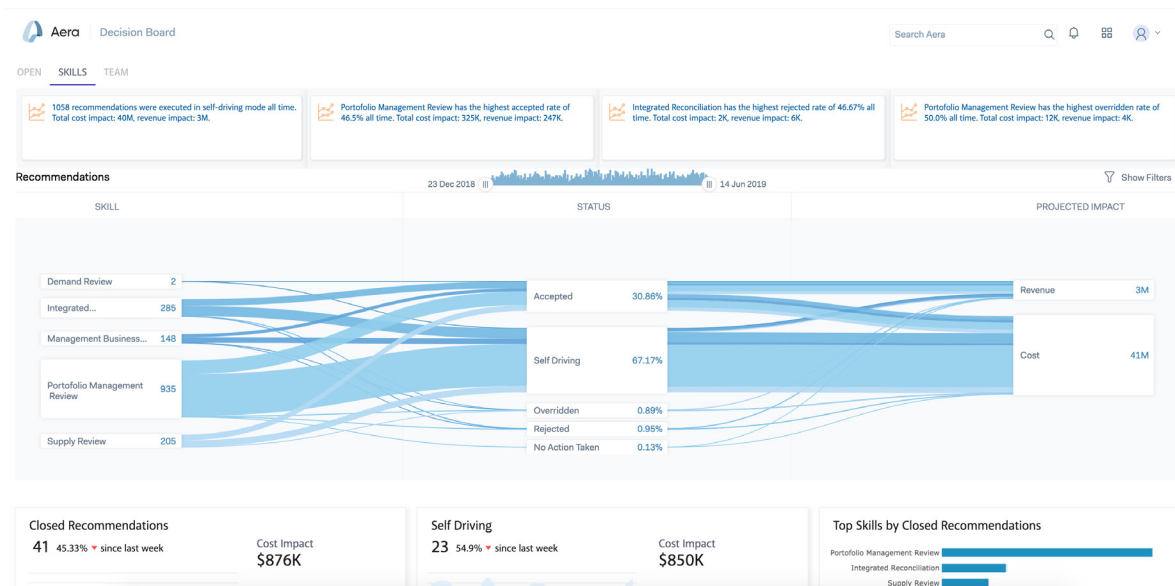
Achieving the full benefits of Decision Intelligence requires orchestration across four key areas and a technology platform that tightly integrates them:

- **Data** – The ability to extract and harmonize billions of transactions from existing and future enterprise systems and external data sources, creating an actionable, multi-attribute, abstract, transactional data fabric
- **Intelligence** – The ability to automatically observe, sense, analyze, and predict the outcomes of decisions by applying a range of advanced techniques, including optimization, data modeling, and artificial intelligence (AI)
- **Automation** – The ability to model the dynamic cognitive processes of human decision making, not only providing users with transparent, explainable recommendations, but also allowing them to create automation policies and rules
- **Engagement** – A transparent user experience that provides full visibility into the data and intelligence behind every recommendation, down to the transaction level

Aera Decision Cloud™ gives you the power to regain control of your order fulfillment processes with Decision Intelligence. Aera Decision Cloud goes beyond simple reports and KPIs, giving high-level recommendations of actions that optimize business objectives against complex, interrelated constraints and real-time data. It becomes a virtual member of your team, acting like a trained digital analyst – delivering well-researched and informed business recommendations, and taking action autonomously once a decision has been made. Aera learns from every decision and its outcome, thus improving future recommendations.

This platform integrates the four pillars of Decision Intelligence and allows you the capability to quickly address many order fulfillment challenges.

In addition, Skills™ enhance Aera Decision Cloud to address business decision flows for specific use cases and domains, including order fulfillment. Finally, Aera provides auditable and detailed reporting and evaluation of decision making over time through the Aera Decision Board, with seamless user engagement across desktop, mobile, and voice.



The **Aera Order Skillset** gives your team the ability to improve customer experience by helping you set the right expectations for order fulfillment, while navigating the constant fluctuations in supply and demand. This Skillset provides solutions to the complex challenges of managing order fulfillment today. Your team gains the ability to meet the expectations of On-Time In-Full (OTIF) delivery and higher customer service levels, while reducing uncertainty around ATP dates and exception management.

Also, the Order Skillset is designed to overcome the challenges of traditional order management approaches that prevent you from having a full view of your business: disparate data sources that prevent the calculation of accurate ATP dates; SKU proliferation creating negative impacts on OTIF; and increased customer expectations for consumer-like experiences and greater personalization.

With the Order Skillset, Aera automates data processing, dynamic adjustment of ATP calculations, and exception management. It leverages machine learning techniques to predict the risk of orders not being fulfilled and monitors your ability to meet commitments.

Finally, Aera predicts supply and demand events that may impact your customer delivery requirements and recommends corrective actions to address them. In doing so, Aera provides end-to-end visibility of demand and supply across your network.

Aera Decision Cloud and Order Fulfillment



Conclusion

At this critical moment, your business faces the challenge of how to access meaningful information for order fulfillment operations. Whether it's early warning of a storm that could affect your deliveries, an alert that a popular new product is about to go out of stock, or a sudden downtrend in sales in the final month of what you expected to be a strong quarter, your teams need to be able to take action rapidly and achieve better results.

Because of these evolving needs, order management has outgrown traditional software solutions and isolated legacy systems. You need an agile and flexible solution that augments customer service instead of overwhelming it with complex configurations and difficult-to-comprehend results.

Decision Intelligence, delivered by Aera Decision Cloud, enables you to keep your promises to customers and gain an agility advantage in a rapidly changing marketplace. You will gain access to simplified end-to-end management of data science, processes, and engagement; faster time to value; a scalable operating system built on cloud-native technology; and optimized economics through a single platform for Decision Intelligence.

About the Company

Aera Technology, the Decision Intelligence company, empowers global enterprises to make smarter, faster decisions. Its platform for AI decision automation, Aera Decision Cloud™, seamlessly integrates with existing systems and data sources to automate and scale decision making with accuracy and speed. Known for its proven, exceptional performance and value generation, Aera is the trusted choice of market leaders in consumer products, life sciences, chemicals and industrial, technology, and more. Partnering with Aera, enterprises are building more sustainable, intelligent, and efficient organizations. Visit aeratechnology.com.

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