Analyst Report

Beyond ERP: How Logility Extends the Value of Supply Chain Planning by Supporting the Entire Enterprise

Joshua Greenbaum
Enterprise Applications Consulting
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Introduction: Crisis Favors the Prepared Enterprise

Back in 2006, long before the supply shortages of the COVID-19 economy and the sight of a mega-cargo ship blocking the Suez Canal made "supply chain" a household term, the idea that modern supply chain planning and management systems were critical to the overall success of a manufacturing or distribution company was seen as an almost radical idea. An article entitled *Supply Chain Enterprise Systems: The Silver Bullet?,* published by the Wharton School at the University of Pennsylvania, challenged conventional thinking about the relative value of modern enterprise software systems. In particular, the article cited an earlier research report in which the authors "found that *with the exception of SCM systems,* the enterprise systems [ERP, CRM, HRMS] simply do not 'positively affect shareholder value and operating performance.' "

Supply chain systems can positively impact value and performance, while ERP and other enterprise systems do not? The statement may have seemed a little hyperbolic at the beginning of the century, but it's become more germane with each passing year. ERP systems are increasingly important systems of record that, nonetheless, have become less directly relevant to overall company success with the passage of time. It's no longer enough to run an efficient ERP system in order to navigate the complexities of the global economy. Something more is needed, and that something is planning and executing a supply chain system that can translate the complexities of supply and demand and support collaboration in ways ERP simply isn't designed for.

That supply chain "exception" is even more relevant, and more essential for thriving in the post-COVID economy, than ever before. For many companies with advanced supply chain planning and management systems, the challenges in 2020 of disrupted supply and distribution chains, changes in consumer behavior, and myriad other crises – ice storms, political unrest, workforce disruptions, among others – became opportunities for supply chain planning and execution excellence.

Needless to say, many companies did not thrive during this difficult time. But a common thread unites those manufacturing and distribution companies that did make the best of a very difficult year: those companies were able to use the intelligence in their supply chains to unite the entire enterprise towards the goal of surviving and even prospering during the global crisis. The supply chain professionals who enabled these efforts were able to succeed because they broke down silos and engaged the entire extended enterprise – internal lines of business such as finance, operations, sales, and support as well as external partners and even customers – in ensuring that the flow of supplies and finished goods continued under truly extraordinary circumstances. It's a collaborative role ERP systems were never designed to fulfill.

This report is the story of how the customers of Logility, Inc. were able to use their Logility software and analytics to unleash the power of enterprise-wide collaboration and yield extraordinary success despite extraordinary obstacles. While these companies were in sectors that did relatively well despite the crisis, it's also true that, as the saying goes, "luck favors the prepared mind." Or, as this report will show, luck favors the Logility-driven enterprise.

Supply Chain Intelligence Isn't Just for Supply Chain Professionals Anymore

The importance of supply chain planning and intelligence isn't new to the professionals who've labored in the field for many years. Nor are the limits of ERP systems. The demands of just-in-time manufacturing, the need to reduce inventory costs, the complexities – and the ethics – of sourcing have all been front and center in the profession for years. Also front and center has been the need for extensive collaboration inside and outside the four walls of the enterprise, something ERP systems were never designed to support. But as trends towards greater consumer responsiveness, customer service, and the globalization of demand and supply have become the core of strategic business thinking, the expansion of the use of supply chain planning and intelligence has grown exponentially across the rest of the enterprise.

The changes on the demand and supply side of the enterprise have been both aided and made more complex by the arrival of new technologies that significantly improved both the customers' buying experiences as well as the experience of the workforce dedicated to supporting those customers. The setting of expectations was perhaps the most salient aspect to this revolution: the consumer and the business buyer are increasingly expecting a customer experience from enterprise systems that are based on browser and mobile phone usage patterns, not older client/server GUI modes. This need for an "instantaneous" and high-touch commercial experience has driven the concept behind digital transformation across the entire global economy.

That push towards an enhanced customer experience has driven a reassessment of the role of the back-end systems that support the supply chain, and ultimately the customer. That reassessment has made it clear that ERP systems aren't able to sit at the center of all this change, particularly due to the need for extensive collaboration. That's a role better suited to supply chain planning and execution systems. While the supply chain practitioner's role in ensuring that products arrive successfully in the hands or on the loading docks of the customer hasn't changed all that much, the ability to ensure that this process works successfully has meant the growing involvement of myriad other stakeholders in other lines of business. Indeed, taking a holistic approach to customer satisfaction in the new economy means supporting the ability of supply chain leaders to involve parts of the organization that previously had no direct interest, much less visibility, into how demand, sales and operations planning drive company success. ERP still has a seat at the table, but it's only one of the components of a successful supply chain strategy.

As the trend toward digital transformation began to consume the global economy in the last decade, this expansion of the need for supply chain intelligence became a key component in company success. A report written in 2018 by the supply chain experts at the University of Tennessee's Haslam College of Business highlighted this need for a more holistic approach inside the enterprise.

> *...some supply chain organizations collaborate with a strategic external partner more effectively than with internal partners (other supply chain disciplines or business functions). Yet the spirit and value-creation focus of collaboration needs to be internal as well as external. Misaligned functional silos cause waste and lost value in many firms.*
>
> (2018-05-End-to-End-Supply-Chain-Collaboration-Best-Practices.pdf(utk.edu))

As we shall see, the ability of Logility's customers to use their software and analytics to create a collaborative environment between supply chain professionals and their counterparts across the enterprise allowed these companies to successfully navigate the treacherous financial waters of 2020 and thrive despite the challenges.

Customer stories: Collaboration and Trust are the Key to Success

Enterprise Applications Consulting (EAC) interviewed Logility's customers with the goal of understanding how they are utilizing Logility's digital supply chain platform in order to meet their planning and execution needs. In addition to highlighting the fact that ERP systems are not designed for this kind of complex collaboration, these interviews showcased how Logility can combine data from disparate sources to undertake complex scenario planning that can drive an entire company's response to the kind of disruptions that the pandemic economy caused. Beneath this lies the ability to generate a "single version of the truth" that can be disseminated broadly across the company.

One of the key components of Logility's effectiveness is its accuracy. That accuracy in turn created a tremendous amount of trust, both inside and outside the enterprise, that important and often costly or risky decisions could be made based on outputs from Logility. This trust lies at the heart of the effectiveness of Logility in solving complex problems that demand collaboration across traditional enterprise silos.

Tillamook County Creamery Association

Tillamook County Creamery Association (TCCA), a producer of high-quality dairy products based in Tillamook County, OR, has been on a quest to drive greater efficiency into its operations for the better part of 10 years. That quest received a new urgency as the impact of the pandemic started to settle in, Elaine Videau, Director of Planning at TCCA, told EAC. Supplies were being disrupted and capacity constrained at a time when products like ice cream started taking on a new role as a quarantine comfort food. "We grew ice cream by 45 percent, and we didn't initially have the capacity," said Videau.

Logility had already been playing an important role at the company for a number of years, helping TCCA support significant improvements in its operations. Savings in reducing waste and obsolescence had reached over $4 million per year. Forecast accuracy had also been improving significantly, up 25 percent from previous levels. "One of the goals (of using Logility) was to drive efficiency. It affects every area of the company," Videau added.

The shift to using Logility for supply chain planning started several years ago when the company sought to upgrade its ERP systems and modernize its spreadsheet-based planning processes. Both the incumbent ERP vendor and the vendor that ultimately replaced TCCA's ERP systems claimed that the company's planning requirements could be met by their respective ERP systems. The vendors were invited to demonstrate their capabilities, and "we proved that ERP is a static tool," Videau explained. Logility was tapped instead for this critical role.

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>
> ***Elaine Videau, Tillamook County Creamery Association***

Fast forward to the spring of 2020, and the pandemic economy's complications proved to be a trial by fire for TCCA's supply chain team, one that Logility was able to help surmount. "We were running scenarios on how we can do more with less," Videau said. "We were creating something out of nothing every day." The resulting efficiencies meant that the company has been able to shift to carrying only seven to 13 days of inventory, down from six to eight weeks previously.

One of the key elements in the success of Logility at TCCA was the ability to use the information in the supply chain system to rally the entire company towards the goal of meeting increased demand while juggling a supply chain complicated by the pandemic. This meant working closely with operations, finance, sales, and other key stakeholders to build trust for the analytics that Logility produced. "Not only did we get control over inventory by increasing visibility," Videau said, "we delivered. We became predictable and we became innovators."

The "single version of the truth" that Logility is able to deliver was the key to Videau's success in enabling the other lines of business to align around a common set of goals and outcomes. "The biggest win is that it builds trust. Operations, Sales, and Finance trust Logility," Videau added.

Plastic Packaging Technologies

At Plastic Packaging Technologies, LLC., a manufacturer of flexible packaging materials based in Kansas City, KS, the growing complexity of the company's business supplying packaging to a wide variety of companies was a major impetus in bringing Logility on board. As in the case of Tillamook, the pandemic that started in 2020 only added to an ongoing shift in business practices that the company had been tracking.

As Angie Taylor, vice president and chief commercial officer at Plastic Packaging Technologies (PPT), told EAC, "There was such added complexity coming" to the company's B2B customers, who range from start-ups to large, established consumer goods companies. The company's smaller customers were particularly vulnerable, even before the pandemic struck. "They're limited on visibility with planning and their ability to stay out of harm's way," Taylor explained. "For us, it's about taking care of our customers and helping them in situations like the pandemic where we see a lot of volatility in product and demand."

Logility helped plug some significant holes in the company's planning processes, which were largely ad hoc and based on older technologies. "We really didn't have a sophisticated planning tool," Taylor said. "It was time to mature past the spreadsheets."

That maturation process needed something other than the company's specialized ERP system, which was "great at capturing transaction and finance-facing data", Taylor explained. Indeed, PPT's ERP system provides basic costing and supplier information that is only a subset of the data the company needs for planning. Moving the needle on planning, particularly in collaboration with customers and suppliers, needed data from more sources as well as analytics that the company could share with its internal and external stakeholders.

The causal impact of having more data to use in planning and execution is important. The broad amount of data used by PPT for planning has significantly increased the use of the analytics produced with Logility across the company. "It's pretty major for us; everyone from leadership down is leveraging the insights from Logility," Taylor said. "The demand planning team, the procurement team, and production planning and scheduling" are using the data from Logility. "We have a lot of really excited people in the company. The quality and compliance teams want in now, too."

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>
> ***Angie Taylor, Plastic Packaging Technologies.***

Logility's insights are also having an impact outside the company. PPT uses Logility data to help customers with demand planning and collaborative forecasting. "We're able to share a lot more information and make them feel more secure," said Taylor. "Our customers are very excited about this."

Logility also allows PPT to collaborate more closely with its suppliers, which benefits both parties. "If we are collaborating with them we get more insight, and they're giving us better signals so we can better plan our production," said Taylor. "We're able to treat them the way we treat our customers."

Precision Fluidics, a Division of Parker-Hannifin Corporation

The Precision Fluidics division of Parker-Hannifin Corp., which manufactures valves, pumps, regulators, and related products, picked a great time to bring their planning and forecasting systems up to date. The division's old planning processes and systems were in need of an upgrade, the company was running its backend processes on a custom-developed ERP system, and Precision Fluidics' plan was to have its Logility system fully operational in the spring of 2020.

The requirements were obvious: the custom-developed ERP system and the company's old planning processes were neither "efficient nor forward-looking," said Steven Herren, supply chain leader at Precision Fluidics, which is based in Hollis, NH. "It didn't give us a way of easily maintaining inventory policy." Nor did it help manage what would become a monumental collaborative effort between Precision Fluidics, its partners, and its customers to support a truly global crisis.

March of last year began with a global disruption that wasn't in anyone's forecast. For a company that makes valves used in ventilators, among other types of equipment, a sudden surge in demand made the new Logility system all the more important, even as Precision Fluidics was forced to delay parts of its implementation in order to get in front of an "unprecedented" demand for its valves, Herren added.

Instead of moving forward with the full implementation Precision Fluidics originally planned, it capitalized on the previously implemented functionality with the demand planning module. "We needed to gain clarity and confidence in the forecast first," Herren said. These efforts yielded important insights that helped Precision Fluidics better comprehend capacity requirements and needed investments. Additionally, the forecast crafted in Logility enabled Precision Fluidics to share data and collaborate with its suppliers in order to meet the unprecedented ramp-up in demand.

"The total throughput of this plant went up by a factor of three; some products were up 20 times," Herren said. Even without being fully implemented, Logility was able to help support the company's "massive effort to ramp up internal and external capacity to meet customer requirements during a global crisis," Herren added. "Even in the middle of the ramp-up, the tool was powerful in maintaining a single source of truth for all demand estimates."

Enabling a more collaborative planning and execution effort was key to the company's ability to stay ahead of an extremely dynamic and fluid situation. Having visibility into the demand and meeting that demand would have been largely impossible using the company's previous mix of ERP and spreadsheet-based processes.

Precision Fluidics' "massive effort" to ramp up production of valves for ventilators required close cooperation with suppliers and customers in order to ensure forecasts and capacity planning were as accurate as possible. Indeed, Logility's insights on potential demand helped Herren's team convince key suppliers to increase their capacity. One supplier added more shifts and lines, another actually ordered entirely new equipment at a considerable cost, and risk. "They were ready to make that investment based on the information we shared with them," said Herren.

With better visibility into their demand, Precision Fluidics was also able to match their suppliers' commitments with "much larger orders to help give them the confidence to ramp up. We were able to back them up with our own actions."

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>
> ***Steven Herren, Precision Fluidics.***

This new relevance meant that Logility had become essential to a growing list of the company's internal stakeholders, a role the software is particularly well suited to. Now that implementation has completed in 2021, Precision Fluidics is "working with all the operations leaders and giving them direct visibility into the system. And we're doing the same with the sales teams, business managers, and controllers. What is interesting about Logility is that everyone comes to it with a different perspective on what they need. We can set it up so that they can see the data in a way that helps them make the decisions they need to make," said Herren.

Conclusion: The Collaborative Supply Chain

What we have seen from these customers' experiences with Logility is the impact and power that trusted information can have in cutting through uncertainty and driving informed decision-making. It's clear from the standpoint of 2021 that no one could have anticipated the disruptions of 2020, and there clearly was no pandemic playbook from which companies could draw much-needed guidance.

That meant that the kind of scenario planning that Tillamook and others were able to engage in was an important tool in surviving, and even thriving, in the face of so much uncertainty in both supply and demand. The teams using Logility were not only able to support those needs, they were able to do so with data that the entire enterprise could trust. That combination of comprehensiveness and trust had an enormously positive impact for Logility's customers at a time when trust and certainty were scarce.

The kinds of problems that Logility was able to solve for its customers aren't just limited to surviving and thriving in the midst of a pandemic. The essence of the global economy is one of extreme dynamism and change. Some of that change is systemic and predictable – such as regulatory change – but much of it is hard to see coming until it's there. Regardless, managing a modern business that depends on a complex supply chain is no longer something that can be done using ERP systems, however modern and up to date they may be. ERP plays a role in supply chain success, but not as the nexus of the business processes that enable that success. That nexus lies in a solution like Logility and its ability to provide the insights and plans needed to support the collaboration that underpins the modern supply chain.

As this report has shown, software solutions like Logility can make all the difference between success and failure. The fact that supply chain systems can positively impact value and performance should no longer be in doubt.