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ParkourSC

2022
ENABLING
TECHNOLOGY
LEADER

*North American
Digital Supply Chain
Operations Industry*

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Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. ParkourSC excels in many of the criteria in the digital supply chain operations space.

AWARD CRITERIA

Technology Leverage	Customer Impact
Commitment to Innovation	Price/Performance Value
Commitment to Creativity	Customer Purchase Experience
Stage Gate Efficiency	Customer Ownership Experience
Commercialization Success	Customer Service Experience
Application Diversity	Brand Equity

Commitment to Innovation, Commitment to Creativity, and Application Diversity

Disruptions have become more frequent than ever, such as from the COVID-19 pandemic in 2020 and the war in Ukraine in 2022. Continuing geopolitical instability in other regions worldwide and labor shortages frequently cause disruptions as well. Putting global supply chains under pressure is only one of the impacts of these disruptions, requiring supply chains to recover faster. Boardrooms, therefore, are now considering how much time it will take for recovery every time a disruption occurs, how to reduce this recovery time, and how to reduce the impact of the disruption because the impact on businesses can be high and can last longer. For instance, out of $1.2 trillion, the bio pharma industry loses $35 billion because of failures in temperature-controlled logistics every year. In addition, the war in Ukraine has had its own impact because the country is one of the largest producers of neon gas, which is required for manufacturing processes. The war in Ukraine, however, has now made supply chain issues and the availability of neon gas, among many other things, even more complex.

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> *Industry Principal*

Under such circumstances, companies need to respond and innovate faster, deliver new tech-enabled services to end customers, and shift to new business models; however, global companies already have many planning systems in place, such as enterprise resource planning (ERP), supply chain management, warehouse management, transportation management, and third-party logistics (3PL), all of which can lead to fragmented systems. Users handle multiple phone calls and emails; look at various dashboards; and, at best, use Microsoft Excel spreadsheets to tackle system fragmentation; however, manual processes cannot scale when fragmented systems are in use, and manual processes are not designed for real-time execution. In addition, with the increasing global labor shortage, relying on manual processes will no longer suffice. One way to resolve the issue of fragmented systems is stitching or integrating the systems together, but this approach is too expensive and time consuming. Frost & Sullivan research indicates that resilient and real-time supply chain operations can reduce the impact of disruptions and address the abovementioned challenges.

Amid this scenario, California-based ParkourSC expanded its digital supply chain operations platform in June 2022. Digital-twin modeling, intelligence orchestration, and extended-enterprise collaboration form the core of ParkourSC's real-time supply chain operations across the extended enterprise.

Digital-twin modeling: The company's platform has a model and operate setup, with the operate part collecting signals from any entity in the supply chain, writing business rules, finding and reporting exceptions, receiving various alert notifications, and automatically and collaboratively resolving exceptions as incidents occur -- or even predicting risks and avoiding potential incidents. ParkourSC has now added the model component, where it can model every entity in the entire supply chain network (large-scale knowledge graph with nodes), such as individual packages, pallets, products, warehouses, planes, trucks, people, or any other entity in the network. ParkourSC calls this digital-twin modeling, which digitizes supply chain operations at multiple levels and monitors the performance of the end-to-end supply chain. With digital-twin modeling, customers and their users can now simply click and see their entire network graphically, whereas significant supply chain-related data was previously buried in a table that no one ever sees.

Intelligence orchestration: ParkourSC allows for the embedding or attaching of intelligence on the node dynamically and then into the supply chain operations and models to orchestrate intelligence. Attaching intelligence to the node is like writing a script or adding a low code recipe that can reference business rules set up in the platform or even link to external data sources such as custom AI models or systems. By embedding intelligence on the node, the digital twin becomes an "intelligent digital twin". For example, by attaching a piece of code to a pallet, a simple rule can be written that if the temperature of the pallet drifts beyond a required temperature range -- such as 2 to 8 degrees Fahrenheit -- then a notification alarm will be sent; however, if the temperature drifts for more than an hour, then a critical alert will be sent. ParkourSC enables the writing of a simple if-then-else rule and allows the ability to attach a forecast machine learning (ML) model (e.g., thermal prediction algorithm) that can be called/used. In addition, ParkourSC has added a business intelligence (BI) tool into its platform so that customers can customize and build their new and automated reports and dashboards for monitoring the performance of the supply chain to continuously drive improved supply chain operations and prioritize areas for innovation.

ParkourSC's journey started with gathering only sensor signals but has now expanded to gathering contextual signals from all kinds of sources, including data on weather, traffic, and carriers (e.g., ocean, air, and road). As a result, the company now attaches all signal streams (e.g., feeds and signals from any point in the supply chain and not only from systems and sensors) coming from the real world into the intelligent digital twin. The intelligent digital twin becomes a live model of what is happening in supply chain operations.

Extended-enterprise collaboration: Both internal and external stakeholders must work together; therefore, ParkourSC enables collaboration across all entities and stakeholders using a network of digital twins. This means that a ParkourSC customer can create a master digital twin of its supply chain, then share individual tenants to other organizations, such as suppliers, partners, and customers. This network of digital twins helps to provide transparency for all stakeholders into the performance of the supply chain, improving customer satisfaction and loyalty, orchestration across the ecosystem, and driving new revenue opportunities.

Overall, Frost & Sullivan research indicates that digital-twin modeling, intelligence orchestration, and extended-enterprise collaboration provide ParkourSC's customers with a resilient, real-time supply chain and can reduce the impact of disruptions and recover faster.

ParkourSC also shifts the supply chain from one point in time to all the time. Traditional supply chain planning includes supply-and-demand planning, integrated business planning, or sales and operations planning (S&OP) that happen on a fixed monthly, quarterly, or annual basis (i.e., at a point in time). Customers operate to the best of their ability by executing this plan based on stale data.

The days of point-in-time planning are over, given the rapid disruptions that companies are currently facing because they can plan any amount; however, once they go into execution mode and face a disruption, they will still need to overcome the disruption and execute the plan. ParkourSC excels in the industry because it provides customers with the tool set to shift the supply chain from point in time to all the time, compared to competitors that focus on traditional planning methods, thereby highlighting ParkourSC's fundamentally different way of approaching customers' problems.

ParkourSC believes that planning and execution are two sides of the same coin. The company brings in visibility, which is based on ground truth, to manage excursions and exceptions, to enable collaboration and automation. By adding digital-twin modeling, intelligence orchestration, and cross-enterprise collaboration, ParkourSC enables real-time operations at customers' preferred frequency, even by the hour, day, or week, leading to real-time operations. A continuous feedback loop now exists between the two worlds of planning and execution, wherein as day-to-day shifts happen, customers can continually realign their existing plan to ground truth and flawlessly align planning and execution. To this end, Frost & Sullivan applauds ParkourSC for helping customers move away from the current style of operations and traditional planning to real-time operations.

Customer Ownership and Purchase Experience

The aspect of ParkourSC's real-time supply chain operations platform and intelligent digital twins that delivers some of the greatest customer value includes helping customers become resilient, innovative, and agile and remain growth focused. Modeling and adapting the end-to-end supply chain as needed and monitoring the ground truth lead to resilience; continually aligning planning and execution leads to agility; and adapting business models to the changing market and delivering new products and services to end customers lead to more growth. Moreover, improving on-time in-full (OTIF) and line-item fill rate (LIFR) boosts customer satisfaction and revenue.

ParkourSC provides pharma companies with a command center that spans across systems and adds intelligence and workflow automation so that customers can remain vigilant on what is happening in their supply chain operations, respond faster (ideally predictively before a problem happens), and deliver better patient outcomes. For example, pharma companies can optimize the ecosystem through co-creation by delivering better patient outcomes with digital product workflows, from manufacturing to consumption; increase their advantage over competitors by providing end customers with transparency in quality and compliance; and deliver new services by digitizing factory operations to enable real-time supply chain operations. In addition, companies can enhance packaging with devices to deliver thermally assured packaging. For example, Thermo Fisher Scientific, which provides industry-leading contract development and manufacturing organization (CDMO) services and clinical trial solutions, uses ParkourSC's solutions to improve product integrity, efficiencies, and compliance reporting; achieve operating savings; and get new products to the market safely and faster.

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Network of digital twins and a force multiplier for customers: ParkourSC creates an intelligent digital twin for customers so that they can share their mini digital twins with their suppliers, partners, and end customers, thereby creating a network of digital twins for cross-enterprise collaboration. Frost & Sullivan research shows that this network of digital twins is a novel concept because through cross-enterprise collaboration, customers can chat with relevant organizations to avoid wasting products and materials. In addition, customers can use digital twins as a central point to coordinate their supply chain operations at all stages and to resolve issues collaboratively.

Brand Equity

ParkourSC was previously called Cloudleaf, a company that came from an Internet of Things (IoT) background but evolved over the years by learning from the market and from customers. Cloudleaf was no longer only technology oriented and started solving supply chain agility, resilience, and intelligence-oriented/related issues.

To this end, Cloudleaf strategically rebranded itself as ParkourSC, a French word that means "journey", which reflects the journeys that materials and products take through a supply chain. ParkourSC has already been successfully supporting temperature-controlled supply chain operations for pharmaceuticals and life sciences organizations and has achieved 300% year-over-year (YoY) growth in both bookings and annual recurring revenue (ARR) for the last two years. In addition, the company closed a $26 million investment in March 2022, which is expected to enhance the company's team size, working capital, product innovation, and customer engagement going forward.

Conclusion

Companies need platforms to help them go beyond visibility, overcome frequent supply chain disruptions, and drive innovation and growth. ParkourSC's real-time digital supply chain operations platform and intelligent digital twins successfully address this need. The platform enables customers to digitize and monitor their end-to-end supply chains, embed intelligence, and collaborate across their extended enterprises. Chief among ParkourSC's differentiation is that it shifts the supply chain from point in time to all the time and continually aligns planning and execution.

ParkourSC's customers can drive business innovation and faster growth by delivering new products and services to their end customers and by shifting to new business models. Automated workflows, optimized operations, increased revenue, reduced operating costs, and improved profits further enhance the customer value proposition. Frost & Sullivan commends ParkourSC for enabling companies to establish real-time digital supply chain operations, improve supply chain resilience, become agile, and recover from disruptions faster.

For its strong overall performance, ParkourSC earns Frost & Sullivan's 2022 North American Enabling Technology Leadership Award in the digital supply chain operations market.

What You Need to Know about the Enabling Technology Leadership Recognition

Frost & Sullivan's Enabling Technology Leadership Award recognizes the company that applies its technology in new ways to improve existing products and services and elevate the customer experience.

Best Practices Award Analysis

For the Enabling Technology Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Technology Leverage

Commitment to Innovation: Continuous emerging technology adoption and creation enables new product development and enhances product performance

Commitment to Creativity: Company leverages technology advancements to push the limits of form and function in the pursuit of white space innovation

Stage Gate Efficiency: Technology adoption enhances the stage gate process for launching new products and solutions

Commercialization Success: Company displays a proven track record of taking new technologies to market with a high success rate

Application Diversity: Company develops and/or integrates technology that serves multiple applications and multiple environments

Customer Impact

Price/Performance Value: Products or services provide the best value for the price compared to similar market offerings

Customer Purchase Experience: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

Customer Ownership Experience: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

Customer Service Experience: Customer service is accessible, fast, stress-free, and high quality

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty

About Frost & Sullivan

Frost & Sullivan is the Growth Pipeline Company™. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service™ provides the CEO and the CEO's growth team with a continuous and rigorous platform of growth opportunities, ensuring long-term success. To achieve positive outcomes, our team leverages over 60 years of experience, coaching organizations of all types and sizes across 6 continents with our proven best practices. To power your Growth Pipeline future, visit Frost & Sullivan at http://www.frost.com.

The Growth Pipeline Engine™

Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fuelled by the Innovation Generator™.

Learn more.

Key Impacts:

- **Growth Pipeline:** *Continuous Flow of Growth Opportunities*
- **Growth Strategies:** *Proven Best Practices*
- **Innovation Culture:** *Optimized Customer Experience*
- **ROI & Margin:** *Implementation Excellence*
- **Transformational Growth:** *Industry Leadership*

The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

Analytical Perspectives:

- Mega Trend (MT)
- Business Model (BM)
- Technology (TE)
- Industries (IN)
- Customer (CU)
- Geographies (GE)