

EBOOK

Empowering businesses to seamlessly navigate demands

Solutions for peak seasons

infios

Busy periods often coincide with holidays, major sales events or industry-specific trends. But a surge in demand can happen at any time of the year and last for varying periods. To forecast and plan accordingly, modern warehouses and distribution centers (DCs) require operational flexibility and the effective use of warehouse simulation software.

Infios's expertise in optimizing warehouse and staffing management, order fulfillment, transportation and distribution is crucial during peak seasons. Our data-driven insights enable businesses to make informed decisions, consider trends and adapt swiftly to changing market conditions.

We help clients scale their operations seamlessly, allocate resources effectively and enhance overall supply chain visibility.

Peak period challenges can stretch a supply chain

During busy periods, a series of challenges can emerge, underscoring the importance of effective supply chain management:

Challenges

A substantial surge in freight rates can strain operational budgets.

Finding adequate transportation capacity can become a significant hurdle.

Managing inventory to avoid periods of shortage and overflow requires precision.

Agility to scale operations swiftly, both up and down, is crucial.

Recruiting and training additional staff at short notice can be difficult.

Higher order volumes can result in higher return rates.

Solutions

Supply chain optimization is pivotal for mitigating cost escalations.

Optimization strategies can ensure efficient transportation allocation.

Inventory management tools facilitate better demand forecasting, to reduce the risk of stock shortages or excessive storage.

Expert management enables seamless adjustments and cost-effective resource allocation.

Management insights streamline this process to minimize disruptions.

Operational expertise can optimize the returns process and reduce problems.

Infios's comprehensive supply chain solutions ensure businesses have the right processes in place to navigate the challenges associated with peak demand periods and maintain, or enhance, customer satisfaction.

Creating a strong operational foundation is essential for analyzing past data and allowing advanced planning for stock management scalability. We ensure seamless collaboration, leveraging tools and technology to mitigate disruptions, while offering robust continuity. Our approach ensures preparedness, resilience and sustained success for customers.

Order Management System (OMS) and Commerce Platform

The Infios OMS and Commerce Platform seamlessly integrates orders, inventory and customer data to adeptly tackle peak season challenges. Designed to ensure control and real-time visibility, together they accommodate increases or decreases in orders to prevent understocking or overstocking, by:

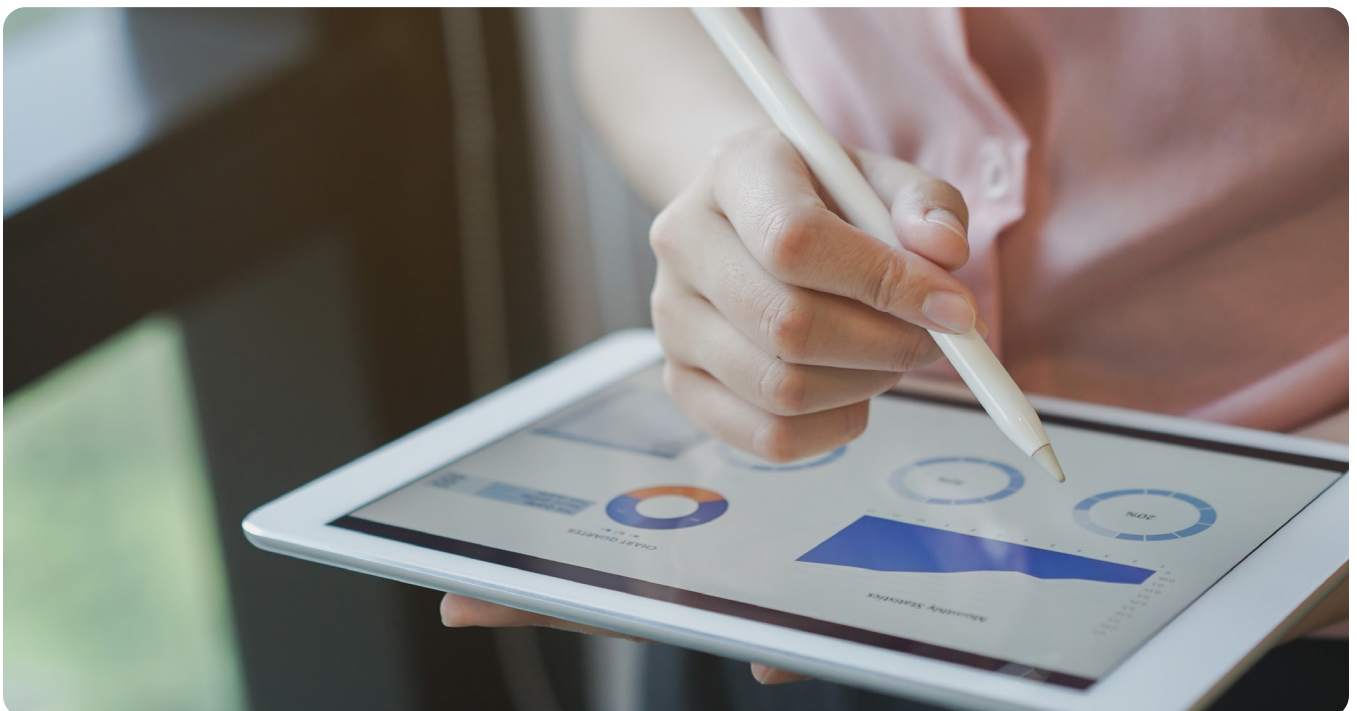
- Generating insights from order data to identify trends and optimize processes.
- Using predictive analytics to forecast patterns based on historical factors.
- Adapting order processing workflows based on demand fluctuations.
- Integrating online and offline sales channels for seamless coordination and flexible purchasing.
- Consolidating orders from multiple sales channels into a single platform.
- Analyzing insights to prioritize orders based on urgency, value and customer loyalty.
- Providing real-time visibility into available inventory across locations.
- Automating order processing to optimize fulfillment and reduce errors.

- Routing orders to the optimal fulfillment center or store based on proximity.
- Enabling customers to track orders in real time.
- Streamlining returns and exchanges through automated authorizations.

Through expertly managing changes in demand, the OMS and Commerce Platform drives efficiency for improved satisfaction and loyalty.



Crucially, the OMS fills gaps in the supply chain by load balancing shortages in retail stores, enabling fulfillment to occur via mail. Conversely, it also means that retail stores can ease the pressure on overwhelmed distribution centers.



Warehouse Design and Simulation

Infios effectively addresses changes in demand through innovative warehouse design and simulation strategies. As market dynamics constantly shift, the ability to adapt swiftly while maintaining operational efficiency is key. By leveraging advanced technologies and data-driven insights, Infios designs warehouses that are both optimized and flexible by:

- Analyzing best use of space and services to maximize capacity and efficiency.
- Allocating resources such as manpower and machinery to ensure smooth operations.
- Managing inventory levels, locations and replenishment strategies to manage stock.
- Measuring and analyzing key performance metrics such as order fulfillment, time, accuracy and throughput.
- Simulating the movement of goods and materials for a visual representation of processes and workflows.
- Allowing users to create various scenarios to test different strategies for better decision-making and risk mitigation.

By utilizing real-time data feeds and predictive analytics, Infios can ensure an agile response with dynamic allocation of storage, automated routing of goods and workforce optimization. Additionally, intelligent software assists in monitoring inventory levels, lead times and customer preferences, facilitating proactive adjustments.



Carlsberg, one of the largest brewers in the world, manages its supply chain in-house through CSC (Carlsberg Supply Company). CSC chose CLASS to assess new warehouse layouts—to ensure long-term competitiveness and resilience in an ever-evolving market landscape.

- Tackled reluctance to change, by showing how the suggested improvements will work.
- Ensured optimum efficiency of all operations.
- Increased capacity during peak periods.
- Standardized and communicated best practice across the globe.
- Identified cost savings through reduced travel distances, optimized headcount and MHE—while retaining quality customer service levels.



“Using CLASS our team was able to easily simulate different layouts for warehouses and bottle yards; selecting optimum designs to meet project goals and improve on KPIs.”

Svetlana Pavlova
Group Warehouse Senior Manager
Carlsberg

Warehouse Management Systems (WMS)

Infios WMS addresses diverse industry needs for a wide range of companies—from manufacturers to e-commerce giants. Our Software as a Service (SaaS) provides scalable and agile solutions, efficiently adapting to changing order demands, optimizing operations and minimizing disruptions during busy periods.

The system has an intuitive interactive interface, which empowers users by allowing real-time visibility into warehouse activities. This enables informed decision-making and enhanced overall productivity by:

- Orchestrating workflows through automation to minimize errors and enhance throughput.
- Utilizing data-driven analytics for meticulous inventory management and precise order fulfillment to reduce carrying costs, while ensuring optimal stock levels.
- Offering add-on software modules for incremental enhancements tailored to specific needs, and the choice between the cloud or on-premises deployment.
- Seamlessly managing orders and waves, ensuring streamlined operations.
- Providing advanced shipping management and staging for accuracy and speed.
- Simplifying the returns process with built-in returns management.

WMS allows businesses to effortlessly move and flex with evolving market dynamics, ensuring companies can fine-tune processes as they cater for maximum efficiency.



Partstown

Parts Town is a long-established international food service equipment parts distributor. They faced challenges with their previous WMS due to its inflexibility and lack of support. Our solution provided a flexible solution that could scale with Parts Town's rapid growth, improving both speed and accuracy.

- 30% improvement in inventory accuracy.
- 20% increase in picking productivity.
- Streamlined training, enabling employees to follow optimal paths via RF scanner instructions.
- Created job opportunities by building a team around the WMS to customize and oversee its impact.
- Enhanced end-customer experience.



“Our experience with Infios has been one that has fulfilled nearly all the promises that were made when we signed on.”

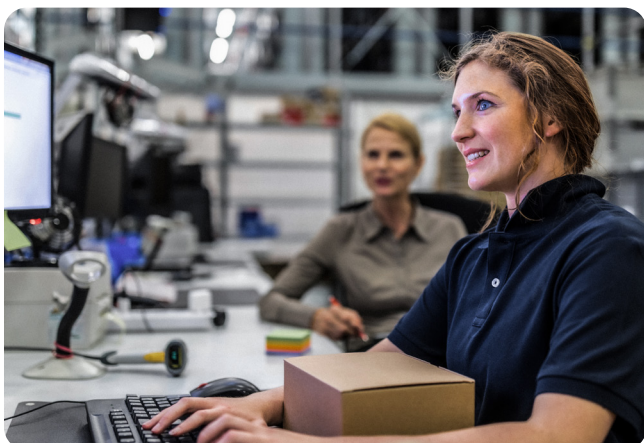
Kenny William
Senior Director
Parts Town

Warehouse Control Systems (WCS)

Infios WCS seamlessly integrates Warehouse Management Systems (WMS) for optimum control of all types of automation equipment. WCS serves as a nerve center, ensuring efficient material flow and task execution. Working across common types of conveyors, sorters, storage and robotic technology, it provides one system to manage and control Material Handling Equipment (MHE) from all major vendors. It provides:

- A central point of control for managing and optimizing entire portfolios.
- Orchestration of order fulfillment, inventory movement and replenishment.
- Intelligent algorithms enabling efficient task assignment, route optimization and congestion avoidance.
- Synchronized communication and automation that brings precision to the warehouse.
- An offline emulation mode to accurately simulate automation scenarios.
- Automatic adjustment of material flow in the event of malfunctions.
- End-to-end real-time visibility of the automation chain, and intuitive dashboards to visualize data and provide actionable insights.
- Database-driven architecture supporting growth of transactions.
- Scaling to accommodate changes in transaction volume at no extra cost.

With its user-centric interface, WCS provides operational visibility to enable flexibility and agility, bridging the gap between strategic planning and dynamic execution.



BOOT BARN®

Boot Barn, one of the largest retailers of western and work apparel in the US, has over 200 stores and three e-commerce websites. The company offers over 8,000 styles of boots and more from a range of leading brands, then made the decision to expand its Kansas facility by 45,000 sq. feet—approximately a 50% increase.

- 50% increase in picking productivity.
- Increased productivity by interleaving product picking and put-away tasks.
- 25% increase in throughput speed.
- Improved control of whole MHE system.
- End-to-end visibility of entire material flow.
- Reduced need for hiring seasonal staff and increased opportunities for staff reallocation in-house.



“The project has been a success and we are definitely tracking on our ROI calculations. We are very happy with the WCS solution we have in place right now.”

Doug Smith
Vice President
Supply Chain

Unified Control System (UCS)

Infios UCS enables efficient warehouse management by coordinating automated and human workflows through a centralized hub. Positioned between the Warehouse Management System (WMS) and automation solutions, UCS uses real-time data to allocate tasks based on suitability and workload, resulting in coordinated fulfillment processes. UCS accelerates productivity and ROI by:

- Providing multi-site support for warehouses and clients under one UCS.
- Optimizing Autonomous Mobile Robot (AMR) and human collaboration.
- Configuring workflows to adapt to operational needs for more flexibility.
- Configuring allocation and lot control for real-time inventory management.
- Streamlining technology integration and order fulfillment through to packing.
- Customizing configurations for operational efficiency to reduce expenses.
- Aligning AMR-based inventory with order priorities and slotting capabilities.
- Supporting various AMR types, mobile scanners, voice solutions and more.
- Ensuring optimal item availability for orders and pick-to-zero efficiency.
- Enhancing task completion and accuracy with user-friendly interfaces.
- Offering real-time insights and operational visibility with interactive dashboards.
- Making replenishment recommendations through targeted slotting and tracking.
- Enhancing picking through allocation, execution and light-assisted assembly.
- Providing SaaS-based deployment with multi-language support.

UCS unifies automation and human workflows, enabling warehouses to maintain accuracy and efficiency amidst rising order volumes, labor shortages and budget constraints.



Boxy, Hungary's most innovative and efficient logistics service provider for online retailers, operates from the largest automated fulfillment warehouse in Hungary. The company boasts a brand new same-day delivery fleet. The turnover rates of enterprise customers across the entire Central Eastern Europe region range from 100 to several million orders per month.

- WMS, UCS, SDS and AMR ecosystem.
- Scalability without major interventions.
- Outstanding shipping performance.
- Responsive and transparent operations.
- 50% cost savings compared to others.
- 300 picks per hour—a 233% increase.
- 1,300 parcels per hour—with room for growth.
- Pick-by-light stations, and goods-to-person. reallocation in-house.



“The software solution from Infios is the heart of our customer fulfillment strategy and a real game changer for us, with which we can react flexibly to customer requirements. We are proud of the productivity and efficiency that we have achieved thanks to Infios in a record time of less than 12 months.”

András Táncsics
CEO

Voice-directed work (VDW)

Infios VDW empowers warehouse staff to complete tasks in a more ergonomic, accurate and efficient way. Improving safety in busy warehouses by allowing workers to keep their hands and eyes free, while giving them the freedom to focus on the task at hand. VDW also supports training: helping people get up to speed quickly. Tasks that once relied on paper and screens now evolve into seamless, hands-free workflows, guided by voice systems interfaced with the Warehouse Management System (WMS). It propels productivity and reduces errors by:

- Providing headsets linked to Warehouse Management Systems (WMS) enhancing order management, productivity and accuracy.
- Supplying metrics and insights gleaned from individual performance and real-time warehouse dynamics for visibility and tailored solutions.
- Enabling insights and dynamic workforce adjustments to respond to any upsurge in e-commerce.
- Enabling data-driven decision-making and facilitating appraisals.
- Integrating workflows such as cycle counting and replenishment, alleviating bottlenecks and allowing increased picking speeds.

Infios's VDW technology echoes its commitment to operational excellence, enhanced efficiency, adaptability and agility—in the face of modern warehousing complexities.



NASSAU PROVISIONS

Nassau Provisions specializes in the distribution of speciality and general groceries in New York and beyond. Infios used WMS as the foundation for a standardized process from beginning to end, transitioning warehouse associates from a manual system to the comfort of a digital operation.

- 57% increase in output.
- 133% increase in picking productivity.
- 76% decrease in labor dependency.
- Easily absorbed the 30-40% daily volume increases during peak season.
- Improved training time by over 50%.
- Reduced staffing requirements, combating labor shortages.
- Increased safety and fewer accidents.



“I have 60 years of experience in the business and I have never seen the kind of response Infios displayed in March 2020 at the beginning of the pandemic. Their response was pivotal in the success of Nassau Provisions in the trying days ahead.”

Allan Maurer
Chief Operations Officer

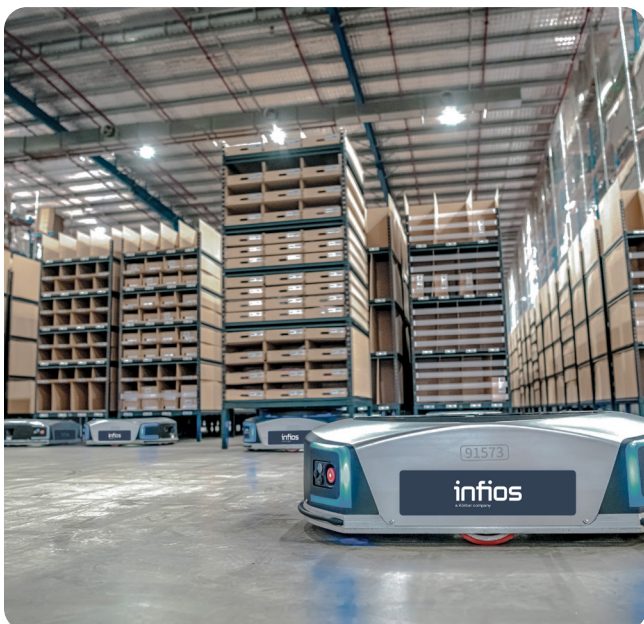
Autonomous Mobile Robots (AMRs)

Infios AMRs seamlessly integrate into existing workflows navigating warehouses, fulfillment centers and distribution hubs. The robots swiftly transport goods between storage and picking areas, accelerate order fulfillment, reduce manual labor requirements, minimize the risk of errors and optimize resource allocation.

Equipped with advanced sensors and AI-driven, they adapt to changing conditions in real-time. They create smoother operations by:

- Efficiently handling put-away and replenishment tasks.
- Managing bulk material movement, reducing the need for manual labor.
- Facilitating seamless components shuttling, optimizing and manufacturing.
- Providing goods-to-person capability, thus enhancing order fulfillment efficiency.
- Piece picking and automating the retrieval of individual items accurately.
- Sorting tasks and ensuring all items are organized and routed precisely.

AMR plays a pivotal role in streamlining operations and facilitating a successful peak season across various industries. By harnessing the power of AMR, businesses can enhance capabilities, maintain high service levels and meet customer expectations even during the busiest times.



Evo's founder started selling winter sports clothing from a Seattle dorm room two decades ago. It's grown to offer a range of sports gear, with eight stores and 70% revenue from online sales. A 2019 warehouse expansion prepared them for high holiday demand and the employment of extra staff. The pandemic also surged online sales—intensifying summer demands amid distancing protocols.

- Increased picking speeds (from 35 to 90 units per hour).
- Increased picking accuracy (including mixed SKUs in one bin).
- A reduction in the number of staff needed in one area (from 12 to 5)—resulting in less congestion.
- Seven bots added for the peak season, through the Robot-as-a-Service (RAAS) model.
- System remained virtually error free beyond standard robot maintenance.
- Temporary staff trained in only 10–15 minutes.
- Boosted morale: staff recognized robots as a help rather than a replacement.



“To me, these early successes and these opportunities are exciting, because it means the solution should continue to grow with us and add more value over time.”

Spencer Earle
Supply Chain Director

Freight Audit and Payment (FAP)

Infios's FAP combines cutting-edge algorithms and data-driven insights to optimize transportation strategies. It helps businesses to enhance resource utilization, minimize the risk of delays and drive efficiency and cost savings—while maintaining quality and meeting customer expectations. Our solution supports:

- Selecting the most suitable carriers for specific routes based on performance, capacity and cost-effectiveness.
- Allocating resources—ensuring vehicles, drivers and assets are used efficiently during peak periods.
- Integrating real-time data to dynamically adjust routes and schedules.
- Monitoring carrier performance, delivery times and other key metrics to ensure service level agreements are met.
- Analyzing historical and current transportation data to identify patterns, trends and areas for improvement.
- Simulating scenarios that evaluate impact on operations to aid planning and decision making.

These capabilities optimize transportation networks, enhance customer satisfaction and effectively navigate the challenges posed by peak demand.



Peet's Coffee™

Peet's Coffee offers superior beverages by sourcing the best coffee beans and tea leaves in the world—adhering to strict high-quality and taste standards. With over 50 years of experience and 5,000 employees, Peet's is available in over 12,000 grocery stores across the United States.

- Consolidated transportation data into a single source of the truth.
- Gained visibility across all modes of transportation.
- Achieved financial and operational KPI visibility across all distribution channels.
- Created allocation and accrual dashboards.



“The journey with Infios has been great. We were operating in the dark with our data, but as our engagement with them progressed from parcel audit to freight payment, we've gained financial and operational visibility to KPIs without us needing to do any heavy lifting.”

Marc Dorau
Senior Manager of Logistics

NEXT STEPS

Ready for a supply chain that stays ahead of seasonal demand peaks?

Connect with Infios to start your journey—no matter your industry, size or complexity, we're built to scale with you.

GET IN TOUCH

infios

Infios.com
Copyright © Infios or its affiliates
All rights reserved