



MAXIMIZING SUPPLY CHAIN ADVANTAGE THROUGH TECHNOLOGY INTEGRATION



Effective utilization of technology within the supply chain is not just a benefit, but a necessity. Companies that take full advantage of modern technology to streamline operations reduce costs, have happier customers, and gain a competitive edge. Putting technology solutions such as Transportation Management Systems (TMS), Enterprise Resource Planning (ERP), warehouse automation tools, and advanced analytics to work can make the supply chain a real business advantage.



Order Entry and Rate Shopping

Customer Service Representatives (CSR) or online portals can easily apply technology to creating orders, informing an ERP system to initiate an API rate shop from a TMS. Real-time carrier rate options and service times are received and policy-based markups or free shipping is triggered without fail, optimizing freight strategy utilization and recovery. For example, a manufacturer implementing API rate shopping through their TMS improved freight recovery by 35% by automatically selecting the most cost-effective carriers and applying the correct freight strategy.



Warehouse Operations and Shipment Processing

In the warehouse, technology can improve operations for picking, packing, and shipping. Picking processes can be enhanced by use of RFID-Integrated Gloves, Pick-to-Light and voice-picking systems, Automated Mobile Robots, and Goods-to-Person systems. After products are picked, further automation can be achieved through packaging machines, dimension and weighing machines, and labeling systems. Once measurements are gathered, integrations with TMS APIs allow orders to be rated, carriers assigned, and pickups scheduled while capturing essential data back in the ERP. Together, these technologies improve speed, reduce errors, and capture essential data for continuous improvement.



Transport and Delivery

TMS systems can also help close out the order by providing end-to-end visibility from pickup to final delivery. It proactively tracks shipments, flagging potential delivery issues while providing automated notices to customers along the way. Post-delivery, electronic invoicing via EDI or API ensures that charges are audited against carrier contracts for accurate billing and timely resolution of discrepancies.



Returns Management and Reverse Logistics

Modern supply chains must also include returns as a standard component of an order transaction. Integrated TMS solutions automate return label generation and tracking, simplifying the return process for companies and customers. Reverse logistics routing is also optimized, and analytics help identify patterns to mitigate future return rates.



Reporting Tools

Technology-driven supply chains generate vast amounts of data. Advanced reporting tools transform this data into actionable insights, enabling real-time performance monitoring and strategic decision-making. Key metrics and KPIs such as on-time delivery rates, cost per shipment, and carrier performance are tracked, offering valuable intelligence that drive continuous improvement and cost optimization.

Effectively leveraging technology across transportation, warehousing, procurement, demand forecasting, and returns management creates a fully integrated ecosystem, reducing expenses, improving customer satisfaction, and driving continuous improvement. Partnering with technology-focused providers such as KDL ensures businesses stay ahead in an increasingly digital landscape.

LET'S WORK TOGETHER

Reach out to us at info@kdlog.com or visit kdlog.com for more information.



People Drive Logistics

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