



NBD
NORTH BAY DISTRIBUTION INC.

AI IS REVOLUTIONIZING RETAIL:

How Robotics and AI Slash Total Landed Cost

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Unleashing Efficiency, Reducing Costs, and Elevating Customer Experiences

Delivering fast, affordable service across multiple channels isn't just challenging—it's essential for survival in today's retail environment. Customers expect it all—quick shipping, seamless in-store pickups, smooth online shopping, and total customer support. Fall short, and you're not just losing a sale; you're risking your brand's reputation, which studies suggest could account for 25–63% of your market cap¹.

The stakes are incredibly high. With 22% of shoppers abandoning their carts due to anticipated slow shipping and 76% unlikely to return after a bad delivery experience², the pressure to get it right is intense. But it's not just about avoiding mistakes; it's about seizing opportunities to lead and grow. By leveraging advanced AI logistics technologies and partnering with leading robotics companies, savvy 3PL partners ensure your operations are not just efficient but future-proof.

To thrive in this competitive landscape, you must master the art of synchronizing inventory, streamlining order processing, and managing delivery logistics efficiently. This isn't just about adopting new technologies—it's about achieving operational maturity. Automating inefficient processes won't yield cost savings; it's the combination of operational maturity with robotic automation that truly drives down costs. Imagine saving 15% to 30% on your Total Landed Cost (TLC) with no upfront investment³—just by integrating cutting-edge AI and robotics into your operations.



The Real Cost of TLC

Every dollar counts when you're balancing the books. That's where Total Landed Cost (TLC) comes in. So we're on the same page, TLC includes every expense from the factory floor to your customer's door:

Goods Cost: The price you pay for the product.

Shipment Costs: Fees for transporting goods from suppliers to warehouses and then to customers.

Insurance Fees: Protecting goods against damage or loss during transit.

Customs Duties: Taxes on imported and exported goods.

Storage Fees: Costs for warehousing the products.

Picking Fees: Charges for selecting and preparing items for shipment.

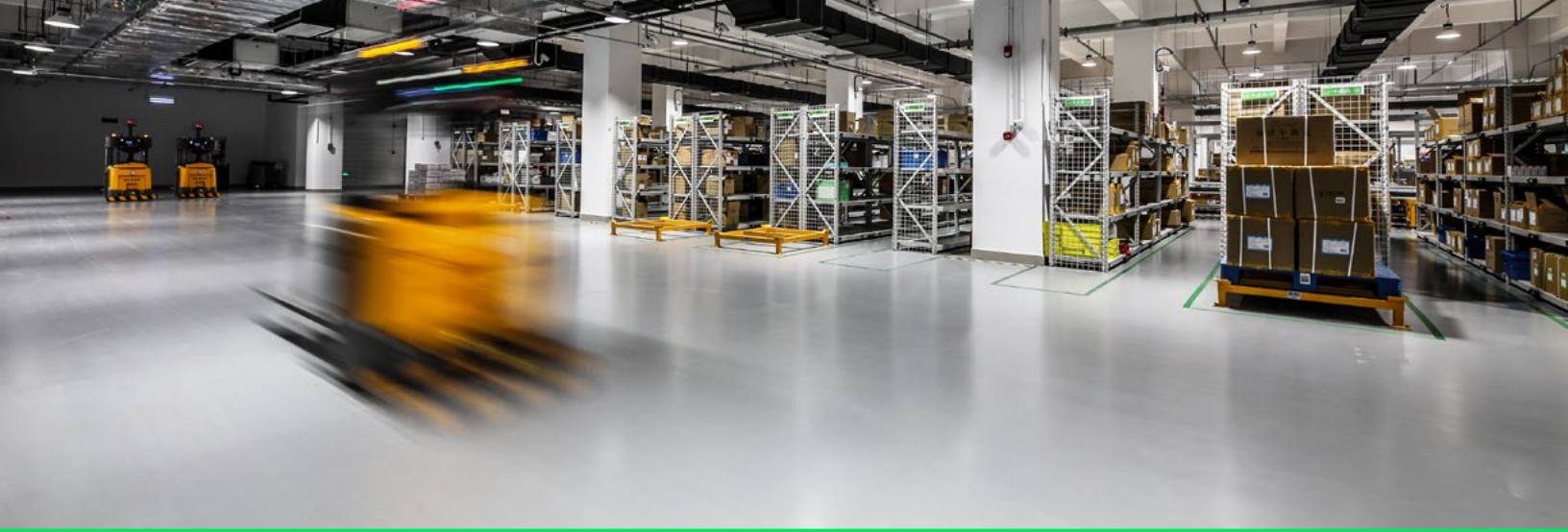
Additional Charges: Packaging, handling, and administrative fees.

Why Reducing TLC Matters

Reducing TLC isn't just about saving money—it's about boosting your margins, offering competitive prices, and driving growth. When you manage and lower these costs effectively, you improve your margins and can offer better prices to your customers. It's also about reinvesting savings into areas that further growth, like marketing, product development, and customer service. Additionally, by enhancing your cost efficiency, reducing TLC can significantly improve your company's valuation, positioning your business more favorably in the market.

This is where robotics and AI come in. These technologies will streamline your operations and reduce many components of TLC. Robots can handle picking and packing with greater efficiency and accuracy than human workers, cutting labor costs and minimizing errors⁴. AI optimizes shipping routes and inventory management, lowering shipment and storage fees⁵. By integrating robotics and AI into your logistics, you will significantly reduce your Total Landed Cost, boosting your bottom line and giving you a competitive edge.

However, a word of caution: While the benefits of robotics and AI are substantial, it's important not to get carried away. Some logistics leads and 3PL providers become too enamored with the potential of robotics and aim to replace every human in the fulfillment process. The reality is that the technology isn't yet advanced enough to fully replace human roles across the board. A balanced approach is essential—using automation where it delivers the highest return while maintaining human oversight in areas where it's still crucial. Overcommitting to a wholesale robotic transformation can lead to inefficiencies and unmet expectations. Be strategic in your automation efforts to ensure you're leveraging the technology where it truly makes a difference.



Powering Up: Transforming Logistics with Robotics and AI

Robotics and AI from market leaders (e.g. Lucas Robotics) are revolutionizing logistics, turning what was once futuristic into today's practical solutions. These technologies are redefining efficiency and accuracy in supply chain operations, transforming how we handle everything from picking and packing to sorting and moving goods.

Handling repetitive tasks is where robots excel: From picking and packing to sorting and moving goods, automation streamlines these processes. Picture robotics systems navigating your warehouse aisles, picking items swiftly and accurately. This shift speeds up operations, cuts labor costs, and minimizes errors, allowing your team to focus on the more critical roles⁴.

Order fulfillment mistakes can be costly: AI-powered systems, such as those NBD employs, enhance accuracy by following precise programmed instructions, drastically reducing errors⁴. This means correct orders, fewer returns, less waste, and more satisfied customers. Enhanced accuracy is a win for both your business and your customers.

Efficiency keeps you competitive: AI offers real-time data analytics, helping you make informed decisions, optimize inventory, and streamline your supply chain. With these insights, you will anticipate demand, manage stock levels effectively, and reduce storage costs⁶. This agility helps you respond quickly to market changes and customer needs, making your operations resilient.

Exceptional customer experiences are crucial: A supply chain powered by robotics and AI ensures you meet customer demands consistently. Faster processing times, accurate orders, and efficient delivery contribute to a positive shopping experience, building loyalty and driving repeat business.

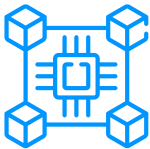
Strategic Integration of AI and Automation: However, while the promise of AI and automation is immense, success lies in their intelligent application. It's not just about implementing the latest technology—it's about understanding where and how to deploy it effectively within your operations. With mature operational experience, you can navigate the potential pitfalls of over-automation. By integrating robotic automation with AI in a thoughtful, measured way, you not only enhance efficiency and accuracy but also ensure that your systems remain reliable and scalable. This balanced approach helps mitigate risks and maximizes the benefits, ultimately leading to a more robust and resilient supply chain.

Steps to Transform Your Operations:



Automate Repetitive Tasks

Focus on automating the areas where it makes the most impact—like picking, packing, pallet shrink wrapping, and moving goods. These are the tasks where robots excel, handling them with speed and precision⁴. By automating these processes, you free up your team to focus on more strategic, value-added activities that drive your business forward.



Leverage AI for Smarter Inventory Management

Integrating AI within your robotic automation systems enhances your ability to optimize inventory management. With AI, you can monitor stock levels in real-time, predict demand more accurately, and avoid costly issues like overstocking or stockouts⁶. This precision not only saves on storage costs but also ensures that you always have the right products available when your customers want them.

By following these steps, you're not just improving efficiency—you're setting your operations up for long-term success.

Strategic Benefits of Robotics and AI

Beyond immediate cost savings, integrating robotics and AI offers long-term strategic benefits. Automation enhances your operational efficiency, making your supply chain more agile and responsive⁷. This agility is crucial for meeting customer demands and adapting to market changes.

Begin to identify where robotics and AI will improve accuracy and speed, leading to better customer experiences. Faster processing times and fewer errors mean happier customers who are more likely to return and recommend your business⁴.

Moreover, automation provides valuable data insights. Identify where you can deploy AI to analyze patterns and trends, giving you a deeper understanding of your operations. This information will inform strategic decisions, from inventory management to marketing campaigns, ultimately driving growth and profitability⁶.

ACTIONABLE INSIGHTS



Conduct an Audit

Start by auditing your current fulfillment processes. Identify the tasks that are labor-intensive and prone to errors. These are prime candidates for automation. By addressing these areas, you will achieve significant improvements in efficiency and cost savings.



Start Small with Pilot Programs

Implementing automation can seem daunting, but you don't have to overhaul your entire system at once.

Start with pilot programs in key areas of your fulfillment process. Monitor the results and scale up as you see improvements in efficiency and cost savings.





Precision Perfected: Increased Picking Accuracy

Speed and precision are everything in today's fast-paced retail environment. Robotics systems navigating your warehouse aisles with unmatched agility, and swiftly and precisely picking items isn't science fiction—it's the future of retail logistics, happening right now. Pilot the use of robots first so you can grow into them versus upending your processes; or partner with a 3PL provider that's already got it all dialed in.

Robotic picking systems will boost picking speed by up to 300%, significantly cutting the time and labor required for order fulfillment⁸. This efficiency means your team will focus on more complex, value-added tasks instead of repetitive manual labor.

Order fulfillment mistakes will be costly. Human errors in picking and packing will lead to incorrect orders, returns, and dissatisfied customers. Robotic systems follow programmed instructions with pinpoint accuracy, ensuring that each order is correct. This precision minimizes the risk of errors and enhances the overall quality of your fulfillment process⁴.

Imagine cutting your fulfillment times by 75%⁹. This isn't just a dream—it's a reality when you have integrated robotic systems into your supply chains.

ACTIONABLE INSIGHT



Benchmark and Explore Automation

To stay ahead of the competition, start by benchmarking your current fulfillment times. Compare them to industry standards and identify areas where you can improve. Implementing robotics will give you a significant edge, enabling faster processing and delivery times. Start with a pilot program to measure the impact and scale up based on your findings.





The Smart Warehouse: Integrating WMS with Robotics and AI

Combining Warehouse Management Systems (WMS) with robotics and AI creates a powerhouse of efficiency and accuracy. This integration transforms how warehouses operate, making processes smoother, faster, and more reliable. By leveraging the strengths of WMS with advanced robotics and AI, you will streamline your entire supply chain from end to end⁶.

One of the standout benefits of integrating WMS with robotics and AI is access to real-time data analytics. These systems provide up-to-the-minute information on inventory levels, order statuses, and overall warehouse performance. This data is invaluable for making informed decisions quickly, helping you respond to changes in demand, optimize stock levels, and ensure timely order fulfillment⁶.

What if you could track every item in your warehouse in real-time, knowing exactly where each product is and how many you have on hand? These systems will do exactly that. This level of visibility reduces the risk of stockouts and overstocking, leading to better inventory management and cost savings⁶.

ACTIONABLE INSIGHT



Invest in WMS and Fulfillment Software

To harness these benefits, invest in a robust WMS that integrates seamlessly with your robotics and AI systems. This combination will enhance your ability to make data-driven decisions, improving overall efficiency and accuracy. Start with a comprehensive evaluation of your current systems and identify areas where a WMS can add value. Implementing a modern WMS will set the foundation for a more responsive and efficient supply chain.





Elevating Customer Experience: Seamless Integration with E-commerce Platforms

A seamless customer experience is essential in today's competitive retail environment, and it's about more than just e-commerce. Integrating your Warehouse Management System (WMS) across all sales channels—including e-commerce platforms like Shopify, Square, and Wix, as well as major marketplaces like Amazon (FBA, FBM, VC), Walmart, and Target—ensures smooth operations across every touchpoint. When this integration includes advanced robotics and AI systems, the benefits multiply. Real-time synchronization of inventory, order processing, and shipping information creates a unified workflow that keeps your customers happy and your operations efficient. This integration can improve order processing times by up to 20%¹⁰ and reduce customer complaints by up to 30% by minimizing errors and delays¹¹.

With orders processed efficiently and accurately, customers get their products on time and as expected. This reliability boosts your brand's reputation and fosters customer loyalty—which leads to repeat purchases.

shopify

amazon

SQUARESPACE

weebly

WIX

Magento

web.com

opencart

Square

NETSUITE

BIGCOMMERCE

bigcartel

WOO COMMERCE

ebay

IONOS

ACTIONABLE INSIGHT

Ensure Compatibility

To fully leverage these benefits, ensure your e-commerce platforms are compatible with your WMS and advanced fulfillment systems. This compatibility will smooth data flow and make communication between systems more efficient, reducing the risk of errors and delays. Invest in technology solutions that facilitate this integration, enabling your business to operate more effectively and meet customer expectations consistently.



Cutting Costs, Boosting Profits: Process Maturity and Cost Reduction Through Automation

Implementing automation is a decisive move to slash labor costs and boost operational efficiency. By automating repetitive tasks like picking, packing, and sorting, you will significantly cut labor expenses. Robotic systems handle these tasks faster and more accurately.

Flexibility is crucial. Seek partners who are highly ranked for their use of advanced robotics, allowing you to benefit from the latest innovations in automation technology without the capital and soft costs associated with building your own systems. It's not just about adopting robotics—it's about ensuring these systems will adapt to your brand's unique needs. Whether it's modifying robotic automation to fit specific requirements or integrating manual processes where necessary, flexibility ensures operational resilience. If automation goes down, or if a product is too large for automated handling, the ability to seamlessly move between manual and automated processes will be the difference between profit and loss.

Robotics bring precision to your picking and packing processes, drastically reducing errors. Incorrect orders cost money and harm customer satisfaction. Automated systems ensure each order is accurate, leading to fewer returns and happier customers.

Effective inventory management reduces storage costs and ensures product availability. Robotics optimize space utilization and improve inventory turnover by maintaining accurate stock levels and efficient storage. This optimization reduces excess inventory and prevents stockouts.



Speed Meets Savings: Efficiency Leading to Faster Deliveries

Automation significantly accelerates order processing, leading to faster deliveries and lower shipping costs. By reducing the time orders spend in the fulfillment pipeline, you can offer quicker delivery times, delighting customers and gaining a competitive edge. Efficient processing not only cuts shipping costs by ensuring timely dispatch but also optimizes delivery routes for maximum efficiency.

A critical component of this efficiency is having a well-distributed U.S. fulfillment network. With strategically located facilities on at least the East and West coasts, you will further reduce shipping costs while achieving 1-3 day delivery times using ground shipping. This approach not only enhances customer satisfaction but also positions your business as a reliable and fast option in the competitive retail landscape.

By embracing automation and leveraging a comprehensive fulfillment network, you will drive down your total landed cost, improve efficiency, and deliver exceptional customer experiences. These strategic moves will boost your bottom line and position your business for long-term success.

ACTIONABLE INSIGHTS



Review Labor Intensive Processes:

Identify areas where automation will reduce costs and boost efficiency.



Control Measures:

Implement robotics to reduce picking errors and improve customer satisfaction.



Improve Delivery Speed:

Use automation to speed up order processing and reduce shipping costs, setting you apart from competitors.



99%+

Same-day receiving & shipping accuracy

30%

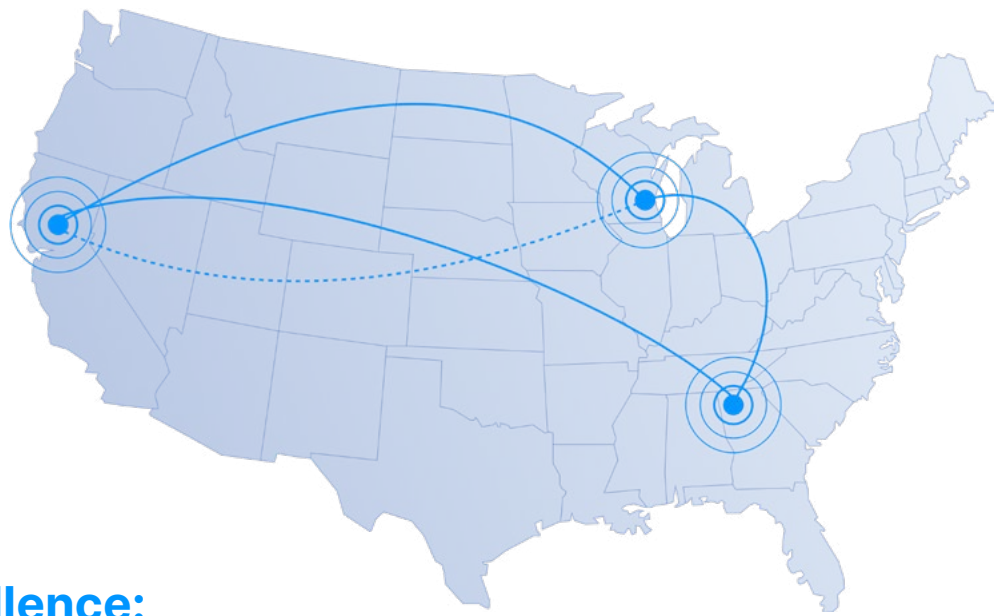
Reduction in TLC (Total Landed Cost)

99%

Inventory Record Accuracy

99.8%

Orders shipping on time



Customized for Excellence: Elevate Your Supply Chain with NBD

It's clear: integrating robotics and AI into your logistics is more than a competitive edge—it's essential for thriving in today's retail landscape and, for some, it's the only way they will survive. With the right technology, you will streamline operations, reduce costs, and deliver exceptional customer experiences.

At NBD, we understand that technology alone isn't enough. Our value proposition lies in the combination of operational maturity and robotic automation, which together result in lower landed costs and superior service levels. This is why leading brands, including a \$22 billion apparel brand, have trusted us for over 15 years. Our ability to adapt, innovate, and deliver consistently excellent results has made us a cornerstone in their supply chain strategy.

Imagine transforming your logistics to be faster, more accurate, and more efficient. That's the power of combining operational maturity with cutting-edge robotics and AI. Reduced costs, quicker deliveries, fewer errors, and happier customers are just the beginning. These advanced technologies, when paired with NBD's proven processes, equip you to meet and exceed customer expectations, ensuring you stay ahead in a fast-paced market.

Our 40+ years of proven performance and reliability underscore our ability to customize solutions that meet your unique needs. Whether you're a long-established company or an emerging brand, NBD offers tailored strategies and technologies that drive success. Our operational maturity, honed over decades, ensures that automation is implemented where it delivers the most impact, providing you with the lowest possible landed costs and exceptional service levels.

Moreover, our experienced warehouse operators, some of whom have been with us for over 20 years, add a layer of consistency and expertise that is rare in the industry. This blend of cutting-edge technology and seasoned personnel ensures that your supply chain is not only efficient but also resilient and adaptable to whatever challenges arise.

Ready to gain a critical competitive advantage? Want to dive even deeper into leveraging operational maturity combined with robotics and AI, or take your first step toward tailored solutions?

Schedule a consultation and let's talk. See our contact information on the next page.



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TAKE A CONFIDENT STEP FORWARD TODAY

Don't wait to embrace the future of logistics. Connect with NBD and discover how our cutting-edge solutions will elevate your supply chain to new heights.

Tailored Solutions for Your Success

Flexible Integration

Customizable options that scale with your business growth. Whether you're starting small or expanding rapidly, NBD offers flexible solutions that adapt to your needs, ensuring you only invest in what truly benefits your operations. Plus, with no fixed fees for space and the ability to use only the building capacity you need, you maintain maximum flexibility.

Boosted Profitable Growth

Efficient, right-sized solutions help you deliver more to your customers while improving your bottom line. NBD customers see an average cost reduction of 11% to 27% and potential revenue increases of up to 29%. Spend less time and money managing your supply chain and more on growing your business. Our advanced technologies streamline operations, driving profitable growth.

Minimized Risk

No upfront or fixed costs mean you can scale as needed without financial risk. Our fulfillment center services and cutting-edge technology reduce errors and variations, with 99.98% order accuracy and 99.98% order accuracy, making NBD a smart and safe choice for your logistics needs.

Enhanced Customer Experience

Superior fulfillment services build customer loyalty and encourage repeat business. With NBD, your customers enjoy reliable, timely deliveries that keep them coming back. We deliver to 96% of the country within 1-3 days via ground shipping, and our same-day fulfillment services ensure your customers are always satisfied. Our commitment to accuracy and efficiency ensures satisfaction with every order.

Stay Ahead with NBD

Integrate advanced technologies to face market challenges effectively. NBD's innovative solutions keep you ahead of the competition, enabling you to adapt quickly to changes and maintain a competitive edge. Stay agile, responsive, and ready for whatever the market throws your way.

READY TO TRANSFORM YOUR LOGISTICS?

Take the next step in optimizing your logistics operations. Contact NBD today for a consultation, request a demo, or sign up for a pilot program. Discover how our tailored solutions will revolutionize your supply chain and drive your business forward.



Chris Caouette
Chief Revenue Officer

 chris.caouette@nbd3pl.com



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Supporting Statistics

1. Reputation Impact: Studies suggest a company's reputation can account for 25–63% of its market cap. ([Source: McKinsey](#))
2. Cart Abandonment: 22% of shoppers abandon their carts due to anticipated slow shipping. ([Source: eMarketer](#))
3. Customer Retention: 76% of consumers avoid retailers with unacceptable delivery experiences. ([Source: Convey](#))
4. Productivity Gains: Companies adopting AI in supply chains report 15–30% productivity gains. ([Source: McKinsey](#))
5. Error Reduction: Automated systems can reduce order errors by 67%. ([Source: Supply Chain Dive](#))
6. Inventory Accuracy: Integrating AI and robotics can improve inventory accuracy by up to 90%. ([Source: Forbes](#))
7. Labor Costs: Companies using automation report up to 20% reduction in labor costs. ([Source: Logistics Management](#))
8. Picking Speed: Robotic picking systems can increase picking speed by up to 300%. ([Source: Logistics Management](#))
9. Fulfillment Speed: Robotic order processing can reduce fulfillment times by up to 75%. ([Source: McKinsey](#))
10. Order Processing: Integrating WMS with e-commerce platforms can improve order processing times by 20%. ([Source: Logistics Management](#))
11. Customer Complaints: Enhanced integration can reduce customer complaints by up to 30%. ([Source: Supply Chain Dive](#))
12. Space Utilization: Robotic systems can improve space utilization by up to 30%. ([Source: Logistics Management](#))
13. Shipping Costs: Businesses that implement automation can reduce shipping costs by up to 50%. ([Source: McKinsey](#))