



IMAGINE MORE Inventory on Demand from D.W. Morgan

The stories of Apple's business successes are legendary—from the Mac to the iPhone. Perhaps its biggest and most important achievement, though, is the one least reported.

It's how current CEO and onetime Senior VP of Worldwide Operations Tim Cook reinvented the manufacturing supply chain and changed forever what we think of as acceptable inventory levels.

Starting in 1998, Cook accomplished four things that set Apple up for a decade of manufacturing dominance:

1. He got the company out of manufacturing and established an archipelago of suppliers instead.¹
2. He reduced the number of strategic suppliers from 100 to 24, reducing complexity.²
3. He cut the number of warehouses from 19 to 9.³
4. His careful and continuous supply chain resulted pruning reduced the time that sat in warehouses from an average of one month to just *two days*.⁴

Why? Because he knew what the rest of the industry is still struggling to recognize: inventory, whether strung out across a supply chain or sitting in a warehouse is “fundamentally evil.”⁵

For Apple, Cook believes that inventory loses 1-2% of value *each week*. In your business, it might be a smaller fall in value, or it might be larger fall—but it is *falling—every second*.

In addition, every dollar that's tied up owning raw materials, work-in-progress or finished goods is a dollar that the company can't use for other purposes.

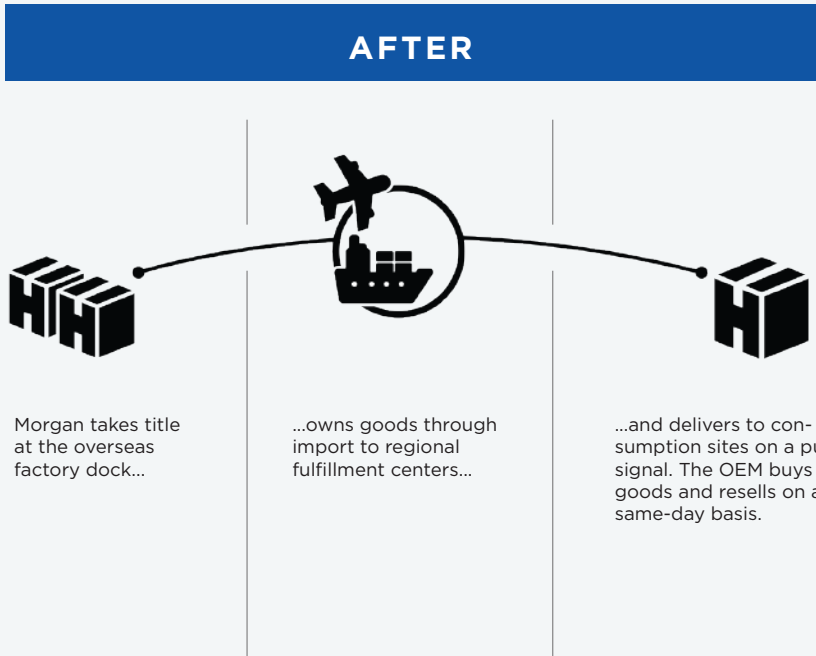
Think of the value that Apple created by eliminating 58 days of inventory ownership and consider: How much would you add to *your* bottom line if you shaved just one day from your supply chain? Just one day.

Introducing Inventory on Demand— Optimizing Ownership in the Supply Chain

In this white paper, discuss Inventory on Demand (IOD), a service developed by supply chain professionals *for* supply chain professionals. It empowers manufacturers to:

- Save money on inventory.
- Save money on transportation.
- Increase supply chain visibility.
- Keep inventory off the balance sheet until it sells.

Here's how it works in a nutshell:



THE RESULT, IN ONE CASE STUDY:

 30% less inventory	 35% less transport
 Faster fulfillment	 Rush charges eliminated

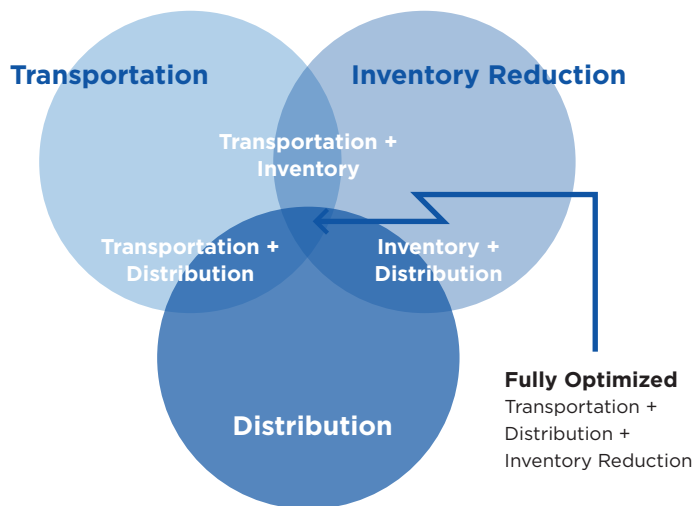
IOD Unlocks Logistics and Balance Sheet Value

Unique to IOD is its power to unlock **logistics and balance sheet value**. Depending on the manufacturer's goals, IOD can help to optimize operations for transportation and logistics, distribution and finance.

OPTIMIZATION	TARGET GOALS
Transportation Focus	<ul style="list-style-type: none"> • Transportation cost savings • Lower inventory levels
Distribution Focus	<ul style="list-style-type: none"> • Transportation / fulfillment cost savings • Maintain or exceed existing service levels • Enable regional fulfillment
Inventory Reduction Focus	<ul style="list-style-type: none"> • Reduction / elimination of inventory carrying costs

IOD—Combined Focus Creates Higher Value

With IOD, companies can think about the elements of their supply chains as a whole—not just the logistics side or the financial side, but all sides, giving them the power to optimize the entire process.



IOD empowers you to accomplish all of this without necessarily replacing your current supply chain system. It can:

- Complement your current system.
- Extend your current system.
- Replace your current system, if that is what you want.

The purpose of this white paper is to:

- **Introduce** you to the power of IOD.
- **Invite** you to imagine what the implications for your business would be if IOD really could accomplish all of these things—or even just one of them.
- **Inspire** you to contact us to begin a dialog centered around the exact ways IOD could help you, and the money could expect to save if you went with IOD.

But for now, imagine how much money your company would save if you shaved just one day off your supply chain.

Imagine Keeping Inventory off Your Balance Sheet Until It Sells

IOD is more than a powerful tool for logistics, it's also a powerful financial tool with immediate and ongoing financial advantages:

Immediate Financial Advantages

IOD improves your balance sheet because you don't buy the inventory until a second before you're ready to sell it. This puts your balance sheet in the best possible light for:

- Financial reports
- Wall Street earning expectations and metrics such as Return on Invested Capital (ROIC)
- Potential investors
- Potential mergers

The above are not only vitally important in and of itself, but it also means that you can do things with the capital that is normally tied up in inventory. *Imagine how you could use the capital that is still on your books from properly forecasting inventory and how would you invest the extra earnings from your frictionless supply chain?*

Ongoing Financial Advantages

IOD works for you—and for us—because we use all of our accumulated experience to get your goods to your buyers in the fastest, most efficient, most economical way possible. Disorganized supply chains costs you money on the front end and disrupt your inventory.

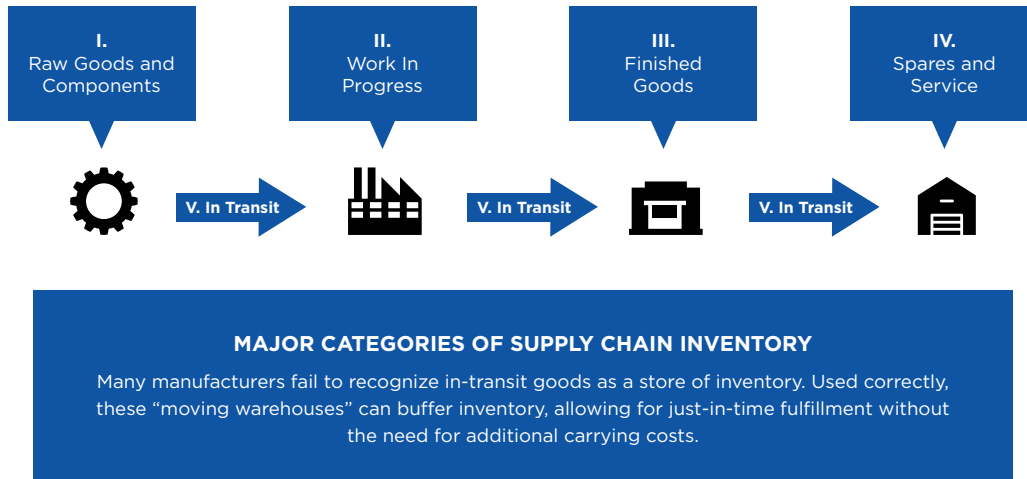
With IOD, our main concern is optimizing time of ownership and cash flow, not just minimizing transportation or warehousing costs. In our experiences with global manufacturers, improvements in inventory financing costs typically range from 1 to 3 percent of the total value of goods. Given a sample inventory value of \$100 million annually, that adds up to an improvement of \$1-3 million. Interested in a real-world case study?

But for now, imagine how your company would employ the additional capital if inventory costs weren't on the balance sheet, and how strong the company would look.

Imagine Being Able to Shift the Time and Place You Take Title

The modern, global, outsourced supply chain is sophisticated and all encompassing—and it has to be—goods come from across the country—and the world, and so you must account for:

- Transportation
- Warehousing
- Import/export issues
- Distribution



It's a demanding job, full of risk, accommodating, as it does, the drive to keep inventory to a minimum in the context of:

- A Just-in-Time model.
- The complications of dealing with a foreign (or distant) entity.
- The logistics challenges of sensitive, sometimes perishable goods transported great distances.

But imagine what it would mean for your business if you had the factory assembly line right across the street from your customer, and as things came off the line, you could just carry them across the street and deliver them to the customer?

- It would reduce your inventory.
- It would decrease your headaches.
- It would reduce your shipping cost.
- It would increase your confidence.
- It would increase your knowledge of where your product is at any moment. In fact, it would give you total knowledge about your product from manufacture through to delivery.
- It would improve your bottom line.

Now forget about imagining because the shifting of time and place is exactly what Inventory on Demand does. In IOD, we buy the product from the manufacturer and move it quickly and cost-effectively to a location close to your point of consumption without any impact on you. In effect, you're no longer contracting for goods. You're contracting to have availability whenever and wherever you want.

With IOD, you don't have to worry anymore because we are handling transportation, import/export issues, the warehousing, the distribution, and the fulfillment. And the product stays on our books—not yours—until you are ready to sell to a buyer. Your product—paid for—appears in your inventory for a moment, and then it immediately shows as sold—and then delivered.

Imagine how simple your logistics task would be if the factory assembly line right across the street from your customer, and as things came off the line, you could just carry them across the street and deliver them to the customer?

Imagine Not Having to Worry Anymore About Having Too Much Inventory—Or Too Little

The right level of inventory is critical.

- Too little inventory (or too late) and you miss sales or increase expedited shipping expenses.
- Too much inventory (or too early) and you increase costs and weaken your earnings.

But that's only part of the story. As uncertainty multiplies for in-transit product availability, managers compensate by buffering inventory at every critical node—near factories, at distribution centers and near key customers. These extra inventories all have carrying costs attached to them, costs that add up when viewed in the aggregate.

Inventory Is Still Fundamentally Evil

Industry analyst Herbert W. Davis' annual Logistics Cost Survey found that "the difference between the 20 percent of compa-

nies that reduced cost and the 50 percent that had an increase was almost fully explained by the inventory level performance⁶." An Inbound Logistics editorial drove the point home, arguing that "the greatest mistake that manufacturers make today is equating transportation costs with total available supply chain savings.... Inventory levels, not transportation costs drive supply chain savings."⁷

When inventories swell, it's not always apparent all the costs that rise alongside that pile of goods—especially when you're managing your own supply chain. For instance:

- Hiring and managing multiple transportation providers.
- Hiring and managing import / export brokers.
- Creating IT and human systems to link to providers.
- Providing warehousing in origin and destination countries to store, consolidate and reconsolidate the goods.
- Maintaining accounting, compliance, finance, logistics and transportation personnel.
- Managing risks of inadequate duty and duty drawback management processes.
- Managing trade compliance and strategies.
- Absorbing carrying costs of inventory for extended periods of time. Just because a manufacturer doesn't have all those items on their own balance sheet, it doesn't mean that they're not incurring those expenses. They're truly an iceberg of expense and risk—sometimes visible, often hidden—that can add significantly to the cost of a supply chain.

THE GLOBAL MANUFACTURING COST ICEBERG

RECOGNIZED COSTS

- Transportation
- Customs Clearance
- Warehousing
- Inventory Carrying

UNRECOGNIZED COSTS

- Merchandise Processing Fees
- Transportation Provider Selection
- Transportation Provider Management
- Customs Broker Selection
- Payment Processing From Multiple Vendors
- Shipment Tracking And Oversight
- Increased Expedited Shipping
- Insurance of Goods
- Risks of a Rigid Supply Chain
- Added IT Requirements
- Additional Warehouse Space Requirements
- Additional Warehouse Labor Requirements
- Unnecessary or Duplicative Movement
- Increased Damage and Loss Resulting from Added Touches
- Additional Accounting, Finance and Logistics Labor Requirements
- Global Process Inconsistency
- Tied-up Capital and Reduced Return on Invested Capital (ROIC)
- Currency Risks
- Sustainability Inconsistency Among Suppliers
- C-TPAT and Other Security Noncompliance Risks

When you add these expenses up, the toll that inventory can take on your profit margin is devastating.

Cost Category	Percent Value of Goods
Cost of Money	2-6
Taxes	2-5
Insurance	1-2
Warehousing	2-5
Physical Handling	2-5
Inventory Control and Clerical	3-5
Obsolescence	3-5
Deterioration and Shrinkage	3-5
Total Cost	18-38 Percent Total Value of Goods

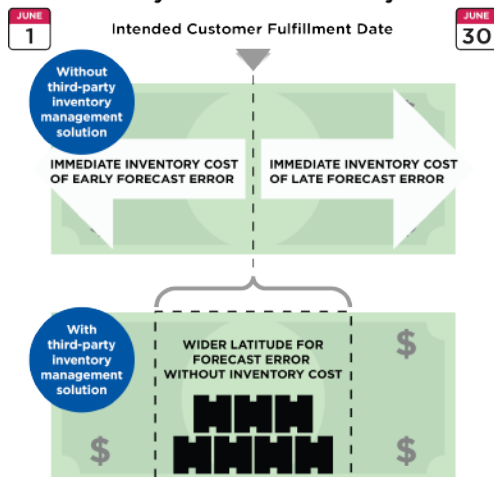
The true cost of inventory adds up to an average of 18-38 percent of the value of goods.

IOD Lowers Hidden Costs and Eliminates Inventory Guesswork

D.W. Morgan's mission is to take the stresses of managing the supply chain away. We pride ourselves on being smarter, cheaper, better, and faster. **Our typical client carries 30% less inventory** by increasing the latitude for forecast error without inventory cost. When supply meets demand:

- Goods don't sit in warehouses. **They arrive as needed.**
- Freight moves via **the most economical, least energy-intensive** means.
- Standardized processes result in less damage and loss, full compliance with security requirements and the most **accurate, continuous status information.**
- Finished inventory flows from factory to customer **without wasted time, inventory cost, transportation or storage.**

Using Third-party Buffers To Increase Availability Without Inventory Cost



Leading Companies Are Searching for Higher Levels of Control & Coordination

The same Aberdeen Study from 2013 found that when it comes to strategic actions, the leading companies (those in the top 20% of performance) desire higher levels of control and coordination with the external parties they depend on. They are also twice as likely to redesign their current sourcing structure in order to enhance their logistic services⁸. D.W. Morgan and IOD can take your logistics to the next level.

Imagine what it would be like to have the perfect level of inventory all the time.

Imagine Saving Money in a Way That Works with Your Current System

D.W. Morgan can work in harmony with your current supply chain practices, become an extension of them or even replace them. Regardless of the inventory management methodology you use, you can unlock its full potential by introducing IoD. Our supply chain professionals designed IOD from the ground up to work with:

1. Vendor Managed Inventory (VMI)
2. Just in Time Networks (JIT)
3. Multi-echelon Inventory Optimization (MEIO)
4. Supply Chain Finance

Definition of Maturity Class	Mean Class Performance
<p>Leaders: Top 20% of aggregate performance scorers</p>	<ul style="list-style-type: none"> • 96% of orders delivered to customers complete and on time outbound • 94% of orders received from suppliers complete and on time • 26% have decreased total landed per unit costs last year • 31% have decreased the frequency of out-of-stock inventory in the past year • 100% are compliant to GS1 standards and track at the item level
<p>Followers Bottom 80% of aggregate performance scorers</p>	<ul style="list-style-type: none"> • 89% of orders delivered to customers complete and on time outbound • 87% of orders received from suppliers complete and on time • 18% have decreased total landed per unit costs last year • 18% have decreased the frequency of out-of-stock inventory in the past year • Only 25% are both compliant to GS1 standards and track at the item level



Imagine the benefit that would accrue to your company if you could keep your current supply chain programs, but make them even more powerful.

By extending your current system with IOD, D.W. Morgan can take your system a few steps further. For instance:

- If you have a VMI warehouse, you could let us buy from those suppliers and manage your needs at a current hub.
- If you have a JIT strategy, let D.W. Morgan manage it and be responsible for continuous availability.
- If your company uses supply chain finance, apply the same logic for our services and let us finance the goods by owning them. This will allow you to generate financial and operational efficiencies.

The best network is the one built just for you. IOD provides a serious solution to companies who are serious about eliminating disruptions and optimizing the performance of their supply chain networks.

Our streamlined approach to logistics and inventory management will align your business objectives to your supply chain reality. We can unlock and overcome any hurdles that are currently disrupting your supply chain pipeline. By squashing the obstacles and enhancing your manufacturing flow logistics, this positively impacts your bottom line.

Imagine an Award-Winning Partner Committed to Your Success

As lucrative and powerful as they have proven to be, the benefits of IOD are only as good as the people who stand behind them. At D.W. Morgan, we have built our company—and our reputation on first-in- class service to our clients and to our community.

Award-Winning Champion

Because of our commitment to excellence on behalf of our clients, we've received many coveted awards, including

- Cisco Systems Supplier Appreciation Awards Winner (five times)
- Who's Who in International Logistics by Armstrong and Associates
- Business Model Mastery Award from Managing Automation
- Best Practices in International Logistics by the Aberdeen Group

Minority Owned, Community Minded

At the heart of our company is the conviction that being a good corporate citizen means helping improve the communities in which we operate, building trust, and exemplifying what it means to be a responsible business leader.

Our company and employees support a broad array of initiatives, with a particular focus on children, social services, education and minority business development.

D.W. Morgan is a minority-owned company and has been recognized as

- California's Top 10 Minority-Owned Companies by DiversityBusiness.com
- Northern California Minority Supplier Development Council's (NCMSDC) Supplier of the Year (twice)
- National Minority Supplier Development Council's (NMSDC) Regional Supplier of the Year

As D.W. Morgan has spread across the world, we have sought out diversity partners at home and abroad. We are a proud member of many prestigious minority business associations such as the NCMSDC, NMSDC, and the Women's Business Enterprise National Council (WBENC).

We take pride in promoting an exemplary corporate culture built on diversity. Imagine the ways your company could grow with a trusted, award winning service working behind the scenes.

But for now, imagine what it would be like to work with a leading company, recognized both in their field and in their service to the community.

Don't Leave IOD to Your Imagination

The best network is the one built just for you. When you contact us, we'll run a full, free cost-saving analysis to show you exactly what you can expect to save. You'll be able to see for yourself how our IOD system can find ways to cut costs, optimize transportation and logistics, and equip you with an unrivaled balance sheet that will propel your company to the next level.

¹ <http://fortune.com/2008/11/24/apple-the-genius-behind-steve/>

² <http://www.everythingsupplychain.com/apple-ceo-tim-cook-supply-chain-guru/>

³ Issacson, Walter. Steve Jobs, page 359.

⁴ Issacson, page 361.

⁵ <https://www.fool.com/investing/general/2016/05/25/how-apples-inventory-can-shedlight-on-the-genius.aspx>

⁶ Davis, W. Herbert, Cost of Logistics Survey, Supply Chain Digest 2005

⁷ Urban, Roger, Reducing Supply Chain Costs: Spending More to Save More, & Inbound Logistics, 2002

⁸ Heaney, Bob "Supply Chain Visibility, A Critical Strategy to Optimize Cost and Service", May 2013

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