



INVENTORY SOLUTIONS



**DELIVERING SUPPLY CHAIN SECURITY,
LOWER COST OF GOODS SOLD &
INCREASED LIQUIDITY**

EXECUTIVE SUMMARY

With the current state of the global economy – brought forth by supply chain disruption – many organizations have been faced with a similar predicament: **"How can we make our business more resilient?"**

Safeguarding revenue stability through a robust supply chain, whilst simultaneously avoiding the burden of an asset-heavy balance sheet, has posed a key challenge. How will our organizations enjoy the security of a Just in Case approach, without sacrificing the advantages of Just in Time? The conflict between security and efficiency in the supply chain is a difficult one to navigate. While procurement teams want to maintain a certain level of security for their supply chain, they often find themselves having competing priorities with the need for cash-friendly balance sheets. At times, the two needs seem mutually exclusive.

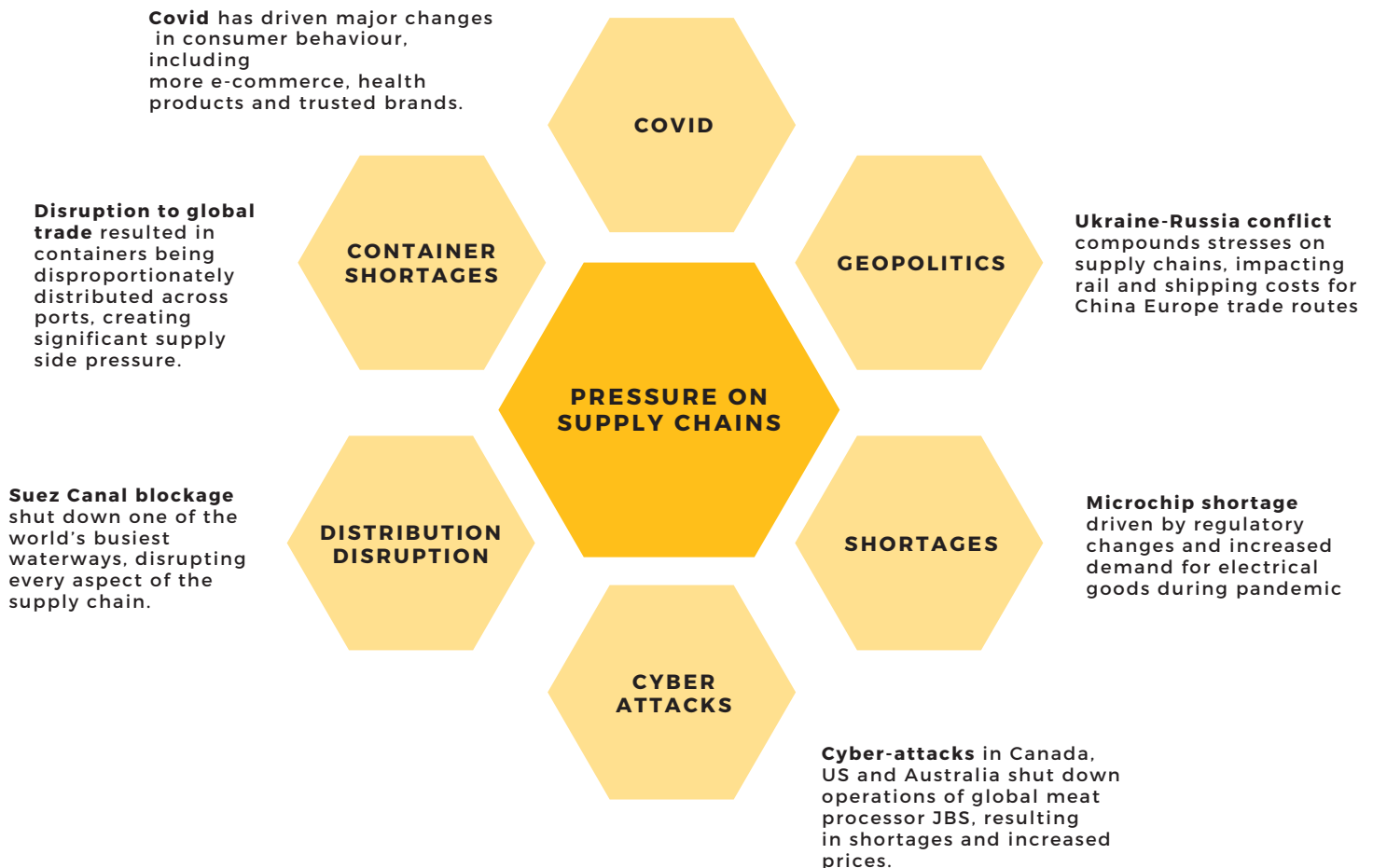
The good news is this: Falcon has discovered how to achieve supply chain security without the downside of inventory-trapped capital. Our comprehensive, scalable solutions can address all aspects of the supply chain, including increasing resilience, facilitating access to inventory (without the burden of trapped capital), and improving one's overall financial performance.



SUPPLY CHAINS UNDER PRESSURE: COVID, CONFLICT & SEMICONDUCTORS

From blocked canals and COVID-19, to the semiconductor crunch and the conflict in Ukraine – to say that the supply chain disruption has been a constant challenge, is certainly an understatement. Understandably, the popularity of the Just In Time (JIT) model, which was pioneered by Toyota in the 1960s, has reduced. Despite the downsides of trapped capital, a high Days Inventory Outstanding (DIO) number, and a sluggish Cash Conversation Cycle, manufacturers are looking more favourably on JIT's less glamorous, but more reliable, Just In Case (JIC) counterpart.

FIGURE 1: *PRESSURE ON SUPPLY CHAINS*





THE SLIDE FROM SUPPLY CHAIN DISRUPTION TO LARGE-SCALE FINANCIAL IMPACT

Supply chain disruption can easily slide into a full-blown crisis, as the challenge of accurately forecasting supply and demand can be compounded by a shortage of critical parts, longer lead times, spiraling costs, products being held up at borders, and even lost sales.

A closer look at the semiconductor shortage demonstrates how devastating this can be. The car industry suffered significantly as a result, with lead times for semiconductors increasing by up to 30 weeks between January and April 2021. In 2021, this cost the industry \$100 billion in revenue, and brought forth a decrease in the production of almost 4 million cars. Another impact was an increase in semiconductor prices by up to 30%, devastating the bottom line for many companies both within and outside the car industry.

The six-day Suez Canal blockade by the 200,000-ton MV EverGreen was another example of debilitating supply chain disruption, costing global trade \$10 billion a day. Shipments were either delayed, sent to alternative ports, or simply went to waste. A reduction in accessible routes also meant that European ocean rates increased by 6%. Furthermore, the maritime transport sector was already reeling from COVID-19, which further compounded the container crunch. A fall in factory output at the height of the global pandemic resulted in a 30% reduction of container traffic, which in turn caused shortages (particularly in Europe), where the price of containers has increased eightfold since 2019.

The conflict in Ukraine is further straining supply chains already reeling from the epidemic, travel restrictions, and shortages of critical components. Disruptions to shipping in the Black Sea are driving up insurance premiums, rail routes from China to Europe are being hindered, and the cost of fuel is inevitably climbing. The automotive industry is being particularly affected, both for fossil fuel and electric-powered vehicles. Russia is the third-largest supplier of nickel in lithium-ion batteries and provides 40% of the palladium for catalytic converters, while about 90% of US semiconductor-grade neon supplies come from Ukraine.

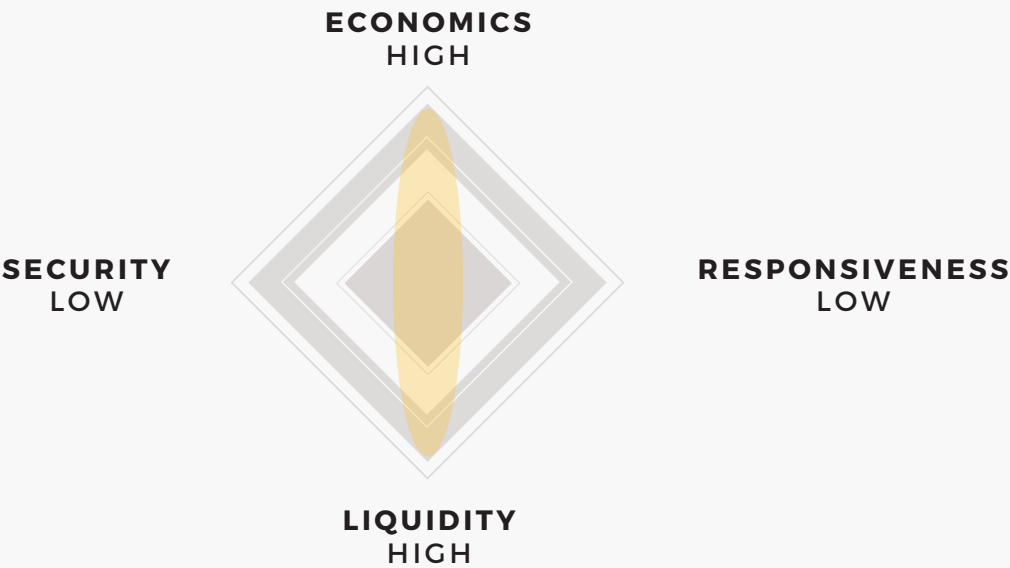


THE JIT V JIC DILEMMA

Developing a coherent response is challenging as different stakeholders will have competing priorities in a crisis. The manufacturing department will prioritize supply security, while the finance team will be more concerned with keeping an asset-light balance sheet that is more efficient, flexible, and responsive. Focusing on supply security and retaining high levels of contingency stock might bring clear benefits for lead times and manufacturing, but would consequently result in capital trapped on balance sheets – which can be used more efficiently elsewhere. This, in a nutshell, is the JIT v JIC Dilemma.

The Falcon Supply Chain Diamond illustrates the four defining characteristics of a supply chain (security, economics, liquidity, and speed) and how they behave in different scenarios. In an ideal world, operating on a JIT basis is both cheap and efficient (see **Figure 2: JIT Supply Chain Diamond**). However, the reality is that security of supply is not guaranteed and disruption can often occur without warning. Overall, the JIT model is simply not sustainable, and organizations that persevere with this approach will remain at the mercy of disruption.

FIGURE 2: *JIT SUPPLY CHAIN DIAMOND*



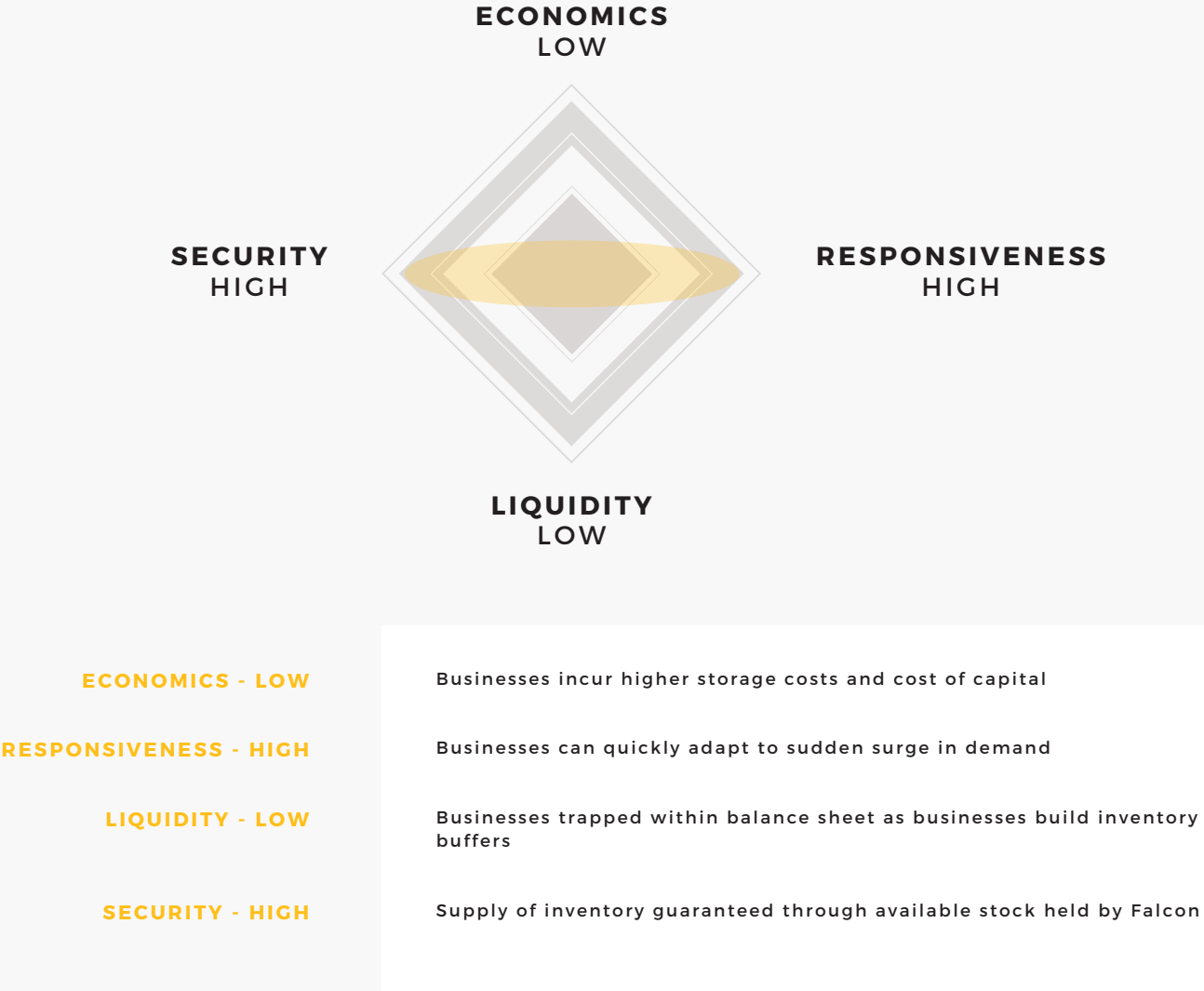
ECONOMICS - HIGH	Businesses incur lower storage costs and cost of capital
RESPONSIVENESS - LOW	Businesses unable to quickly adapt to sudden surge in demand
LIQUIDITY - HIGH	Businesses hold minimal levels of inventory freeing up liquidity for other activities
SECURITY - LOW	Supply of inventory relatively unprotected



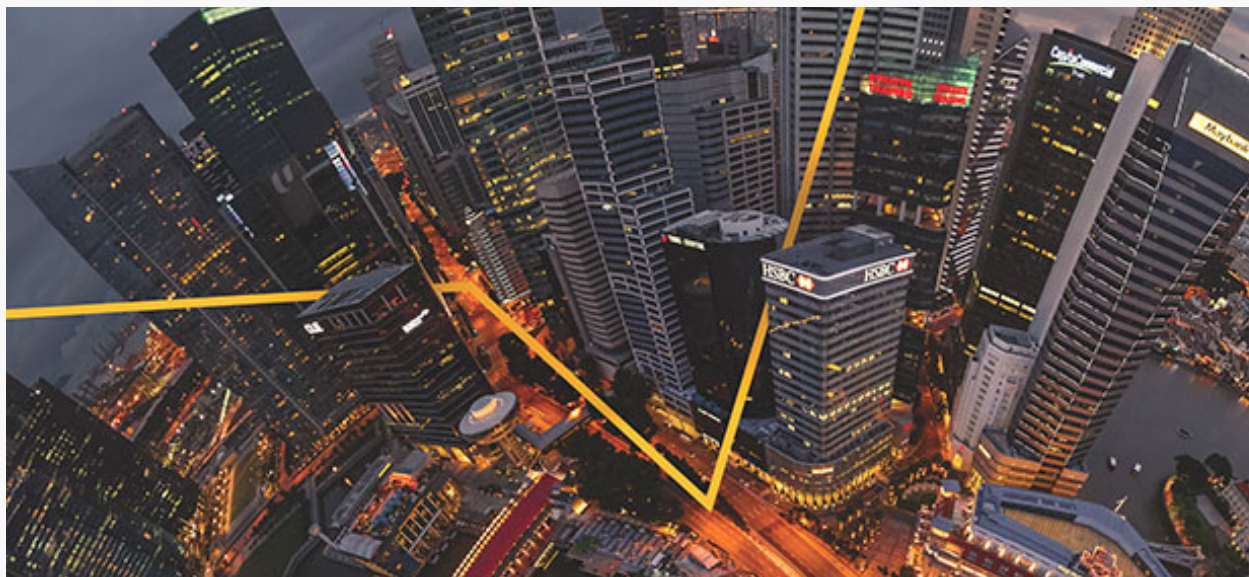
THE JIT V JIC DILEMMA

Although shifting to a JIC model may help address some of the concerns that arise in a crisis, this comes with its own set of challenges. As shown below, increased buffer stock affords greater security but prevents a lean balance sheet (see **Figure 3: JIC Supply Chain Diamond**).

FIGURE 3: *JIC SUPPLY CHAIN DIAMOND*



FALCON'S THIRD WAY



Is there a way for organizations to be both asset-light and cash-rich, enabling them to navigate a crisis with agility – but without the working capital sea anchor of excessive inventory?

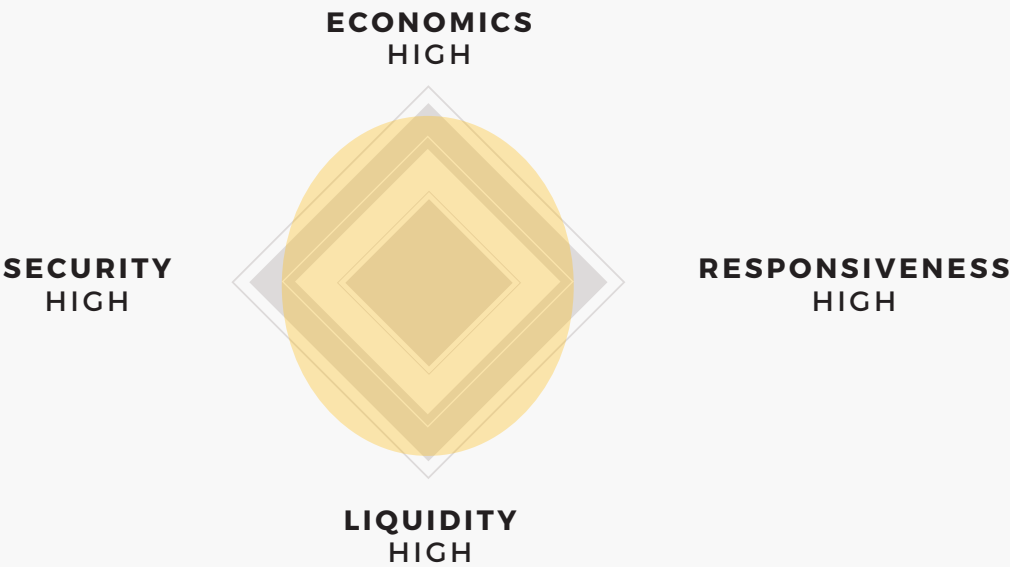
A relatively untapped solution is in plain view. Our research on public companies indicates up to \$10 trillion of capital is currently trapped in balance sheets globally. Freeing this up could unlock significant value and provide companies with additional cash flow and flexibility to reinvest in the business or pursue other ventures.

How can this be achieved?

Falcon's solution is to purchase new inventory and make it available to you as and when you need it on a just-in-time basis. In the meantime, inventory is held by Falcon. This significantly increases cash from operating activities on balance sheets, but without the risk of being unable to meet supply chain master demands when the next black swan inevitably strikes.

This is a win-win supply chain strategy (see **Figure 4: Falcon Supply Chain Diamond on the next page**), enabling companies to have the best of both worlds: avoiding the potential vulnerability of JIT, as well as the trapped capital and burdened balance sheets of JIC.

FIGURE 4: *FALCON SUPPLY CHAIN DIAMOND*



ECONOMICS - HIGH

Businesses offset higher storage costs through reduction in cost of capital and early settle discounts

RESPONSIVENESS - HIGH

Businesses can quickly adapt to changes in market demand

LIQUIDITY - HIGH

Businesses hold minimal levels of inventory freeing up liquidity for other activities

SECURITY - HIGH

Supply of inventory guaranteed through available buffer costs

Through this, businesses stand to achieve both security and an asset-light balance sheet, addressing the major issues that JIT and JIC aim to solve. By leveraging its proprietary technology and expertise gained over three decades of close collaboration with global businesses, Falcon can step directly into your supply chain in a seamless manner. Whether it be a single supplier or a hundred suppliers, Falcon’s technology platform makes its model quick, non-invasive, and easily scalable. With Falcon holding inventory on its balance sheet and providing it as and when required, businesses are guaranteed a steady supply on a JIT basis.

PRACTICAL SOLUTIONS TO COMMON PROBLEMS



Both procurement officers and commercial teams can benefit from Falcon's innovative solutions that remedy a range of practical headaches. When an unforeseen spike in demand occurs, we can make goods available at short notice. Alternatively, we can make specific components available when needed so a manufacturer is not forced to redesign a product [just to get it out the door], or be inundated with a growing mountain of work in progress. Our innovative approach can reduce the growing pressure on tier-one suppliers or contract manufacturers to have a stockpile of raw materials permanently on standby. Rather, we will furnish goods when needed.

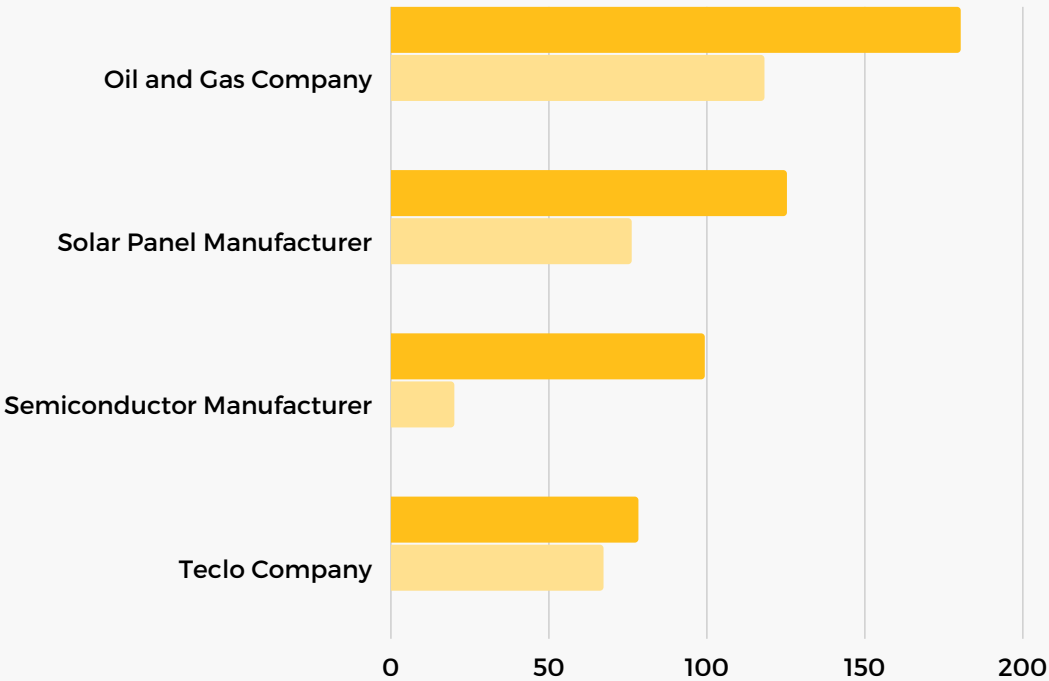


THE BENEFITS OF A SHORTER WORKING CAPITAL CYCLE

To recap, a company’s working capital cycle is the time it takes between the buying of goods to the manufacturing of the product and finally the generation of cash on the sale of the product. A shorter working capital cycle means that businesses can generate more cash faster, thus freeing up more liquidity for other operational activities. Just a single day’s improvement in working capital days (assuming average days of 45.1) translates to over 2% more liquidity!

This approach can be particularly beneficial for sectors where working capital days are typically in excess of two months, notably: oil and gas, construction and engineering, pharmaceuticals and life sciences, chemicals, and manufacturing. Through effective inventory management, not only can organizations free up significant liquidity, they can also achieve a neutral or even negative working capital cycle. This is illustrated in **Figure 5: Days In Inventory (Before & After)**, showcasing how clients from different sectors have reaped the benefits of Falcon’s solution.

FIGURE 5: DAYS IN INVENTORY (BEFORE & AFETR)





SIZE OF THE PRIZE:
ENHANCED FINANCIAL METRICS
& COST REDUCTION

While some may be apprehensive about the expense of these liquidity and working capital improvement plans, such apprehensions are unwarranted. They may often pay for themselves, not least as readily apparent cost savings can be realized in the form of reduced capital requirements. Assuming an average cost of capital of 5%, this translates to an additional \$5 million of profit for every \$100 million of liquidity that is freed up.

Inventory management experts like Falcon are also able to leverage their network and proprietary information to secure inventory at a much lower price point through bulk purchases and early credit term discounts, with savings ranging conservatively between 2% - 10%. The combined effect of these cost savings means that businesses can access inventory on a JIT basis, while effectively guaranteeing the security of supply at close to zero cost (or at a net financial benefit to the bottom line).

FIGURE 6: *LIQUIDITY IMPROVEMENTS FROM UNLOCKING INVENTORY*

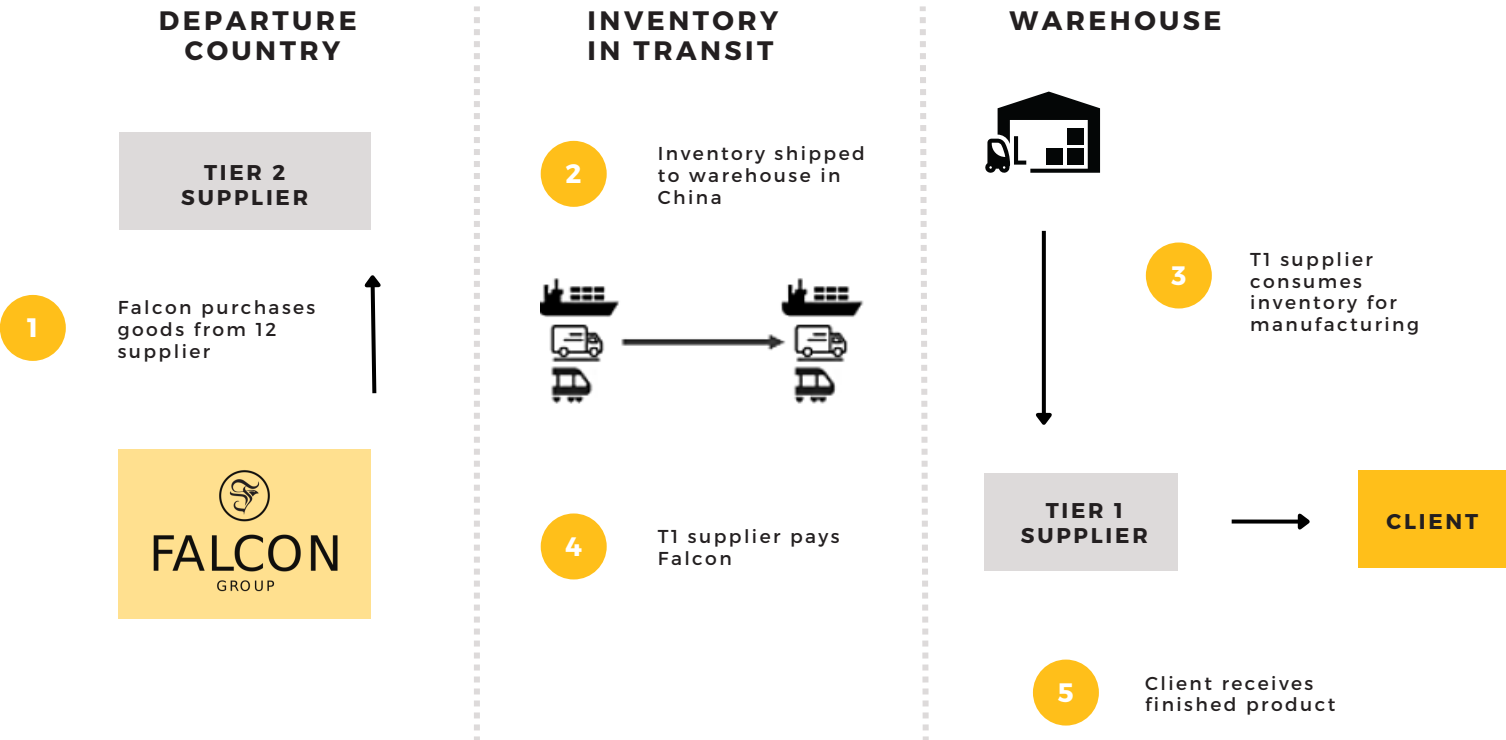
INVENTORY OFF-BALANCE SHEET %	LIQUIDITY IMPROVEMENT %
15	21
30	31
45	61
60	81
74	100



REDUCTION OF AIRFREIGHT EMISSIONS CAN BE ANOTHER BONUS

The use of emergency air freight to transport components to where they need to be is one approach to counter supply chain interruption. Given the comparative CO2 emissions of air freight versus other modes of transportation, this is definitely something to be wary of. For instance, a container ship with a capacity of 18,000 twenty-foot equivalent units (TEU) might emit 3g of CO2 per tonne of goods, for every kilometer traveled. By comparison, a typical air freight 747 with a capacity of 11.3 tonnes may emit well over 400g of CO2. One of the potential benefits of the Falcon model is that goods can be held in a geographically convenient third-party facility. In turn, this can help facilitate nearshoring but also reduce the need for emissions of heavy air freight.

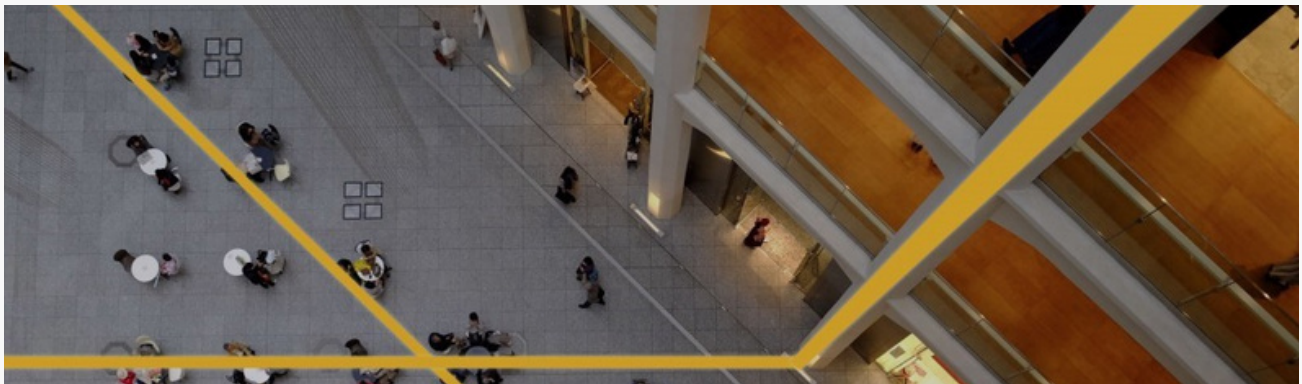
FIGURE 7: FALCON IN PRACTICE



SEIZING THE LOW-HANGING FRUIT

Whilst JIC and JIT may have worked historically, this has always been at the cost of either supply chain security or balance sheet efficiency. Falcon offers a third way that delivers the best of both worlds. With Falcon holding inventory on its balance sheet and providing it as and when required, you can leverage the advantages of both supply chain security and liberated working capital.

Our solutions can help your company face the future with more confidence in your supply chain. The dilemma of liquidity versus inventory can be resolved. Companies can mitigate risk and also leverage their valuable inventory to free up cash for use in other areas.



CHALLENGE

Client suffered from long lead times as a result of Tier 1 supplier working capital management practices.

- Tier 1 supplier is based in China and orders inventory from Tier 2 supplier in Mexico o Tier 1 supplier recognizes inventory on balance sheet for duration of shipment (30 days) until completion of manufacturing process and finished goods released to Client (3-6 months)
- To reduce balance sheet and cash flow impact, Tier 1 supplier only orders inventory when needed
- Tier 1 supplier also delivers finished goods to Client by air to reduce delays resulting in higher cost

FALCON'S SOLUTION

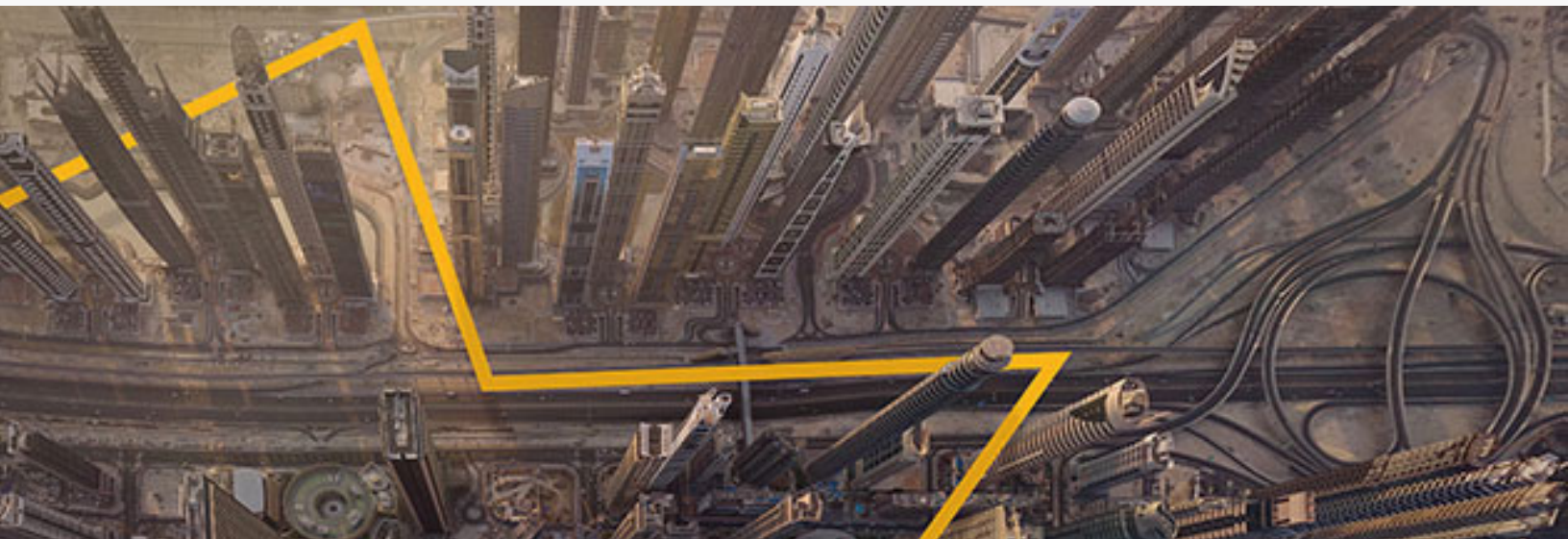
Falcon enters supply chain to provide Tier 1 supplier inventory on JIT basis • Falcon procures inventory from Tier 2 supplier and keeps inventory on its own balance and stores inventory near Tier 1 supplier factory.

- Inventory ownership is only transferred to Tier 1 supplier when inventory used in manufacturing

OUTCOME

Tier 1 supplier improves working capital efficiency and liquidity by only purchasing inventory from Falcon when needed

- Lead time is improved as inventory is available to Tier 1 supplier almost immediately
- Transaction cash conversion cycle is improved by 210 days
- Cost reduction from reduced need for air freight
- Enhanced Client-Supplier relationship throughout the supply chain





With offices in Europe, North America, Asia and the Middle East, Falcon is a leading global provider of asset and inventory solutions. Falcon works with multinationals worldwide to deliver supply chain resilience and balance sheet efficiency.

The low hanging fruit could be in your backyard.

Are you ready to join us?

CONNECT WITH US