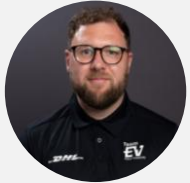


DRIVING SUPPLY CHAIN AGILITY WITH I2M

| DHL Technology Conference
| Shaping Tomorrow's Supply Chains, Today

SPEAKERS



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Accenture's Global Supply Chain Key Phases

UPSTREAM

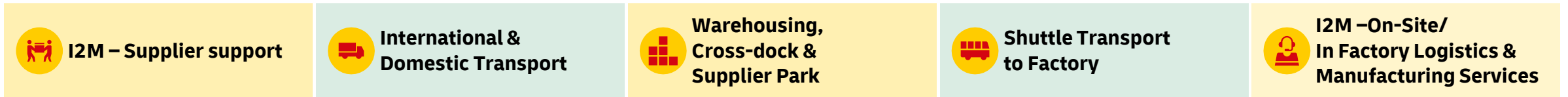
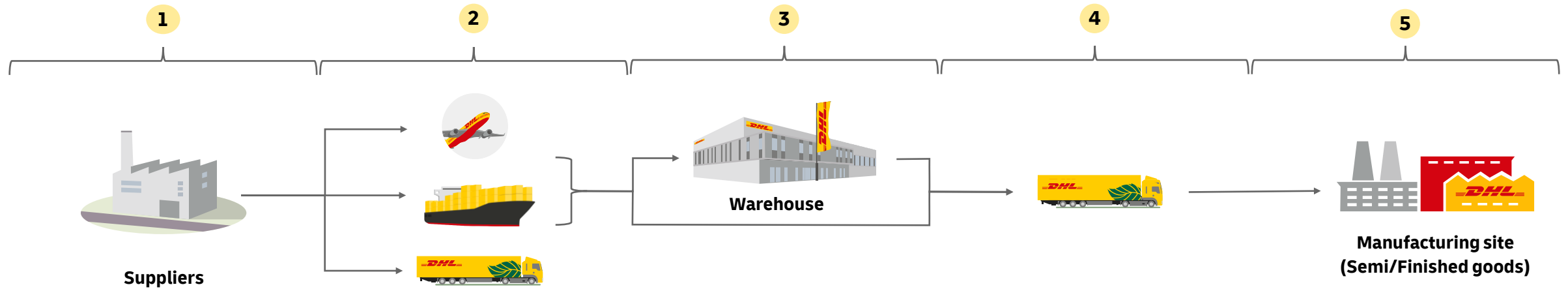
DOWNSTREAM



Untapped efficiencies to be unlocked

Historical focus for supply chain efficiencies

Defining Inbound to Manufacturing



Inbound Complexity in Technology...

Global Supply Networks

Co-ordinating multi-tier cross-border supply with in-house and outsourced manufacturing.

Lead Times and Demand Signals

Balancing disparity between component lead times and customer demand signals.

High Responsiveness

Requiring real time visibility for proactive manufacturing decision making.

Diverse Material Supply

1,000s to 10,000s of components and materials used in the manufacturing process.

Specialist Logistics Requirements

From protecting high value equipment to managing dangerous goods and clean rooms.

Rapid Innovation

Fast and frequent research and development iterations creating stock obsolescence risks.

...can't be completely removed...

...but it can be controlled.

Activity: Group Discussion

Scenario

You are a semiconductor manufacturer and have seen continued growth in customer demand for your product over the last 5 years. This has placed pressure on production capacity and the inbound supply chain, particularly during peak demand months for the most popular product variant. You are experiencing variable lead times on key components and production line changes between variants are time sensitive.

Discussion

- What key inbound risks can you identify?
- What solutions would you consider to balance manufacturing agility and inbound efficiency?

Feedback

- One key inbound supply chain design thought
- One key compromise considered

Having the correct levels of inventory is hugely important for many reasons

Production Schedules

Inventory of raw materials needs to be sufficient to maintain production schedules and expectations.

Cost of inventory

Cost of ownership of the raw materials needs to be considered. It impacts cash flow so you need to ensure that the stock is consumed in a suitable amount of time.

Protection against disruption

There are so many external influences that can disrupt your supply chain, so having a buffer volume of raw materials can help mitigate against certain risks.

This creates a need for balance

Efficiency

Agility



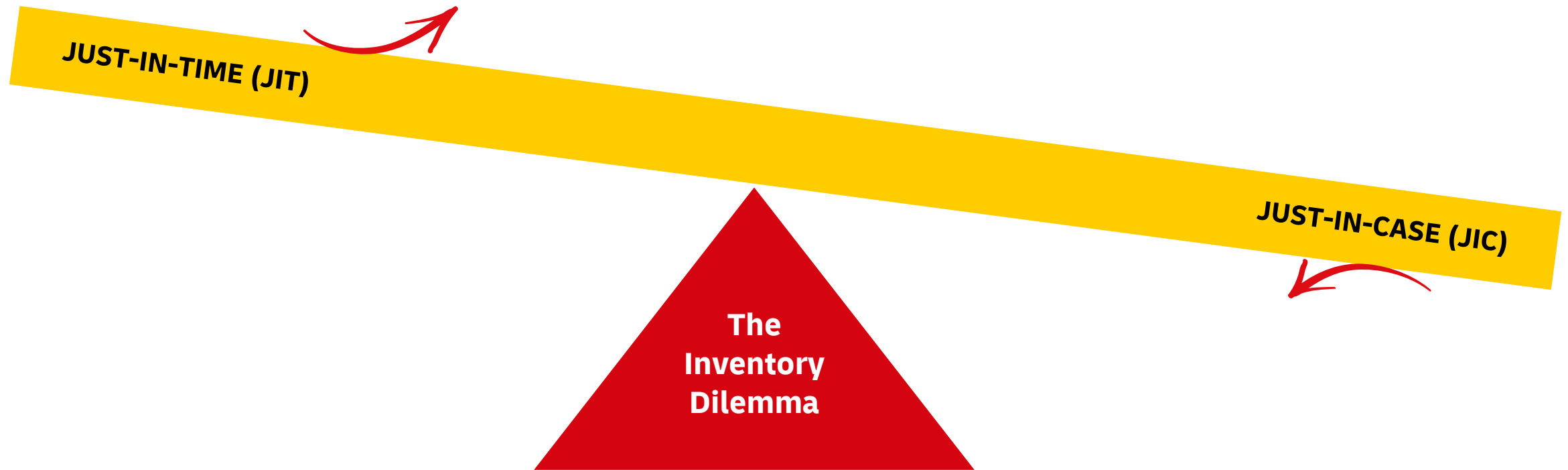
JUST-IN-TIME (JIT)

JUST-IN-CASE (JIC)



**The
Inventory
Dilemma**

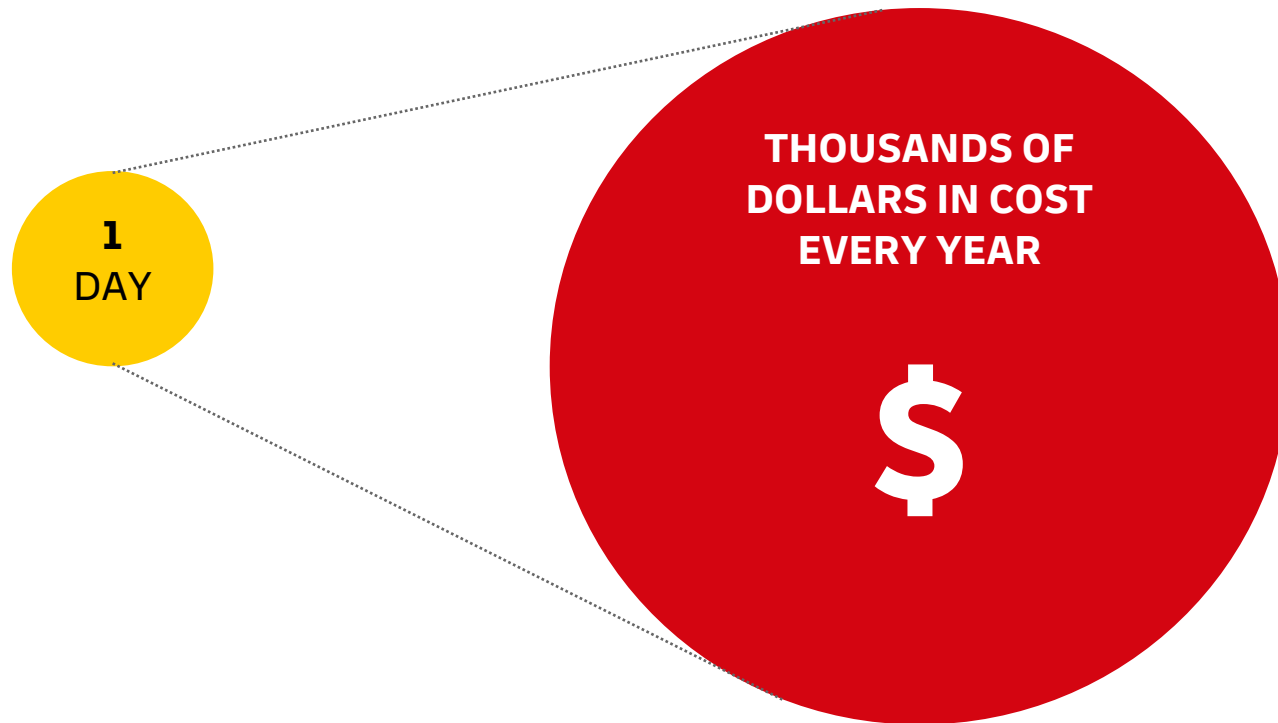
But we often find inventory stock holdings increase to protect decisions and supply chains



Question 2: Answer

According to the Bank of America, the average inventory held upstream by semiconductor manufacturers was 112 days in 2024. This was 1 day less than the previous quarter but still 17 days higher than the 5-year average.

What's the real cost of holding just one extra day of stock?



EXCESS INVENTORY TIES UP CASH, EATS STORAGE SPACE AND RISKS OBSOLESCENCE



Driving agility through inbound to manufacturing

Uncertainty can drive inventory cost...



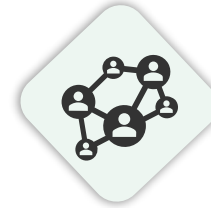
...but there are alternatives to improve agility



Inbound Supply Data and Visibility
Informing pro-active manufacturing decision making in real time



Infrastructure to Respond
Logistics resources ready and able to respond to the next challenge

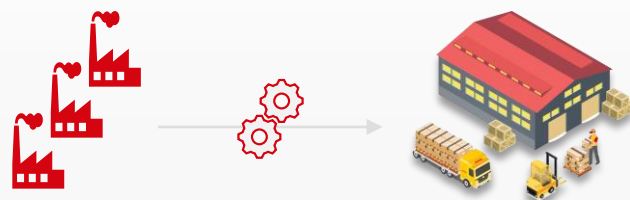


Vendor Managed Inventory
Systems and supply networks that support manufacturing agility

VMI operating archetypes

Different operating models tailored to supply chain needs

1 Production VMI Contract Manufacturing Network



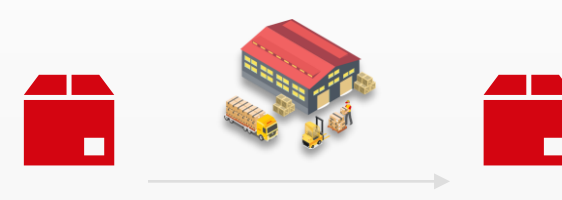
A single VMI hub supporting multiple ODM factories

2 Production VMI In-House/Own Manufacturing



VMI setup replenishing directly into the manufacturer's own production lines

3 Finished Goods VMI ODM/Brand Model (e.g., Apple-Quanta)



Finished goods remain SOI in the DC until transferring to COI at order release

Our DHL Solutions

**Depending on country*

Bonded / FTZ solutions + Customs brokerage & clearance + Secure Trucking + Systems: WMS + Supplier Portal

Unique Capabilities

- Allocation logic multiple ODMs
- Managing shared SOI/COI pool
- Multi-party coordination

- In-plant logistics
- Production floor integration
- Fair-share replenishment logic

- SOI → COI tracking at order release
- FG auditability & traceability
- Compliance management

Key Benefits

- ✓ Streamlined inventory holding
- ✓ Flexible stock allocation to multiple ODMs

- ✓ Supply chain cost optimization
- ✓ A single provider managing end-to-end

- ✓ Cash flow & Inventory holding cost savings
- ✓ Faster fulfillment

What do we see as the fundamentals of a world-class I2M Supply Chain?



Asset Tracking and Visibility

Description: Transport control tower with real-time tracking of deliveries into the plant / Fab.

Benefits: Parts delivered in full as required with minimal losses. Lost or unaccounted stock can be traced.



Clear Ownership Across the I2M Boundary

Description: No grey zones of accountability between inbound and manufacturing

- Clear ownership at every handoff (supplier > inbound > fab > tool)
- No gaps where problems simply get “pushed downstream”
- Joint accountability for outcomes that span functions

Inbound, manufacturing, planning, and engineering share responsibility for I2M performance.



Just in Time vs Just in Case

Description: Management of inventory stock levels that optimizes the space needed for onsite stock but balances against risk of stock shortages

Benefits: Creates a clean, logical flow of raw materials / components into the production plant.



Materials arrive with intent, not just identity

Description: Most fabs have traceability. World-class I2M adds context, including:

- Why the material is needed (tool, step, priority)
- How sensitive it is (yield-critical, AMS, shelf-life constraints)
- What flexibility exists (alternates, timing windows)
- Inbound teams don't just know what arrived — they know what it is for.

Why is a world class Inbound to Manufacturing supply chain important?



**Increased
production
potential**



**Reduced
supply chain
complexity**



**Optimized
inventory
strategy**



**Prepared for
global
scalability**

The right inbound approach enables **resilience**, supports **market access**, **delivers cost optimization**, and helps drive visibility and sustainability benefits.



A **world class** Inbound to Manufacturing supply chain is a **competitive advantage**.