

A light blue car is parked on an airport tarmac. The car has a white license plate that reads '34 015'. On the side of the car, there is a '20 YEARS' logo and the 'time:matters' logo in orange and blue. The car is positioned in front of a large Lufthansa airplane. The background shows an airport with other planes and buildings.

The Role of Time-Critical Logistics in Complex Global Supply Chains

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Our Main Challenges on the Path to \$1T

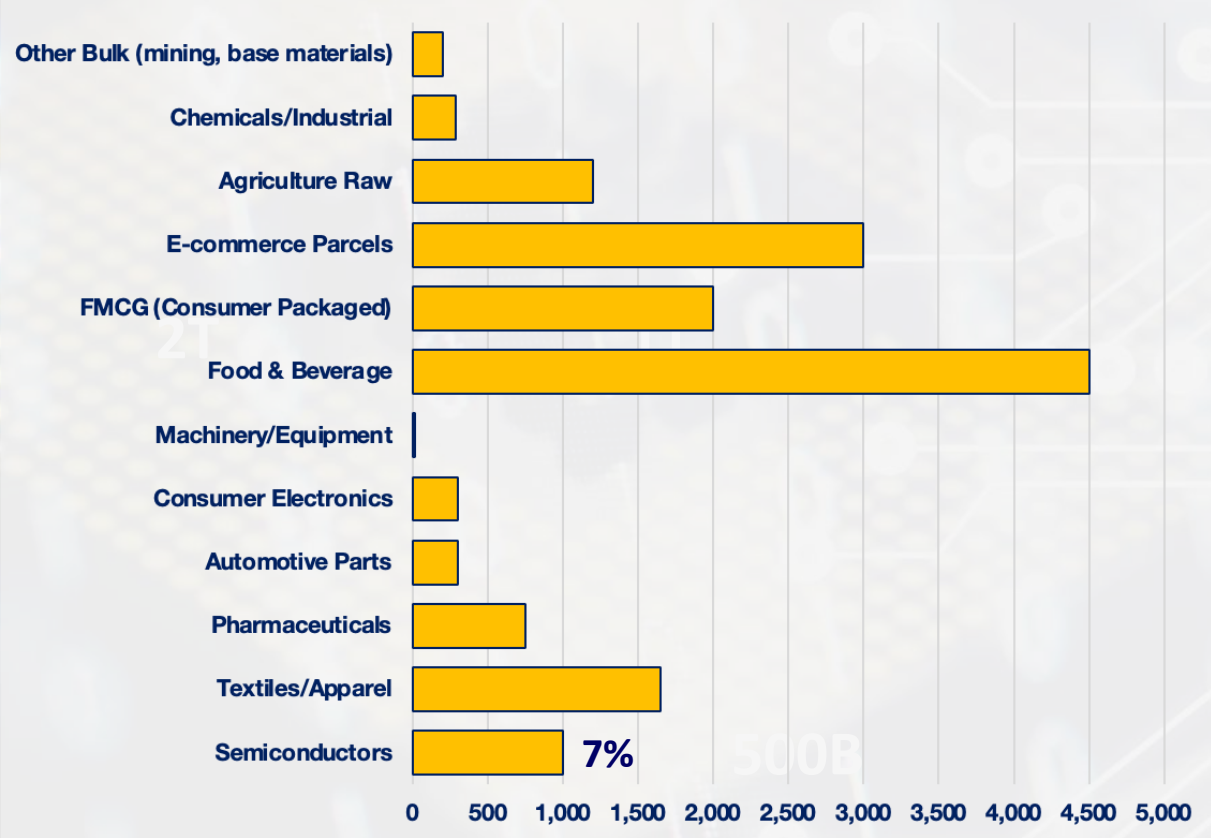


...Supply Chain Complexity



Let's look at some statistics

Global Logistics - Annual Units (Billions)



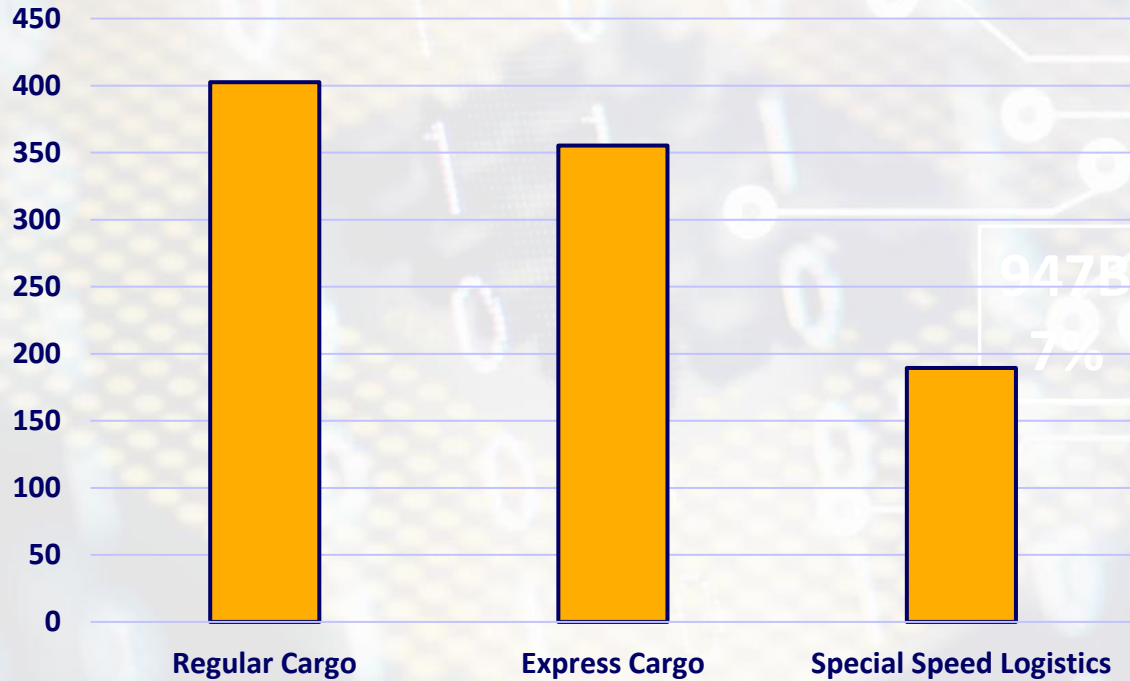
Data: SIA, IDC
IQVIA, World Bank

Semiconductor Logistics Cargo Modes



Data: SIA, and industry sources

Semiconductor Cargo Logistics (USD Billions)



*Data: SIA, UN Comtrade
and industry sources.*

Pareto's Law

- Supply chain disruptions, line-downs, shortages, headache files...
- How much time do they consume of your day to solve it?
- Just 20% of logistical challenges tend to cause 80% of time urgent supply chain disruptions

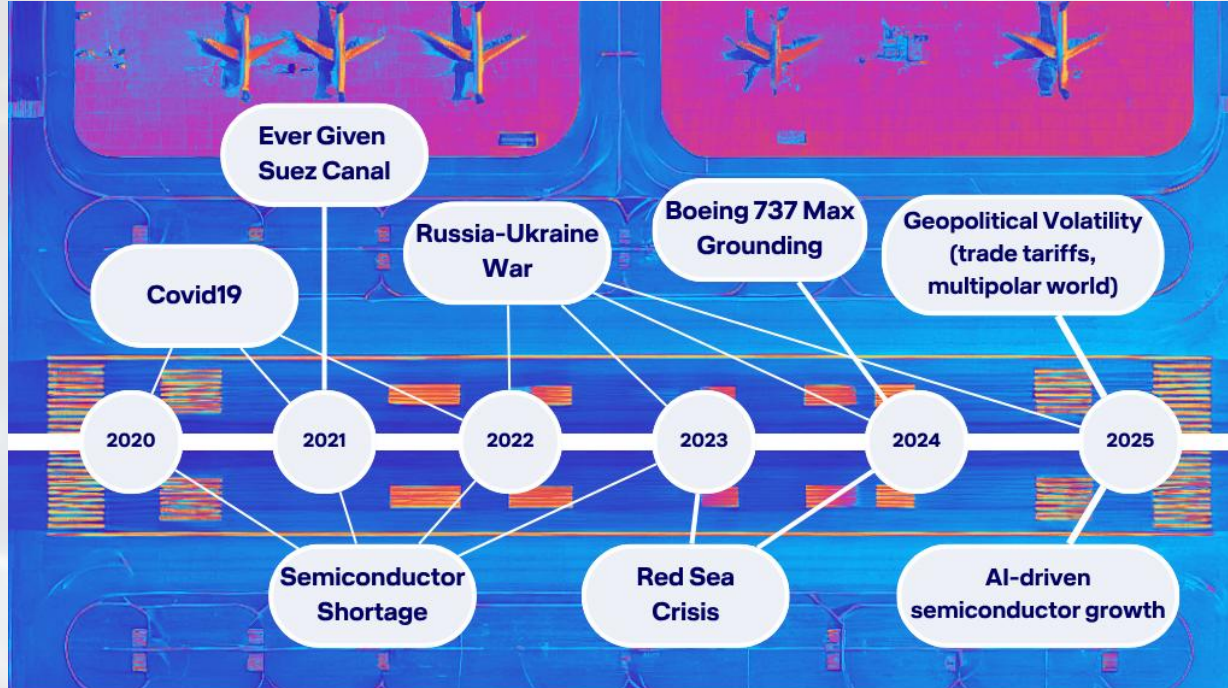


Who Still Remembers...?



What the VUCA?!

- Raise your hand if any of these crises impacted your business



The world around us is...

Volatile

Uncertain

Complex

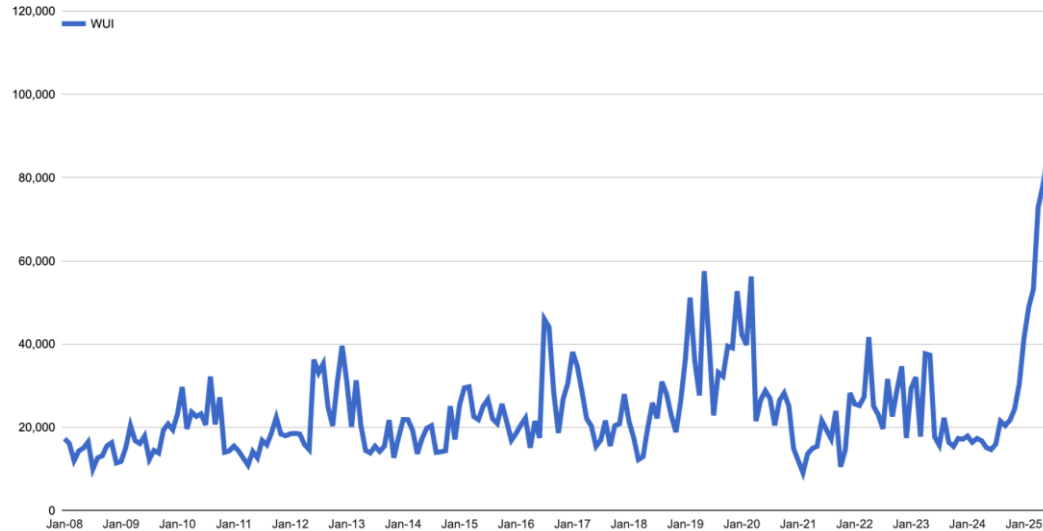
Ambiguous

What the VUCA?!

World Uncertainty Index (WUI): Global

Index. GDP weighted average. January 2008 to August 2025

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Note: The WUI is computed by counting the percent of word "uncertain" (or its variant) in the Economist Intelligence Unit country reports. The WUI is then rescaled by multiplying by 1,000,000. A higher number means higher uncertainty and vice versa. For example, an index of 200 corresponds to the word uncertainty accounting for 0.02 percent of all words, which—given the EIU reports are on average about 10,000 words long—means about 2 words per report.

Black Swans

A "black swan event" refers to a rare, unexpected event that has a significant impact and is often retrospectively rationalized as having been predictable



Reference: N.N. Taleb, The Black Swan (2007)

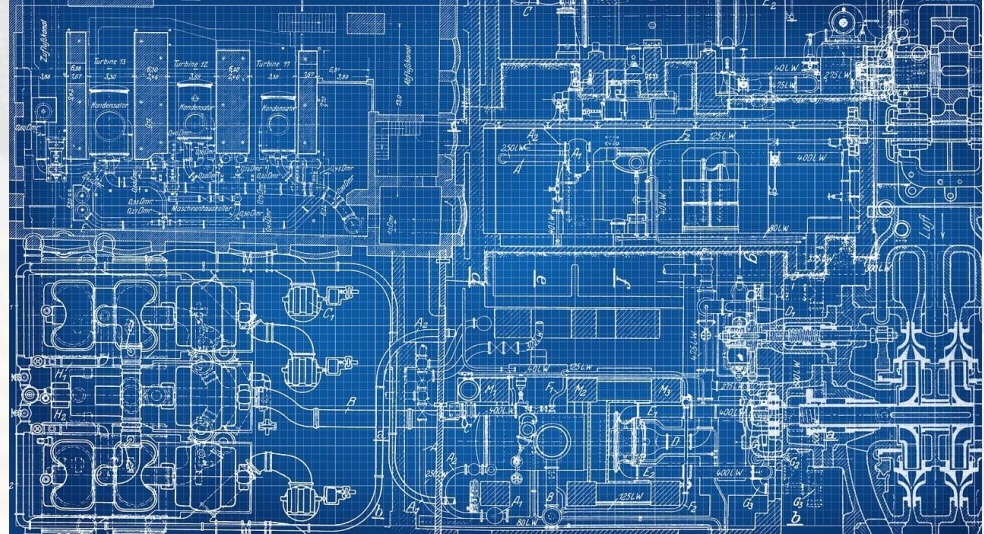
Layered on top of this industry asymmetry are unpredictable shocks:

- Geopolitical flashpoints (Red Sea, Taiwan, Ukraine)
- Climate disruption (floods, droughts, heatwaves)
- Pandemics (COVID-induced vulnerabilities)

“Unprecedented” is now business-as-usual

SEMI and time:matters Join Forces

- SEMI-time:matters Strategic Partnership
- SCM blueprint to help prepare the industry:
 - Prepare for exponential growth
 - Prepare for the worst
 - Prepare for rapid response
 - Optimize capital efficiency
 - Maximize profitability
 - Drive sustainability



SCM Industry Advisory Council



SCM Strategic Partners

Knowledge Partner: McKinsey&Company



time:matters

Rethinking Time-Critical Logistics

- Imagine your supply chain's "weakest link". Where do your shipments usually get stuck?
- Challenge is to balance three key factors:
 1. Speed
 2. Quality
 3. Price
- Generally, you can only pick two of them...
- Think about movements from fabs to OSATs, from Tier 1s to OEMs, from tool manufacturers to fab construction sites



Your shipments need a combination of high speed, white glove service, and 100% delivered quality
Special speed logistics isn't cheap... But it is a justifiable "insurance policy"

When Minutes Cost Millions

A Fab Line-Down Can Cost \$4M/hour

Scenarios	Typical Downtime Costs Saved	Emergency Response Investment	ROI	Time Saved	Typical Outcome
Fab Line-Down	\$24M - 96M + (24 hrs)	\$15,000	~160,000% – 640,000%	1–2 days	Fab shut-down avoided
Equipment Outage (Single Tool outage)	\$1-5M Hr Up to \$24M (24 hrs)	\$10,000	Up to ~240,000%	1 day	Revenue/Profit loss avoided
EUV/Photoresists Delay	\$4M Hr - 100M+ Multi-Day events	\$35,000	~286,000% +	Hours–days	Multi-line impact avoided

Emergency logistics isn't a cost—it's a competitive advantage

Industry case studies:

Fab Line-Down: **time:matters** \$672M save; **Taiwan TSMC**: \$170M; power \$100M Equipment Outage: **Applied Materials** \$250M; **ASML** \$30/second; \$1M/day costs. EUV/Photoresists: **ASML** \$300M transport; -18°C cold-chain; dangerous goods

Special Forces of Logistics

- Correlation with the military:
80% regular forces and 20% special forces
- 80% of the time, your supply chain is fine.
For the other 20%, you need a different solution



Connect With Us

- Hall: C2
- Booth number: 433

Visit us to calculate your emergency logistics ROI!