

What is essential for your supply chain to survive?



Imagine a supply chain as a living organism.

What keeps it alive? What puts it out of balance?

Supply chains today are under pressure. Crises, conflicts, climate, customers, competition. The classic question was: How efficient are you?

The new question is: What do I need to do to ensure my supply chain will be competitive in five years?





Viability = longterm survivability



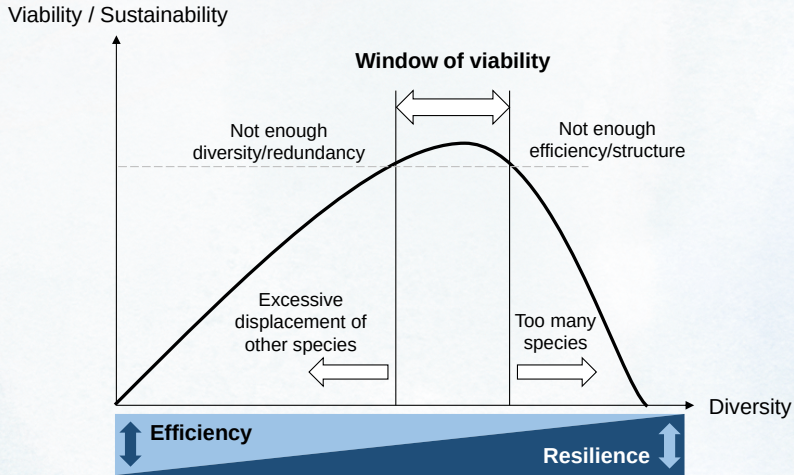
In biology, viability describes the ability of an organism to continue to exist under changing conditions.

Does this also apply to your supply chain?

Viability means more than just resilience. It is the ability to adapt, learn and regenerate without destroying the environment.

A viable supply chain can survive even if everything around it changes.





Between efficiency and resilience: the window of viability

In nature as in the supply chain:

Only resilience: too little structure → chaos, inefficiency

Only efficiency: too little diversity → vulnerability, system collapse

The **window of viability** describes the area in which a system is neither too rigid nor too chaotic, but viable. This idea comes from bionics and is based on the Ulanowicz model from ecology.

We apply this to the biointelligent supply chain: a balanced trade-off between efficiency and resilience is crucial. But there is also a third factor: sustainability.

Three dimensions, many antagonistic objectives



Efficiency

Resilience

Sustainability

SCV balances three goals simultaneously:

Efficiency. Resilience. Sustainability.

All three are important. But they are rarely “perfectly realizable” at the same time.

How can you navigate these conflicting goals to find the right path? What are the consequences of giving too much importance to one dimension and neglecting the others?

A close-up photograph of a dark, hairy ivy stem with several bright green, heart-shaped leaves. The stem is climbing a wall that is painted in two distinct colors: a textured yellow on the left and a textured purple on the right. The leaves are positioned across the boundary between the two colors.

**What was the last crisis
that changed your
supply chain?**

Three cycles, three shifts. And an age-old trilemma:

Efficiency first: Stable times, cost pressure.
Lean, global, just-in-time.

Resilience rush: COVID, war, blocked canals.
Diversify, buffer, localize.

Sustainability push: Climate targets, human
rights, regulations.

Today, we are facing all three at once.
Where are you at the moment? Where are you going?



Are you a build-in or bolt-on company?

Build-In Companies

Sustainability is part of who
we are.

- We connect sustainability with resilience.
- We redesign our business model, not just our reports.
- We act early, because inaction is expensive.
- We measure net cost, not just upfront investments.

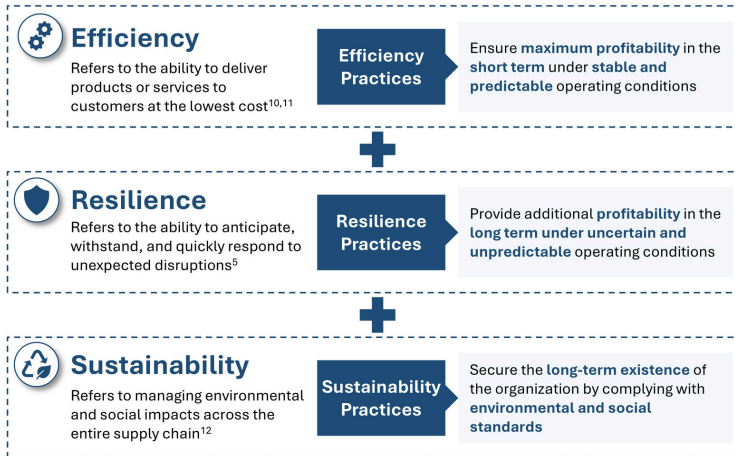
Bolt-On Companies

Sustainability is something we
“add on.”

- We react to pressure, not to purpose.
- We separate sustainability from the core business.
- We see it as a cost rather than a capability.
- We just adapt what we have to make it more sustainable.

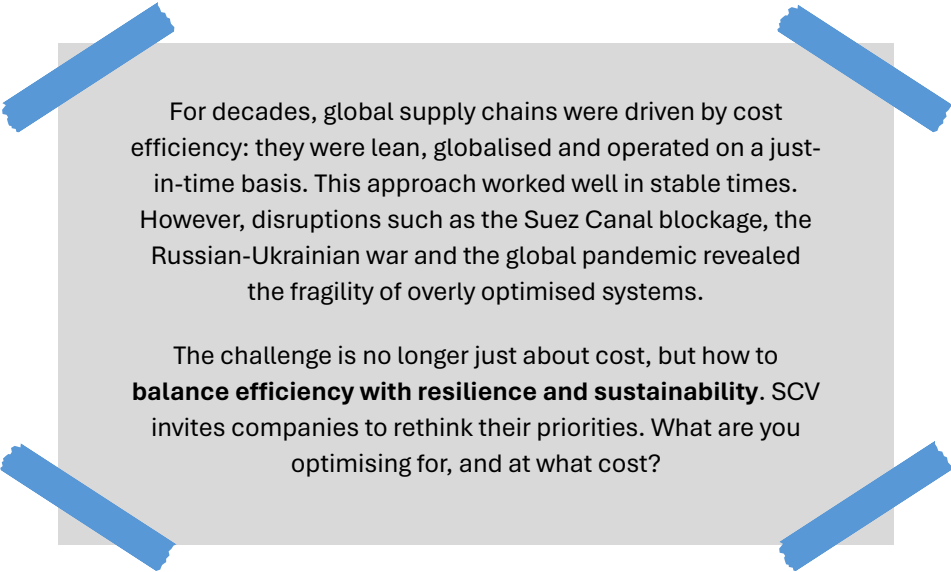
The objectives of supply chain viability







**Are you still playing
the efficiency game?**



For decades, global supply chains were driven by cost efficiency: they were lean, globalised and operated on a just-in-time basis. This approach worked well in stable times. However, disruptions such as the Suez Canal blockage, the Russian-Ukrainian war and the global pandemic revealed the fragility of overly optimised systems.

The challenge is no longer just about cost, but how to **balance efficiency with resilience and sustainability**. SCV invites companies to rethink their priorities. What are you optimising for, and at what cost?



Is your supply chain designed to withstand setbacks, or merely to break less easily?

Resilience is more than just damage control. It is the proactive ability to anticipate, withstand and recover from disruption. According to McKinsey (see reference note), a disruption lasting one month or more hits every supply chain every 3.7 years, costing around 4.2% of EBITDA.

Companies are responding by creating buffers, localising production and sourcing from multiple locations. However, resilience cannot be added on; it must be designed in. True SCV integrates resilience without compromising efficiency.



How do you approach sustainability: as a constraint or a compass?

71% of consumers worldwide now prefer sustainable products. Regulations (e.g. the Corporate Sustainability Due Diligence Directive (CSDDD)) are becoming more stringent. Furthermore, supply chains are responsible for five times more emissions than direct company operations.

Yet many firms still treat sustainability as merely a reporting task. Viable supply chains, however, see it differently, treating it as a strategic design principle. SCV reframes sustainability as a condition for long-term viability that is socially accepted, regulator-approved and future-proofed.

**Short-term profit vs. long-term survival.
Is this a real trade-off?**



SCV is not about making sacrifices to uphold principles. It's about aligning short-term efficiency with long-term viability. Efficient supply chains reduce costs in stable conditions. Resilient supply chains secure profits in uncertain times. Those that are sustainable ensure survival in a world shaped by climate, ethics and regulation.

Purposeful supply chain management involves balancing these forces rather than trading one for another (= finding synergies). In other words: Increased efficiency is not just for shareholders; it is also there to support resilience and sustainability.