Market study on data exchange in the automotive industry

Overview of results

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BVL Focus Group Automotive conducted a market survey on data exchange and data transparency in the automotive supply chain

Who did it?

BVL

TUM

4FLOW

Motivation

Many disruptive challenges are occurring in the automotive n-tier inbound supply chain

Hypothesis

Fast data exchange and **data transparency** across the whole supply chain will reduce challenges

Interview partners

More than

20 interviewees

with **9** OEMs

and **12** suppliers

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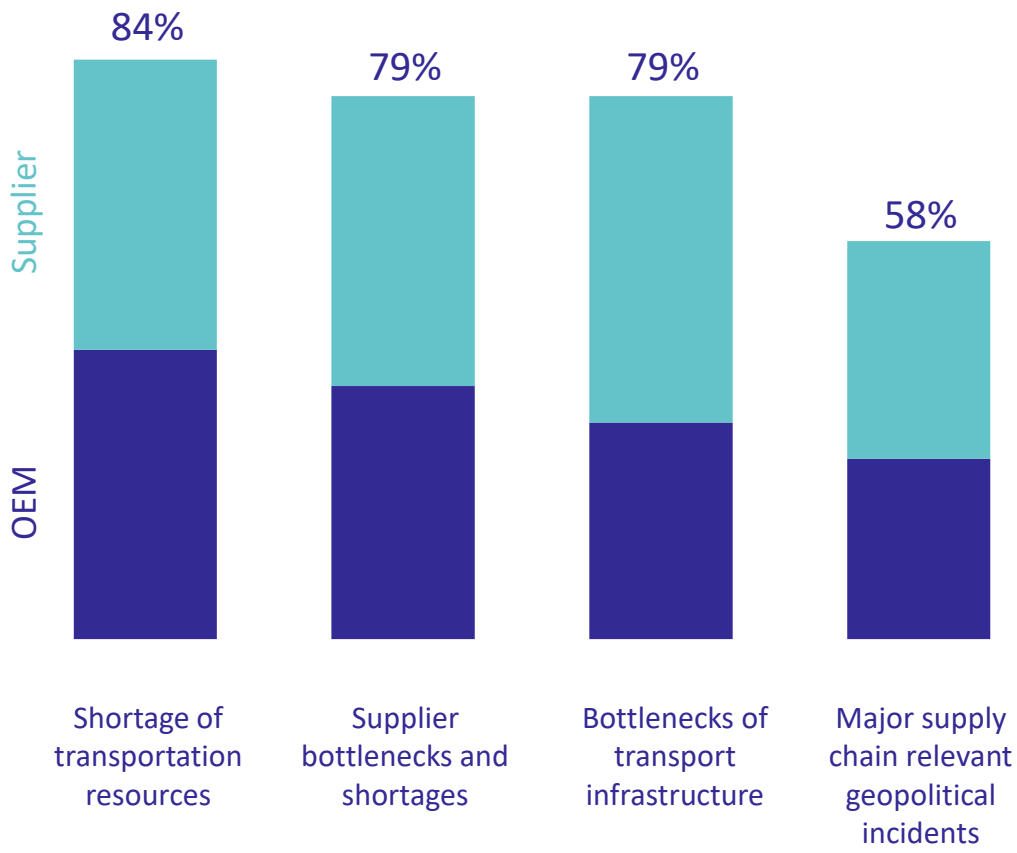
SC challenges most often mentioned by companies

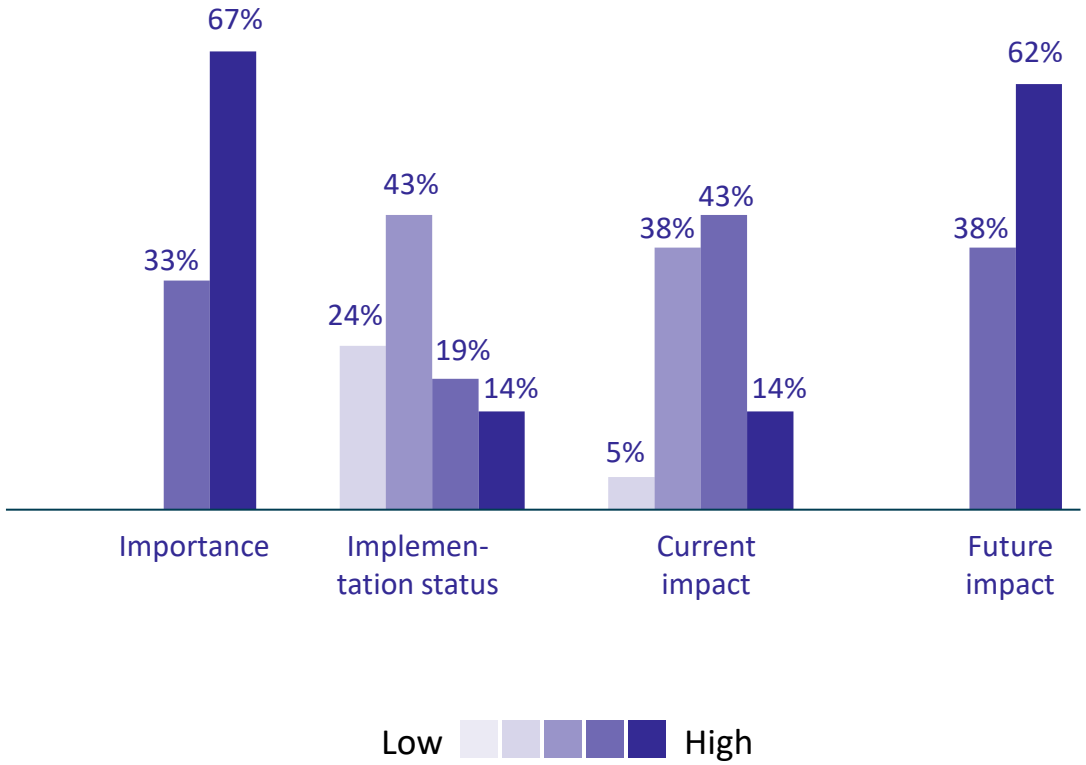


The automotive inbound supply chain faces tremendous challenges in recent years

- Close to every company faces multiple challenges in parallel, those reinforce one another.
- Due to different sourcing regions, not all companies are affected by geopolitical incidents.
- OEM's and suppliers face the same challenges.

Can data transparency and exchange help to overcome these challenges?

Data sharing and data transparency
Self assessment of companies



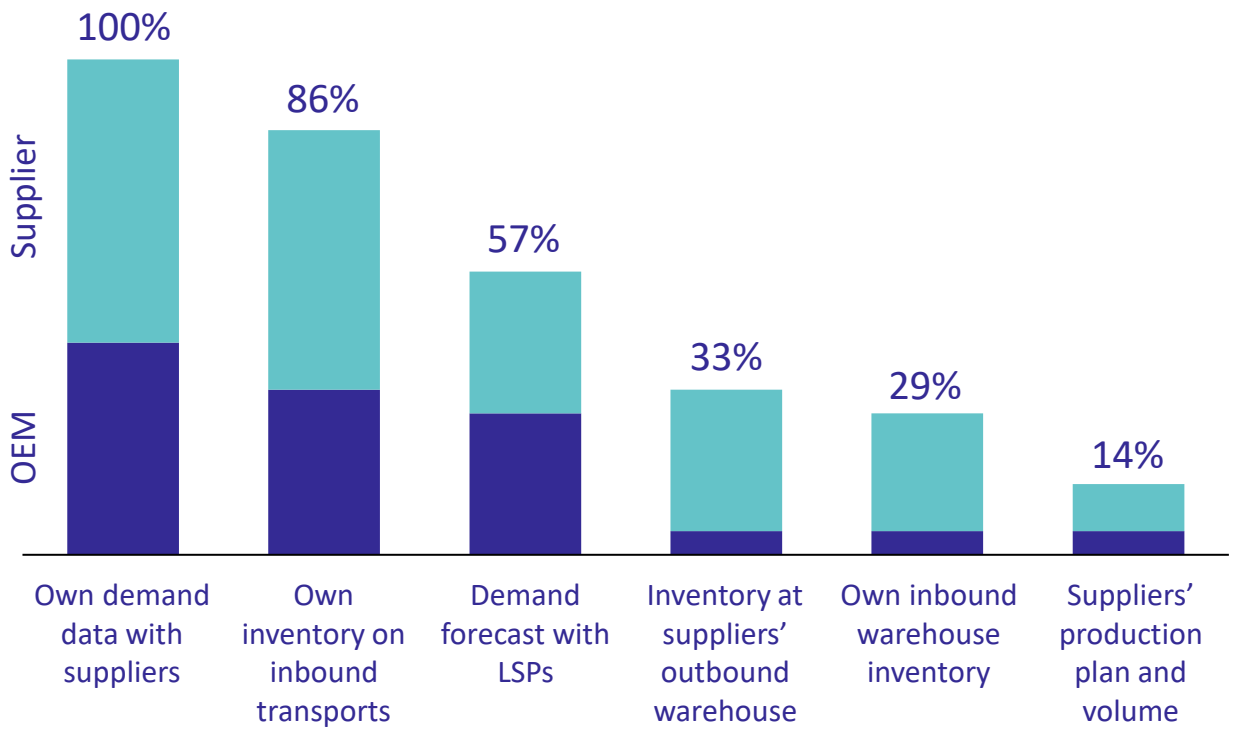
All companies see enormous potential in data sharing to address these SC challenges

- Companies believe in the importance and future potential of data sharing and data transparency.
- Nevertheless, their implementation status is not as advanced as they would like it to be.
- Companies with an already high implementation level and a high impact through data exchange are new players in the industry with an integrated IT-landscape

In the automotive industry, incumbents need to close the gap to meet their data exchange requirements

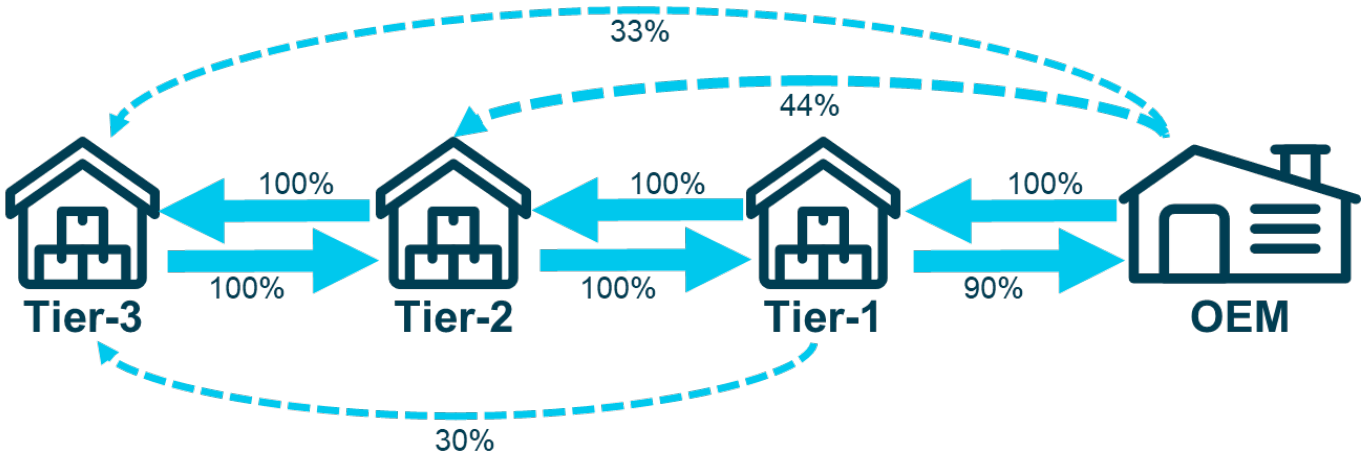
Automotive companies share more advanced data than demand data only in case of emergencies

Percentage of companies sharing data



- Sharing of demand data is a standard.
- Demand forecasts are communicated to LSPs for **securing transportation capacities** by 57% only, although 84% face significant shortages.
- **More advanced data** is shared by less than a third of the companies.

Although improved in recent years, data sharing practices do not reflect the importance and potential identified



- **Data sharing along the supply chain is selective**.
- 75% of companies are **increasingly exchanging data** in the event of **disruptions**, even with new partners.
- With current methods, **data sharing is temporary** in many cases.

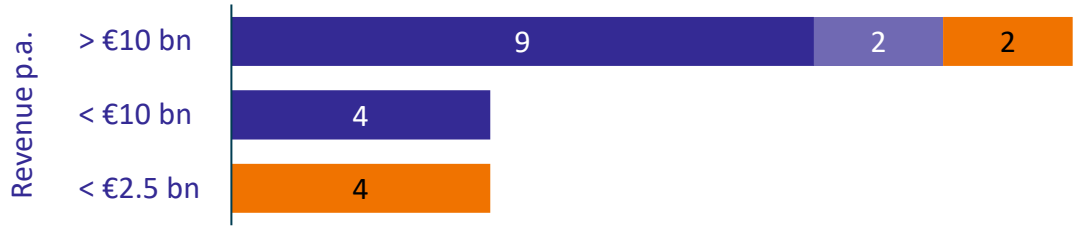
Companies exchange data mainly with direct suppliers!

Well known **reasons hinder data sharing** beyond the tier 1 level

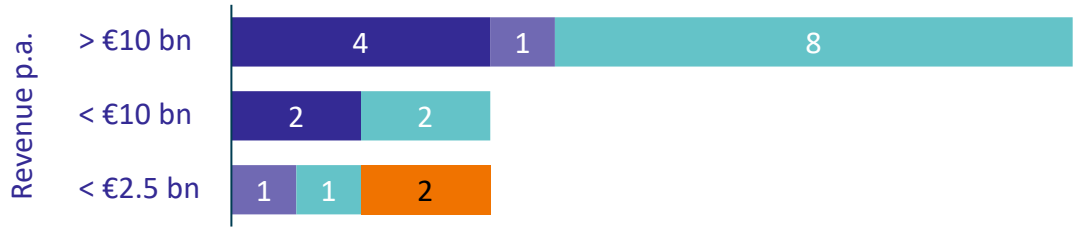
- **Perceived short-term value**
- **Standard (legal) agreements and frameworks**
- **Trust**

Data exchange concepts implemented or planned
Respective situation according to company size

Implemented concepts by company size
[No. of companies]



Planned concepts by company size
[No. of companies]



Standalone solution (TM, T&T, …)
Data exchange platform (Catena-X, …)
Both
None

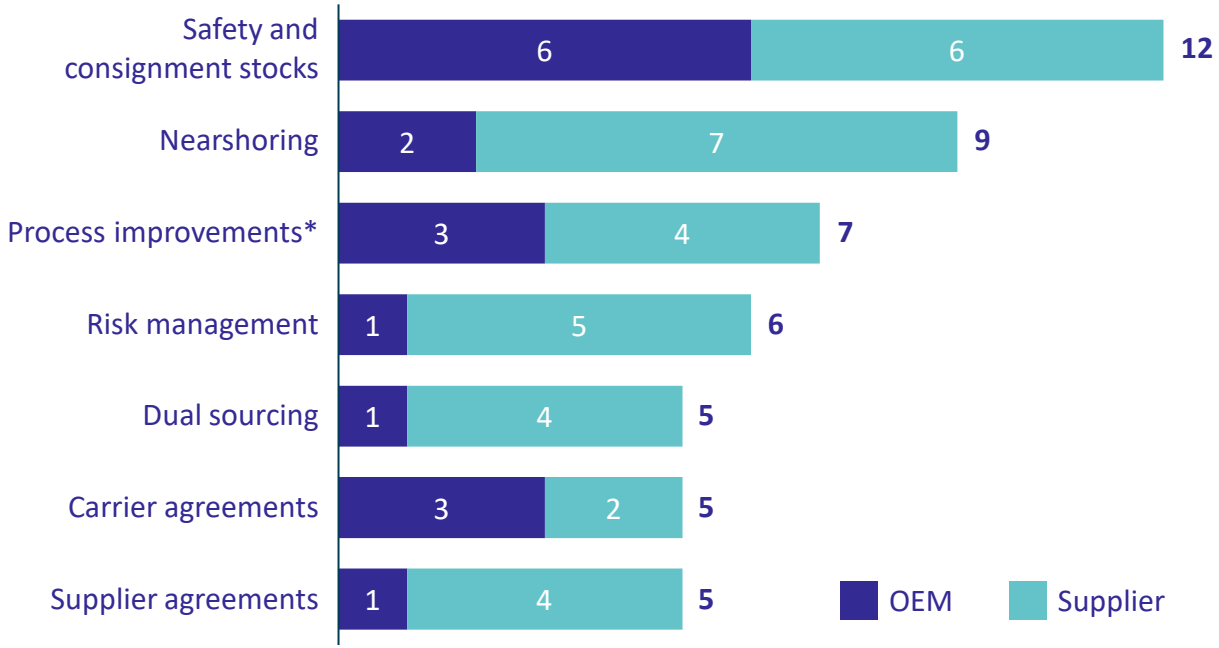
In the future, automotive companies would like to benefit more from data exchange via industry specific platforms

- Currently, larger automotive companies have a **broader set of software solutions** implemented to share data with their supply chain partners.
- In future, companies intend to **share more data** with their supply chain partners through **external platforms**, such as **Catena-X**.
- Small suppliers are **less advanced** in data sharing.

Even large companies struggle with the lack of industry-specific standards and harmonization of data exchange

Automotive companies implement more than 3 measures on average to increase robustness and resilience

Number of implemented measures by type

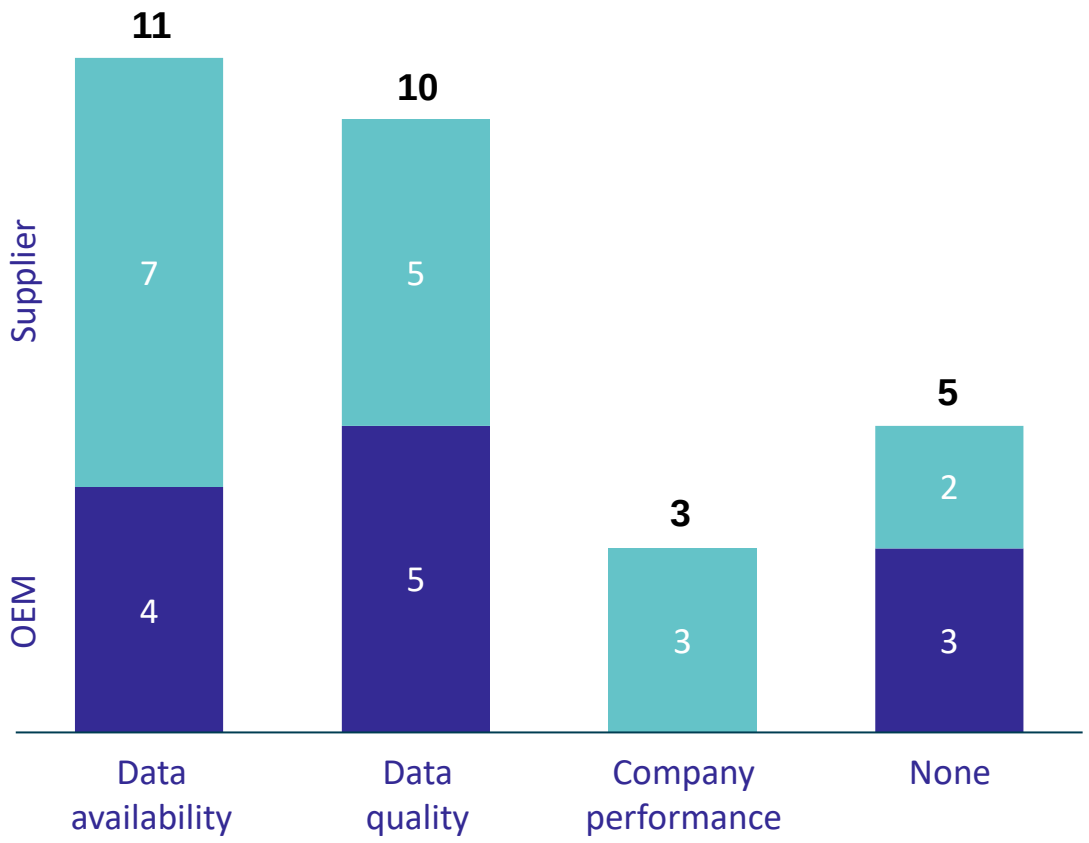


*) Improvements of production, ordering and scheduling processes

- **Building up inventories** was the most common measure used to increase robustness.
- Although **nearshoring** has also been one important measure, **deglobalization is not a general trend**.
- Most companies **continue to globalize**.
  Cost savings still seem to be the main driver for sourcing decisions.

Companies have recognized the value of robust and resilient supply chains and are investing in them

Concepts used to measure the success of data sharing
Number of companies



Only very few companies measure the robustness of their supply chain directly

- **Specific KPIs** to measure the robustness and resilience of the supply chain **have not yet been established**.
- 50% of the companies are measuring the robustness of their supply chain, but most of them **indirectly through performance indicators**.
- Companies also see **challenges in measuring the success** of data sharing.

Today, critical supply chains are not identified in a standardized and proactive way

The automotive industry must exchange data on a significantly broader scale and set legal standards and frameworks to reap the full potential

Data exchange and transparency is seen as **one key driver** to overcome supply chain challenges

Data sharing **practices do not reflect the importance** and **potential** identified

Although the crises has accelerated data sharing, **incumbents need to close their current gap**

Companies invest in supply chain **robustness and resilient**

Standard agreements and **framework agreements** need to support data sharing to enable the identified potentials

Only few companies **measure the robustness** of their supply chain