4FLOW
Your supply chain solution

The hidden costs of supply chain network inefficiency: Why strategic design matters

The real cost of network inefficiency

As your supply chain becomes more complex, inefficiencies become harder to detect and can quietly drain your profitability. With the constant pressure to keep things moving, it's easy to miss how these small inefficiencies accumulate over time. But eliminating them strategically can unlock significant opportunities to improve performance and secure a strong competitive advantage.

Some common hidden costs include:

Lost sales

Supply chain delays can cause businesses to lose up to 15% of annual revenue.[1]

Lack of visibility

Only 60% of businesses have extensive visibility over their direct suppliers, increasing risks of disruptions and inefficiencies.[2]

Transportation inefficiencies

Since 2019, product delivery lead times have increasead by 20%, often due to inefficient routing and transportation bottlenecks.[3]

Poorly located facilities

Suboptimal facility locations affect transportation, delivery times, and operational efficiency – driving costs up.

1 Turning Supply Ch ain Chaos into Supply Chain Strategy - Anvyl
2 McKinsey Global Supply Chain Leader Survey 2024 | McKinsey
3 Supply chain resilience | Deloitte Insights

How strategic network design helps eliminate hidden costs

Hidden costs add up over time, but you can address them through strategic supply chain network design. By optimizing network factors like site locations, inventory allocation, and transportation routes, it's possible to minimize expenses, improve delivery times, and effectively manage demand fluctuations.

The impact on your operational costs and overall efficiency can be significant in the short and long term.

Cost impact

Reduced operational expenses

Streamlined network design lowers ongoing costs without compromising quality. **4flow's network design software has helped businesses achieve up to 15% network savings.**[4]

Optimized footprint

Efficient warehouse and distribution center locations translate to lower labor and transportation costs.

Transportation efficiency

Improved consolidation, routing, and shipment frequencies cut fuel and handling expenses, delivering savings that compound over time.

Efficiency impact

4 Data from an internal case study conducted by 4flow on an automotive manufacturer (2023)

Efficiency impact

Enhanced service levels

Positioning distribution centers near key markets leads to faster, more reliable deliveries. 4flow's customer success stories show up to **17% savings on transportation spend** by strategically positioning new hubs.[5]

Agile capacity management

By ensuring the right mix of capacity across locations, your network can adapt to fluctuating demand and minimize costly bottlenecks.

Future-ready investments

Investing in strategic locations prepares your network for growth and market changes, ensuring sustained throughput and excellent service.

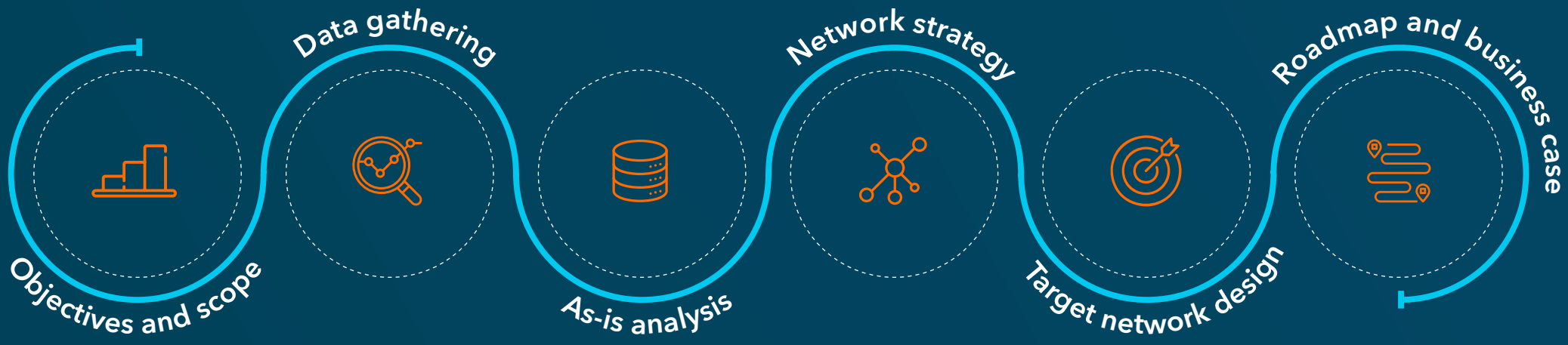
Understanding and addressing the hidden costs of network inefficiency goes beyond just reducing spending. It enables you to turn your entire supply chain into a strategic asset that drives your competitive advantage in an increasingly complex marketplace.

5 Data from an internal case study conducted by 4flow on retail company (2023)

The path to optimization

Optimization is not instantaneous; it requires commitment and a data-driven approach. By defining clear objectives, analyzing the current state, and creating your target network design, you can improve your supply chain performance. Strategically aligning operations with network goals also unlocks greater efficiency and cost savings. Digital technology plays a crucial role in this process.

Six-phase process of supply chain network optimization



By leveraging these capabilities of sophisticated optimization software, companies can design supply chain networks that are not only cost-efficient but also agile, resilient, and aligned with long-term business objectives.

Critical network design factors

To capitalize on the potential of supply chain optimization, specialized network design software helps you ensure efficiency and high-quality results. Consider these critical elements and functionalities when assessing your network design approach.

Strategic modeling and scenario analysis

Advanced supply chain software uses mathematical modeling to optimize facility locations, transportation routes, and inventory strategies.

Considering factors such as:

- **Actual available roads and infrastructure**
- **Operational expenses**
- **Demand patterns and seasonality**
- **Service level requirements**

Data-driven decision making

Optimization software relies heavily on accurate and comprehensive data. You'll need to gather and analyze data such as:

- **Demand forecasts by product, channel, and region**
- **Transportation costs and lead times**
- **Facility costs (both fixed and variable)**
- **Inventory carrying costs**
- **Production capacities and constraints**

Real-world requirements

Optimization models must account for various requirements and constraints in your network, including:

- **Budget limitations**
- **Regulatory requirements**
- **Capacity restrictions**
- **Service level agreements**
- **Sustainability goals**

Network design powered by 4flow

Comprehensive network planning and optimization software

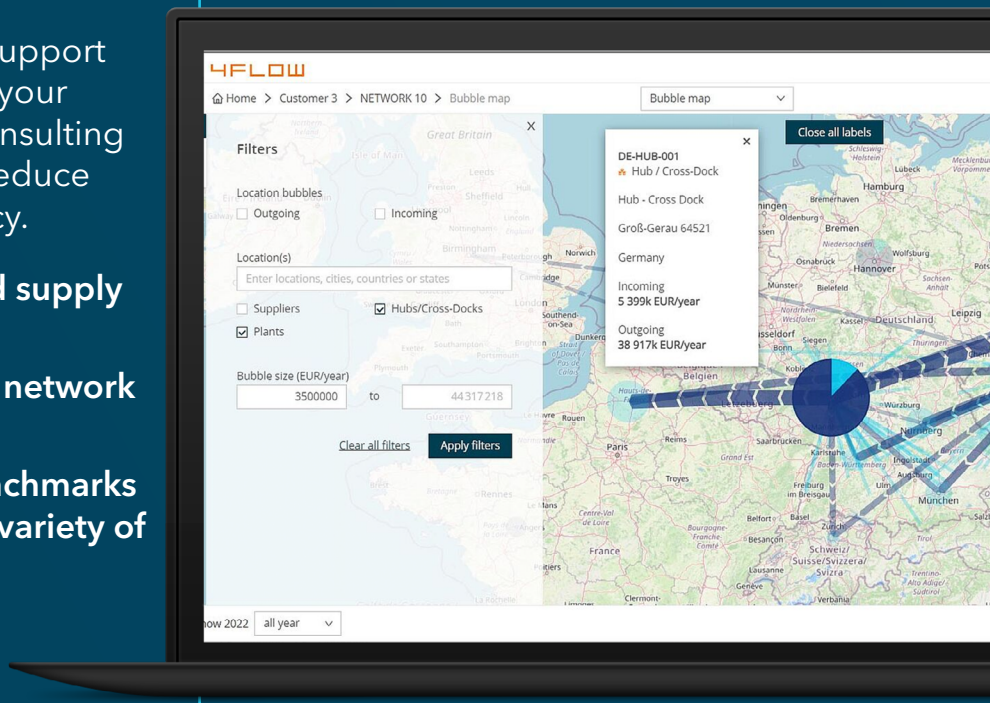
4flow's network design software lets supply chain experts, planners and consultants quickly gain transparency and improve planning in their supply chain networks.

- **Specialized algorithms for precise optimization**
- **Fast implementation and rapid results**
- **Holistic calculations of transportation and warehousing utilization**

Hands-on network design support

If you're looking for more support to address hidden costs in your network, 4flow provides consulting and managed services to reduce costs and improve efficiency.

- **Expertise in end-to-end supply chain network design**
- **Managed supply chain network optimization services**
- **Know-how, market benchmarks and best practices in a variety of industries**



Proven track record

4flow is a leader in network optimization, helping businesses worldwide improve their supply chain operations with over 25 years of experience.

Interested or have any questions? Contact us!

Get in touch to have your questions answered or to schedule a live demo of our software solutions.

4FLOW

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