



# Einhell

CORDLESS EXCELLENCE.

POWER **X**-CHANGE

## Navigating Supply Chain Disruption: An Analysis of Einhell

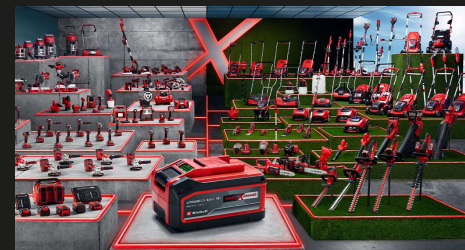
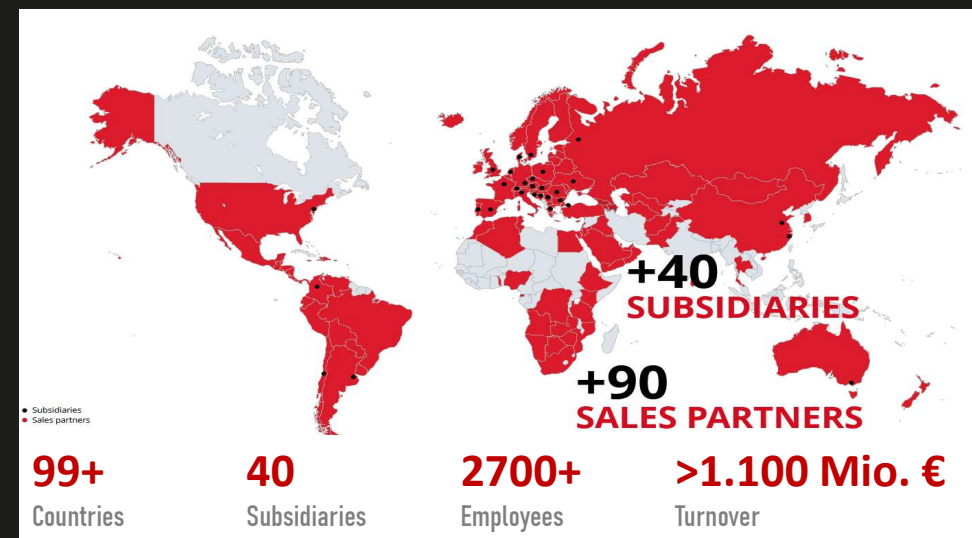
Challenges, Risks, and Opportunities for a global power tools and garden equipment supplier in today's volatile market.



# Einhell – Cordless Excellence

"Einhell is a German multinational company that manufactures **power tools, garden equipment, and accessories** for DIY enthusiasts and professionals.

- ✓ Leading German manufacturer of tools & garden equipment
- ✓ Over 60 years of experience in DIY & garden solutions
- ✓ Global presence: 40+ subsidiaries, 90+ sales partners
- ✓ Pioneer in cordless technology with Power X-Change system
- ✓ Over 300 tools powered by one battery
- ✓ Market leader in cordless tools
- ✓ Official Home & Garden Expert of FC Bayern Munich
- ✓ Official Tool Expert of MERCEDES - AMG PETRONAS F1 TEAM



# Einhell – a global player

"Einhell operates in a highly competitive global market where reliable supply chains are critical. Disruptions can impact production, costs, and customer satisfaction."

- Global supplier of power tools and garden equipment
  - Main production in China
  - Distribution to more than 99 countries worldwide
- Facing multiple disruption challenges
- Highly dependent on resilient supply chains



# Global Supply Chain Context



## COVID-19 Aftermath

Pandemic disrupted manufacturing and logistics worldwide, creating unprecedented delays and shortages.



## Geopolitical Tensions

US-China trade disputes, Russia-Ukraine conflict, Middle east crisis and post-Brexit barriers increasing unpredictability.



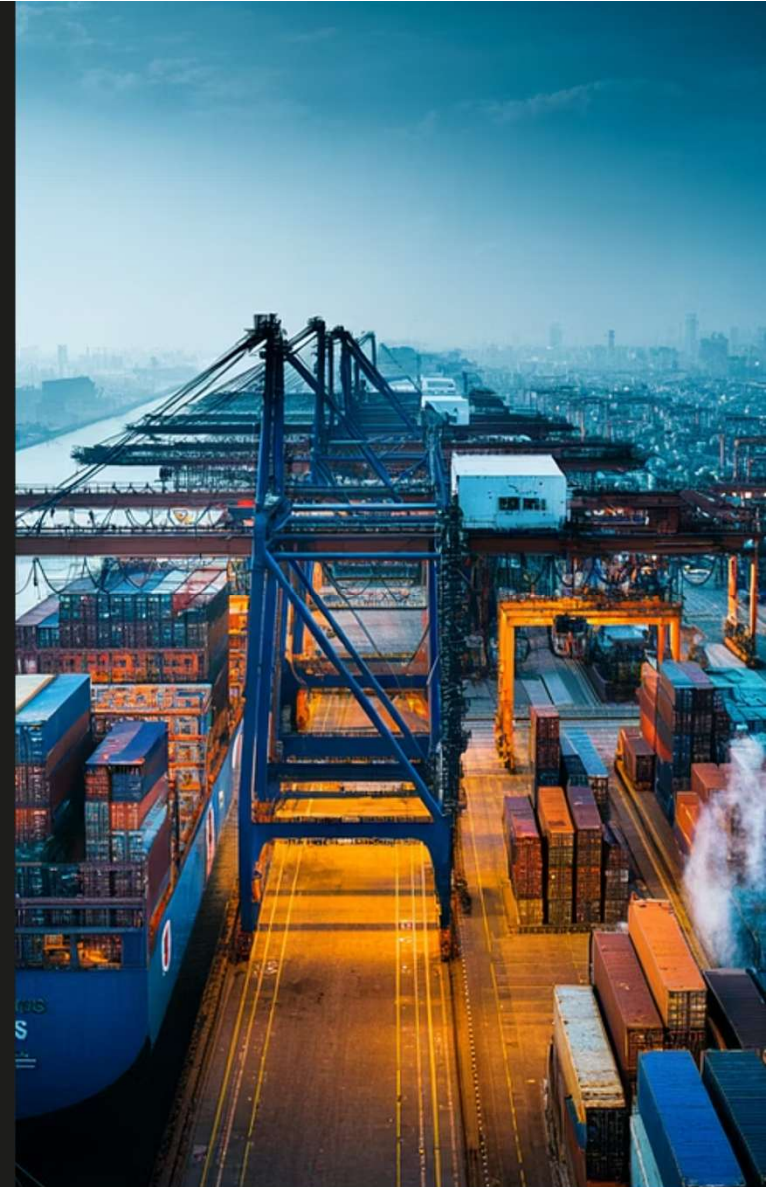
## Raw Material Shortages

Critical materials facing supply constraints, driving up costs and extending lead times.



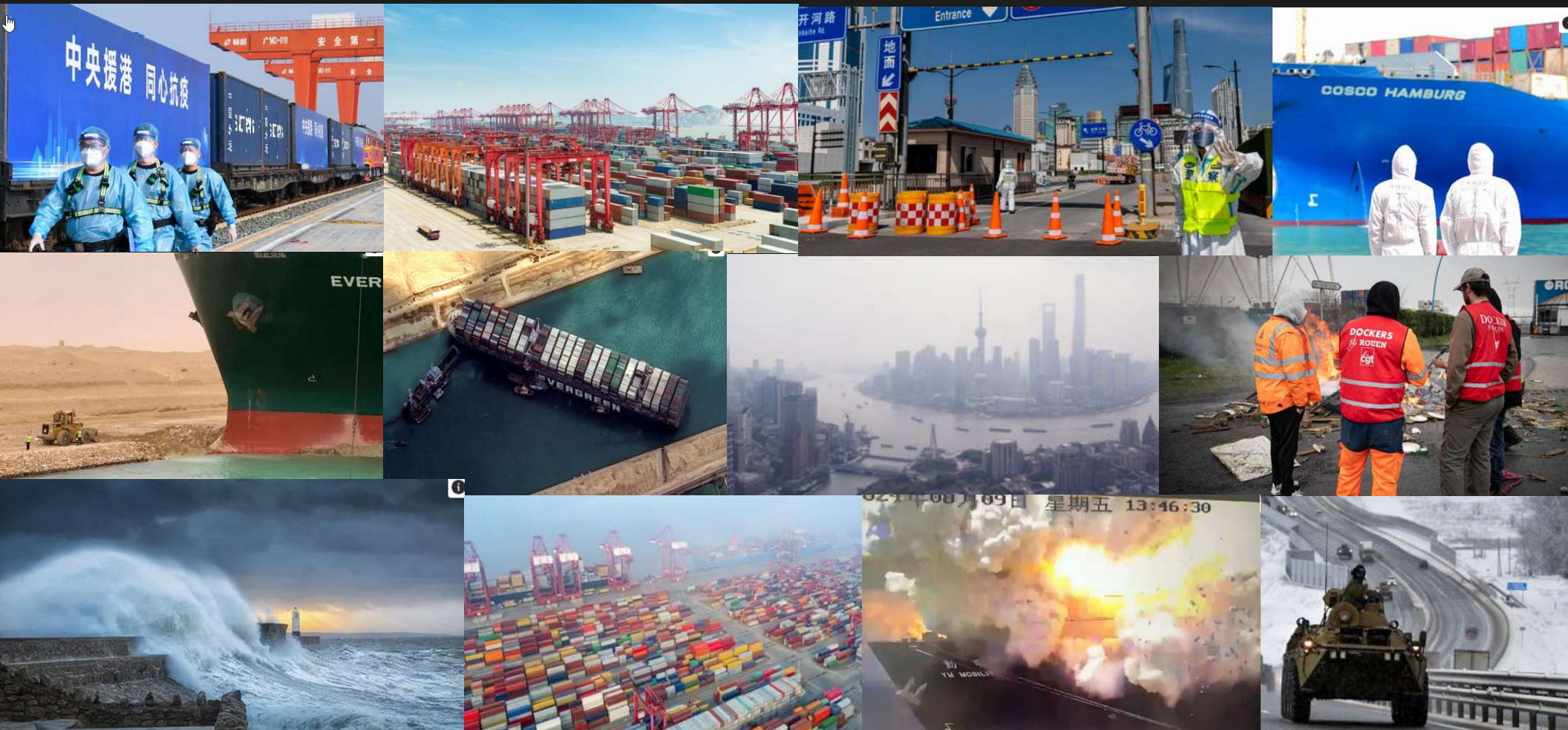
## ESG Pressures

Environmental regulations and sustainability demands reshaping supply chain decisions.





# Global Supply Chain Context





# Key Challenges



## Raw Material & Component Shortages

Heavy reliance on Asian suppliers for batteries, motors, and semiconductors. Rising costs of steel, plastics, lithium, and paper causing production delays.



## Logistics & Transportation Bottlenecks

Port congestion, container scarcity, and rising freight costs impacting timely delivery and overall cost structure.



## Geopolitical & Regulatory Pressures

Trade restrictions, tariffs, Suez Canal issues, Houthi attacks, and EU environmental regulations adding complexity.

# The Bullwhip Effect

Einhell is experiencing demand distortion due to lack of visibility across its supply chain:

- Seasonal Demand Peaks: High demand for garden tools in spring/summer and lower demand in winter
- Retail Promotions: Sudden spikes in retailer orders after marketing campaigns
- Forecast Inaccuracy: Overestimating or underestimating consumer demand for Power X-Change products
- Order Batching: Retailers placing large, infrequent orders to reduce shipping costs
- Supply Chain Delays: Global disruptions (e.g., material shortages, transport delays) amplify order variability



- The bullwhip effect creates a vicious cycle of overreaction throughout the supply chain.

## How EINHELL Can Mitigate the Bullwhip Effect

- ✓ Improved Demand Forecasting: Use real-time sales data from subsidiaries & partners
- ✓ Integrated Supply Chain Systems: Better visibility from suppliers to end retailers
- ✓ Flexible Production Planning: Scalable production to adapt to demand fluctuations
- ✓ Inventory Buffer Optimization: Balance between overstock and stockouts
- ✓ Collaborative Planning: Closer cooperation with major retailers & sales partners

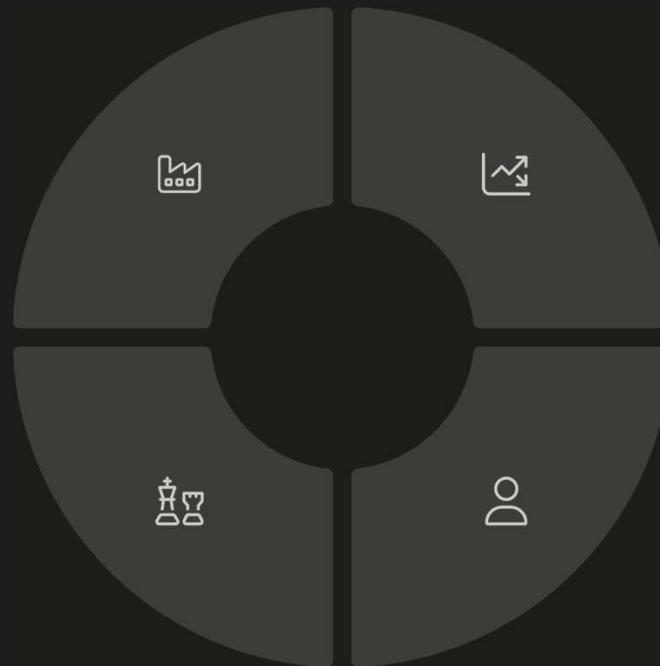
# Risks for Einhell

## Operational

- Production delays
- Inventory shortages
- Supplier delays

## Strategic

- Supplier dependency
- Regional concentration
- Competitive disadvantage



## Financial

- Cost volatility
- Margin pressures
- High holding costs

## Reputational

- Customer dissatisfaction
- Lost contracts / collaborations
- Market share erosion

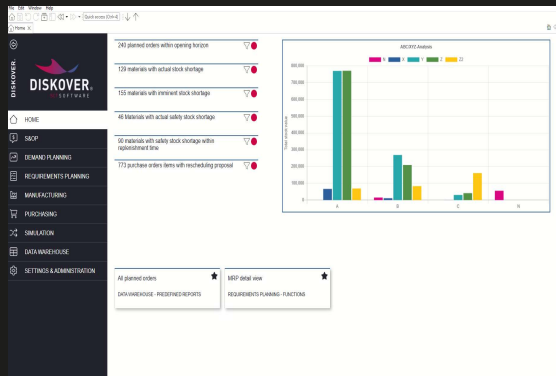


# Opportunities



## Nearshoring & Diversification

Shift sourcing closer to Europe (e.g. Eastern Europe) and diversify supplier base to reduce risks.



## Digital Supply Chain Management

Implement AI, IoT, and predictive analytics for real-time tracking and better forecasting.



## Sustainability Leadership

Embrace green supply chain practices, recyclable materials, and reduced carbon footprint.

# Strategic Solutions

## Vertical Integration & Partnerships

- Partial vertical integration for critical components
- Strategic partnerships with suppliers and logistics providers
- Shared data (e.g. forecast) to reduce bullwhip effect

## Inventory Strategy Adjustments

- Shift from just-in-time to just-in-case inventory
- Build safety stocks for critical components
- Implement EOQ model to optimize order quantities

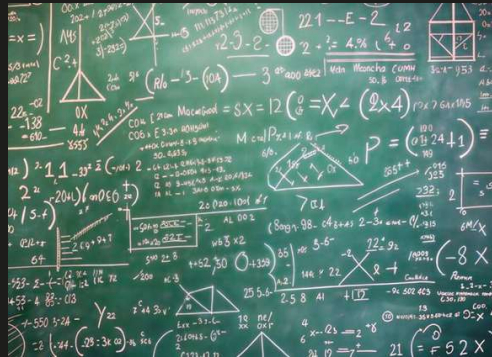


# Expected Outcomes & Recommendations



## Lower Inventory Costs

Through EOQ adoption and optimized ordering



## Fewer Stockouts

With improved forecasting and safety stocks



## Lead Time Reduction

By nearshoring and diversifying suppliers

Einhell should prioritize: diversifying suppliers, embracing digital tools, committing to sustainability, enhancing supplier relationships, and adjusting inventory strategies.



# Thank You - Our team



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