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## BUILDING SUPPLY CHAIN RESILIENCE AMID GEOPOLITICAL RISKS (B)

he remainder of the breakout session at the strategy retreat was quite intriguing for Lukas Schmid. It was fascinating how quickly the discussion turned from a hypothetical scenario into a deep dive into the real-life intricacies of their supply chain. For example, the participants described the effort involved in sourcing pharma-compliant raw materials from multiple continents, such as the API production in Switzerland that could require specific chemicals from Asia and equipment from North America. In addition, the group discussed how a quarantine around one country could disrupt the entire supply chain and drew parallels with previous experiences such as the delays caused by factory closures during the COVID-19 pandemic. The group also explored the potential ripple effects of the Taiwan quarantine on logistics networks and emphasized the importance of having contingency plans in place to reroute shipments and ensure continuity of supply. All participants agreed that they would need more data on Diatec's supplier network, including sub-tier suppliers, to understand where the factories are located. Furthermore, information about the inventory levels of components and transport routes were regarded as essential.

At the end of the session, Lukas felt they had just scratched the surface. There was still so much more to consider and analyze, but he was excited about the next steps. The retreat was not only an opportunity to relax and enjoy the beautiful Swiss Alps, but also a great exercise to overcome Diatec's real challenges with his team and understand how supply chain strategies can significantly make a difference to their resilience and success.

After dinner Lukas had the chance to talk to Christine for a few minutes: "Thank you so much for setting up this session to create awareness for potential supply chain resilience issues linked to geopolitics. I think everyone has understood the importance of gaining deeper insight into our supply chain structure, inventory levels, and transport corridors. So, would we be affected by a Chinese quarantine of Taiwan?" Christine's expression became serious: "Well, Lukas, transportation via Taiwan is the least of our concerns. You will have the follow-up breakout session tomorrow afternoon – you will find out. We have summarized all the critical information for your group on the provided documents."

The next day, the breakout group was meeting again in the early afternoon after a very fruitful joint discussion about the impact of generative AI for the company and several presentations of the individual functions. Lukas felt that he had some exceptional colleagues around him although he knew no one in his breakout session had a real supply chain background.

Nevertheless, the data the head of supply chain strategy Michele Lacroix provided was well illustrated and thus easy to digest. The group received only two pages. On one page there was a simplified bill of materials for the blockbuster insulin pen that included the manufacturing locations for all the critical components and ingredients. On the second page there was more background information about the different product categories as well as the inventory levels in the past year. Michele highlighted "All you need to know is on these two pages. We have evaluated everything else, and it is not critical for this scenario."

"Well, if that is all that is required to create a supply chain resilience strategy it cannot be so complicated" Lukas heard Tom Bradely murmur from over the table. However, Lukas quickly fell into deep thought as he digested the information provided, gazing at the majestic Matterhorn mountain out the window in the afternoon sunlight.

## **Questions:**

- 1. Calculate the Time-to-Survive metric that describes the period the company could operate in case the scenario realizes!
- 2. Develop a short- and long-term resilience strategy! Discuss potential trade-offs!
- 3. Discuss the ethical aspects of decoupling from Taiwan.

## Bill of material

with supplier country of origin, number of suppliers, externals suppliers unless Diatec indicated

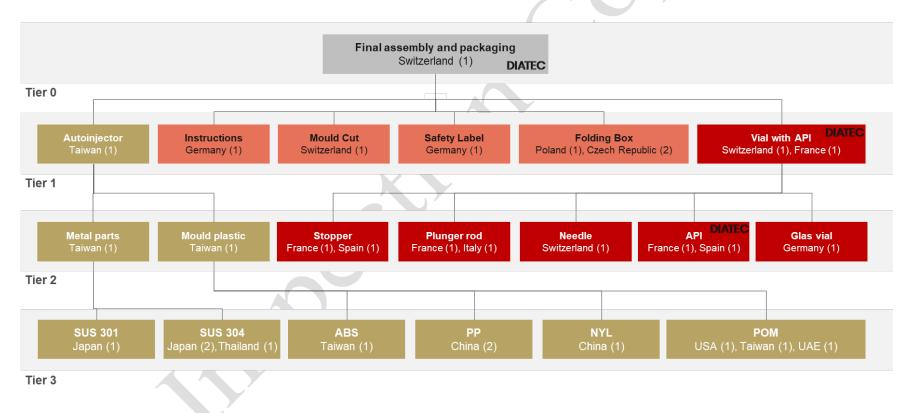
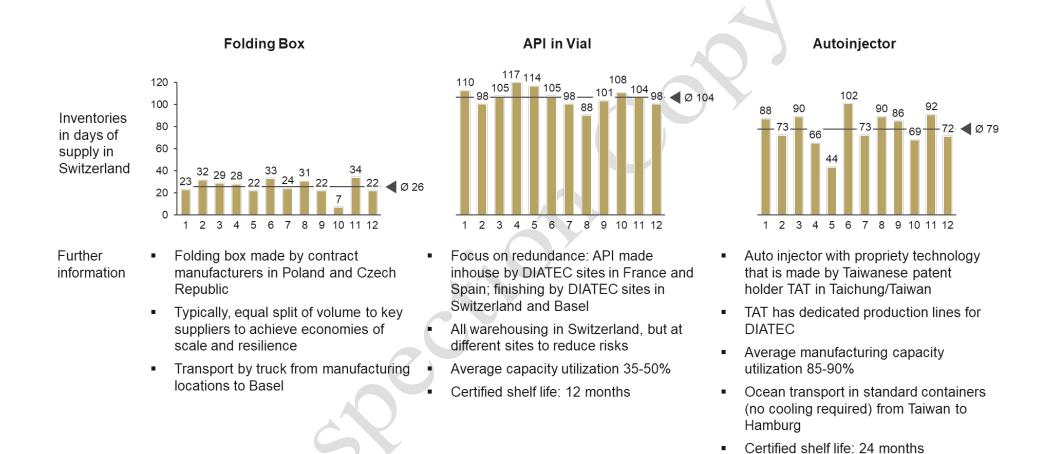


Figure 1: Simplified bill of materials including sub-tier suppliers.

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Note: Inventory data in past year indicates inventory coverage in days of supply per month.

**Figure 2**: Characteristics of key components.