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Impact of Major Interruptions

- 1 Compromising critical infrastructures and enablers of a company's value chain and business functions can create serious financial damage, regulatory issues and reputation losses
- 2 Failure to perform regulatory reporting can lead to serious fines, e.g. pharmaceuticals producers can risk their license to operate
- 3 Inability to perform treasury operations can seriously affect liquidity
- 4 Default of meeting downstream supply contracts with customers can lead to significant business losses and penalties
- 5 Financial damages caused by loss of sales and actions for recovery of normal operation can amount to 10% or more impact on EBIT

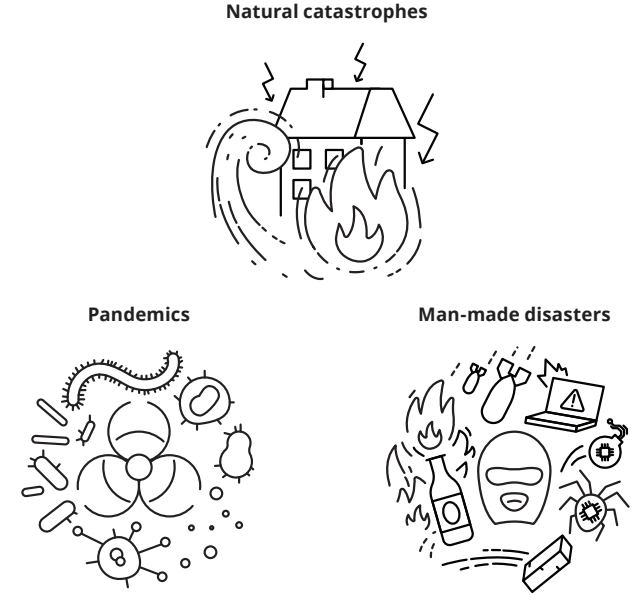
Our Framework, Approach and Results



We consider the entire value chain (end-to-end analysis) and deliver a 360° view on value chain enablers. We determine and classify IT and site criticalities as well as business impacts in order to develop integrated Business Continuity plans and concepts along the value chain. Relevant suppliers, business partners and stakeholders are integrated in the analysis.

- Typical work products**
- Value Stream Maps visualize the flow of the product or service from initiation to customer delivery and its key contributors
 - Mapping and capability assessment of major IT-systems along the value chain creates transparency of critical IT-dependencies and possible options for Business Continuity
 - Analysis of digital solutions which are integrated in particular value chain processes or interfaces highlight potential risks beyond the major IT-systems that are in focus
 - Enabling Function Assessment evaluates the business impact of critical functions like accounts payable, treasury, facility services, regulatory reporting

Our Value Chain Resilience Framework is capable to cover potential threats of:



Success Factors

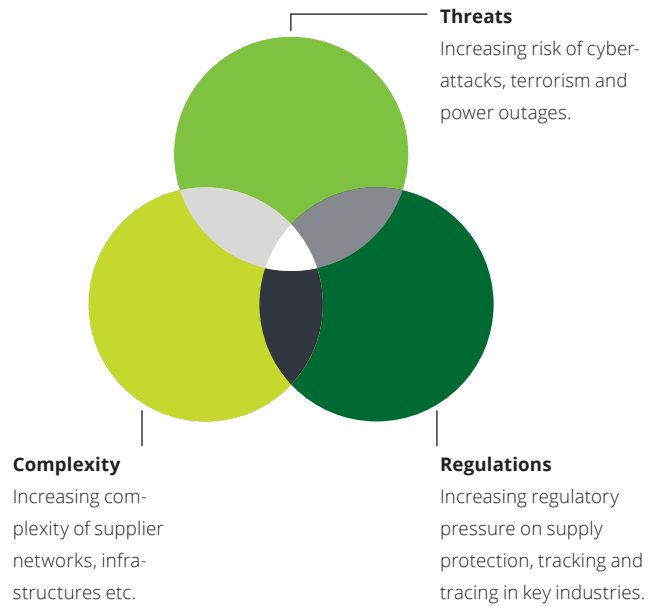
- End-to-end view: effective Business Continuity activities consider all steps and organizations along the value chain
- Communication strategy and standards are essential for broad buy-in and also for protecting sensitive information
- Cross-functional involvement and buy-in: Business Continuity activities taking an end-to-end view need contribution from the whole organization
- Transparency of IT capabilities: it is essential to study the disaster impact on the IT-landscape and its consequences for the value chain
- Consideration of the digital agenda: Business Continuity must understand how digitalization and robotics will change the value chain and integrate these in an end-to-end view



Value Chain Resilience
Taking Business Continuity Management to the next level

Value Chain Resilience

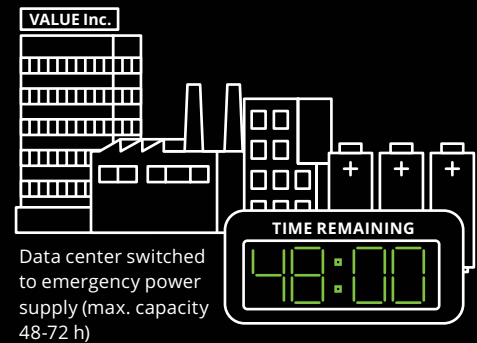
Global business and value chain interruptions are the corporate risk #1



A Blackout Experience Journey

Day 1

10:00
Power Outage in the wider area of VALUE Inc. headquarter

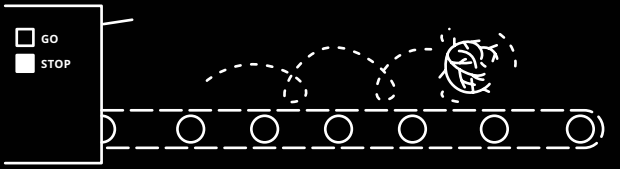


10:20
Office computers are down, sales and other activities come to standstill



10:30
Activation of the crisis management plan including communication to all global sites

11:00
Local production interrupted due to the power outage



11:40
Central country warehouse 200 km away is down, too. Delivery to wholesalers has stopped



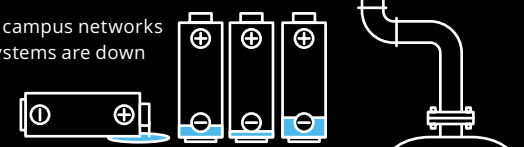
12:15
First estimates for power outage dimensions and time to recover: at least until the next morning



12:30
Most staff members go home



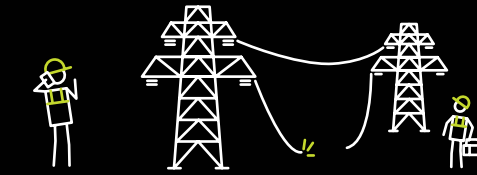
13:55
Battery buffered campus networks and shop floor systems are down



14:00
Where possible emptying of vessels and tubes to reduce risk of uncontrolled chemical reactions



18:00
Grid operators report that more time is needed to fix the blackout



20:00
Increased looting and acts of violence. People should not leave home



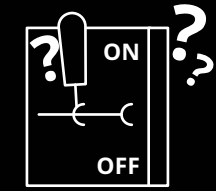
Day 2

09:00
Grid operators are still working on the problem



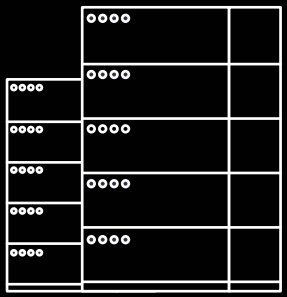
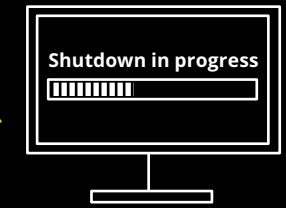
14:00
Decision needed for data center operations to avoid uncontrolled stop of transaction processing

16:00
Decision to stop global transaction processing and shut down systems in the data center



20:00
Shutdown of IT-systems in full process, global processes have come to standstill

Even if electricity would come back in the meantime the process is irreversible.



Day 3

06:00
All systems and business operations are down

VALUE Inc. is out of service

