

From Macro Risk Evolutions to Micro Risk Impacts

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<https://Audit-Championship.com/en/NewYear2023>



2023 New Year Special



5 Audit Learning Paths, incl. Audit Ethics

33 Gamified Trainings, up to 100+



Artificial Intelligence



Cloud



Cyber Security



Drohnen



Internet der Dinge



Virtual Reality



5G



Smart Learning

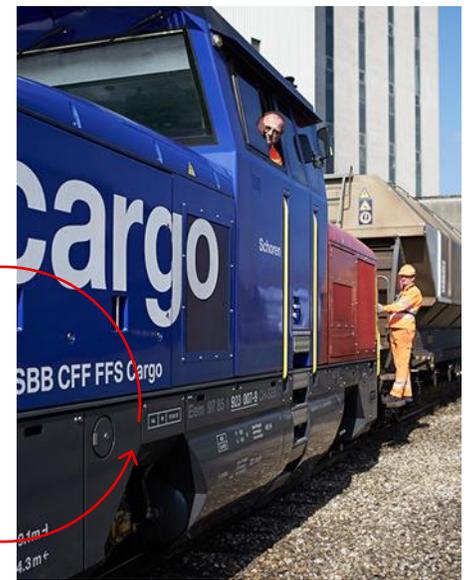
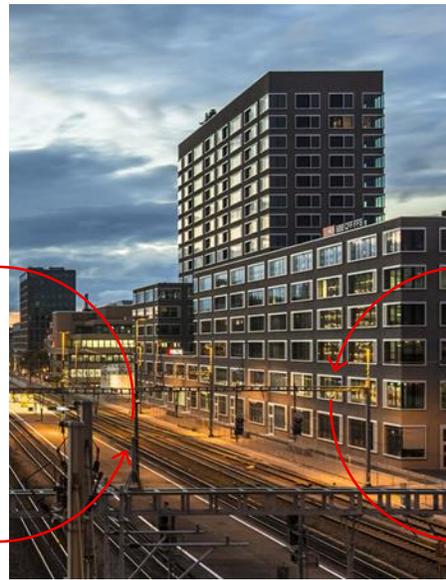
in a World of Digital Transformation Processes



01 SBB Company Portrait

SBB - Company Portrait.

As an integrated railway, we get Switzerland moving.



Passenger Services
Production.

11 260 trains/day.

Passenger Services
Markets.

1.10 m. passengers
/day.

Real Estate.

3,500 buildings.

Infrastructure.

3,265 km of
network.

SBB Cargo.

185,000 tonnes of
freight per day.

SBB - Company Portrait.

Focus on Switzerland, few transports abroad.



Passenger transport only covers the border belt abroad.



Freight transport Operations from northern Germany to northern Italy and from Paris to Budapest.



SBB – Internal Audit Portrait.

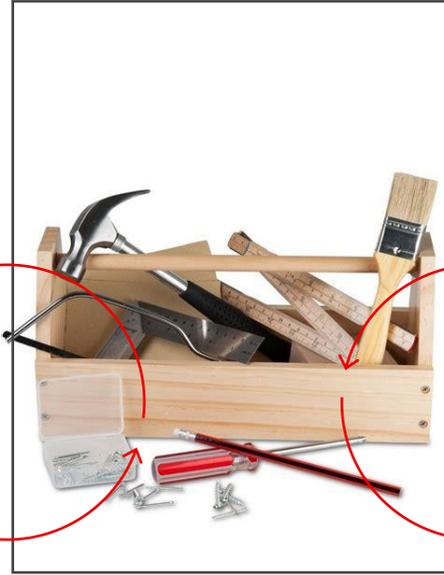
We keep SBB audited.



20 auditors, audit managers and data analysts in the auditors pool.



30-35 Audits per year, most of which are management process audits.



Methodology. Audit Universe, agile audit procedures, COSO, CMMi, etc.



Development Platform. Young Talents and Management Development Platform.



Products. Reports to Board of Directors, Analytics Cockpit, Analytics for Whistleblowing Unit, 3rd line Cyber Risk Mgmt.



02 Why monitor Macro Risk Evolutions?

Why monitor Macro Risk Evolutions?

Low foreign earnings, high purchases of goods and effects from abroad.

SBB has only a small foreign business in comparison.
Why are macro risks so important?

- SBB is economically relevant for Switzerland.
Global risks affect Switzerland and thus also SBB.
- SBB maintains supplier relationships in almost the entire world.

Why monitor Macro Risk Evolutions?

Global risks.

Where do we identify relevant macro risks and macro risk developments, examples:



Climate change.

Mountain routes ->
landslides, rockfalls,
floods



Terror and sabotage.

Critical infrastructure.
Bridges, tunnels etc. and
bottlenecks north-south
and east-west.
Dangerous substances.



Energy shortage.

high electricity self-
production, but
dependence on the public
and thus on the European
electricity grid.



Cyber attacks.

Attacks continue to rise
sharply, especially in the
OT sector.
Cyber risks also created
by suppliers.

Why monitor Macro Risk Evolutions?

Labour force and global supply chain risks.

Where do we identify relevant macro risks and macro risk developments, examples:



Labour force shortage.

Demography.

Compensation through immigration will not be fully possible.

Labour force shortage.

Professionals.

Outsourcing IT experts
-> Data protection and information security.

Global supply chains.

Cluster risks transport routes.

Global supply chains.

Cluster risks Suppliers.

In some cases, only few suppliers worldwide for specialised goods or raw materials.

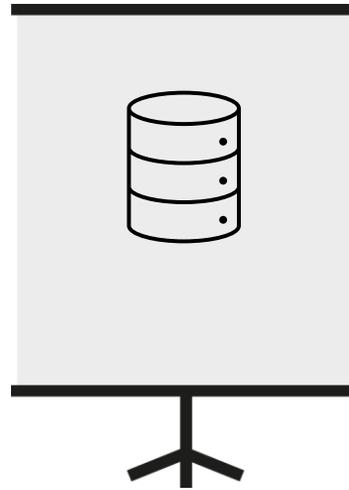
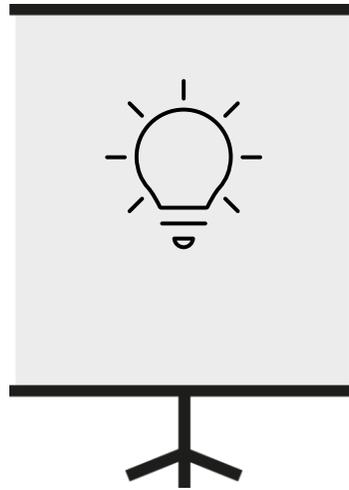
03 Implementation of the supply chain analysis.

A high-angle, wide-angle photograph of the Earth from space, showing the curvature of the planet and the blue atmosphere. The landmasses are visible in dark blue and black, with white clouds scattered across the oceans.

GEO referencencing for risk assessment

Georeferencing in practice.

Identifying supplier risks graphically - a train journey to office.



Supplier risks.

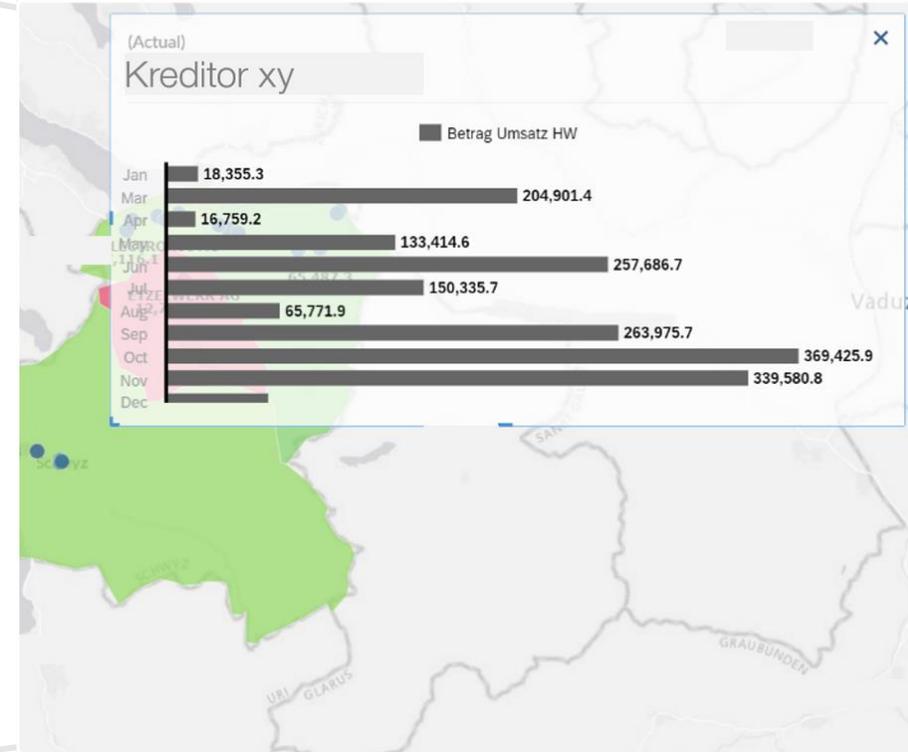
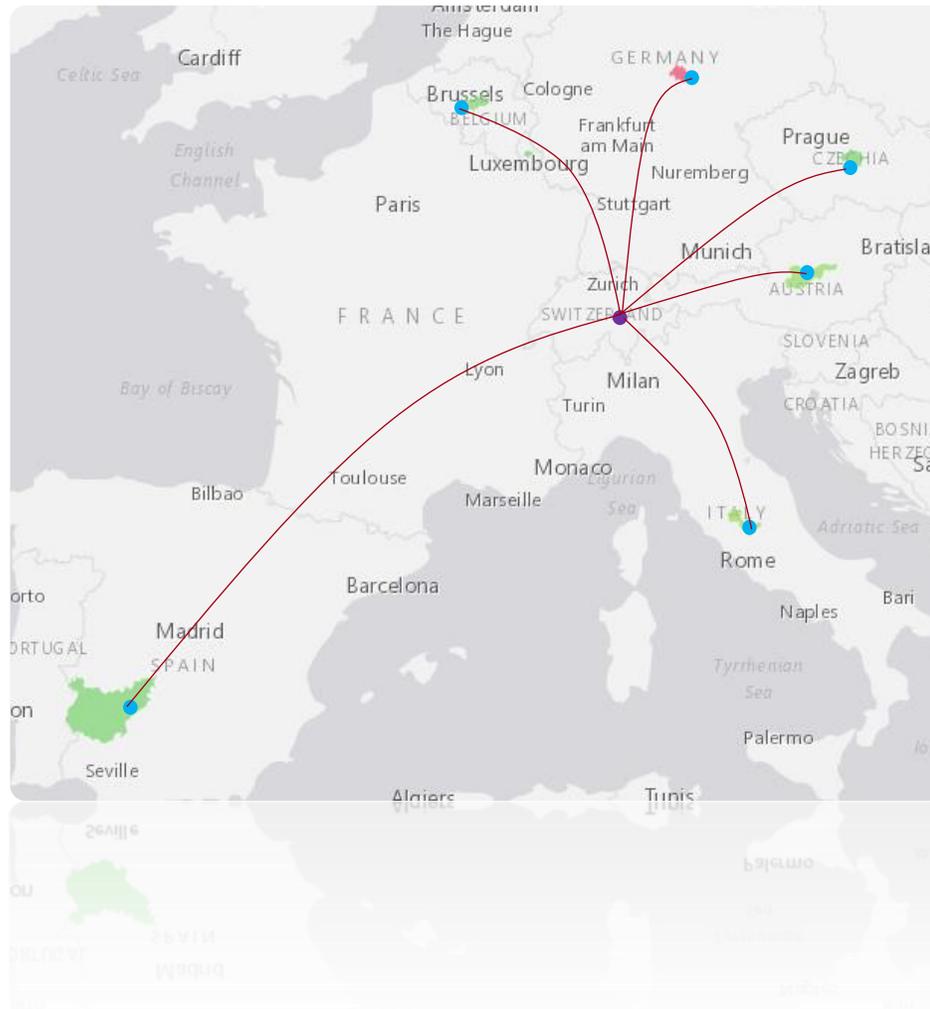
Seeing information instead of reading.



* Data adjusted for presentation.

Know the supply pyramid (Tier 1-3).

Risk minimisation through extended data from critical suppliers.



Warengruppe	Produktbeschrieb	BestellNr	Account	Soll Betrag in HW
Warengruppe	Produktbeschrieb	BestellNr		

* Data adjusted for presentation.

04 Conclusion and outlook.

Conclusion and outlook.

The way away from paper towards digital audits.

What was the reaction by the Senior management and audit committee to these supply chain analyses?

- The Board of Directors very much welcomed the geographical visualisation and included it into the discussions.
- The Strategic Purchasing Department took over the concept for the visualisation. The department got a tailwind by these Analyses by the Internal Audit.
- Seeing data and using it interactively brings immediately new answers to questions that have not yet been asked ... instead of endless scrolling and connecting through dead Excel spreadsheets.

Conclusion and outlook.

How do we address such issues.

Macro risks are becoming increasingly important in the overall risk situation of every company. IA SBB therefore continued to develop its instruments:

Every audit



Gross risk analyses.

on the external influences on the audit objects in each audit.

periodically, superordinated



Trend Radar.

- for identification of macro risk evolutions and
- for regular discussion with senior management.

specific



Scheduling audits.

...that directly target the management of macro risks.

Danke, merci, grazie, gracias & thanks.

 SBB CFF FFS

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