TELE2 BALTICS SNOWFLAKE STORY

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About Tele2

- Multiproduct company
- Operates in Sweden and Baltics
- 24 years in Latvia
- Group headquarters in Sweden
- Largest telecom in Latvia by active SIM cards
- Leading innovation: 5G covers 82% of Latvian territory
- Invests in VoLTE and VoWIFI (indoor call quality)
- Strong values: youth support, education, and digital responsibility

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What was our life before Snowflake?

- For era before cloud, we in Baltics had great big data stack able to scale over PB of data based on hadoop – hdfs, hive, spark, impala.

- Distributed data and compute.

- A medium-sized cluster where we need to add quite a few nodes yearly

- Hundreds of use cases

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Why we started to look around?

- Scaling was slow
- End-of-month reporting caused resource strain
- Noisy neighbor problem reduced stability
- Lack of workflow isolations
- ETL/ELT jobs limited to time slots
- Data governance tooling was outdated

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Decision

- Procurement for integration, cloud and data platform
- Snowflake
- Service integration team for migration
- To host stagging on AWS
- To host Snowflake on AWS
- AWS as it has data centers in Sweden which is close proximity for Baltics
- AWS typically are first ones that get new features for Snowflake
- Multi account solution in one region and one organization

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Migration journey

- Fixed scope
- Data ingested into AWS S3
- Batch jobs to Snowflake
- Transformations with dbt
- Medallion architecture
- Terraform in AWS, but not in Snowflake

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Why Snowflake?

- Cost
- Quite close estimates to real consumption
- Snowflake architecture
  - Shared data
  - Decoupled compute – virtual warehouses
- Workflow isolation
- Built in governance and lineage, now also visual lineage
- Performance outmatches Hadoop
- More features like time travel, cloning, data sharing
- Zero infrastructure management
- Attractive tech for hiring & retention
- 0 incidents to date

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Security in Snowflake

- Shared responsibility
- No passwords
- Integration with IDP
- Network rules
- Trust center with CIS recommendations
- Supports role-based access control (RBAC)
- Data encryption at rest and in transit

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Lessons learned

- Right-size virtual warehouses from the start, including autosuspend
- Add resources for optimization
- Use transient tables to reduce storage cost

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Whats next?

- Finish migration and turn off legacy systems
- Streamlit applications
- AI models for self service data
- FinOps culture – visibility, budgets
- Optimization – search optimization, clustering
- Data governance activities

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