

# Building high-quality business intelligence solution for a global Mobile Virtual Network Enabler in 4 months at 20% of the cost

## Summary

Business Intelligence (BI) is crucial to any telecom enterprise, as it helps with revenue assurance, customer support, KPI monitoring as well as fraud prevention. MVNOanalytics were approached by a Client who struggled to implement a solid BI, despite the best efforts and internal resources that had been invested in it. Our team were able to transform the Client's BI stack from being a pain point to an effective business analysis tool. This was done within four months at 20% of the cost, and evolved into a long-term partnership, as the Client decided to outsource the support and further development of their upgraded BI stack to us.

## Business challenges

The Client became increasingly unhappy with their existing business intelligence (BI) solution. The platform included some outdated legacy tools as well as more recent additions, which created several issues:

- user-unfriendly interface
- multiple data storage locations
- discrepancy between report figures

These problems also started to affect the Client's business operations:

- Financial reports were being late for tax filings, annual audits, etc.
- The marketing department was not receiving insights necessary to launch and evaluate sales campaigns.
- The Client was failing to respond to data requests sent by regulatory agencies.
- Subscription fraud was on the rise, as unreliable reporting made it difficult to track down individual cases.

All this was aggravated by high direct and indirect costs of maintaining and supporting this complex, but largely ineffective system, as it was powered by 7 servers and maintained by an internal IT team.

## Delivering solution

The Client asked MVNOanalytics team to help transform their BI stack and make it an efficient tool to turn data into the right business decisions. Our team was given limited budget and strict deadlines, but very few technical requirements or limitations.

We recognized the solution was critical for our Client's business and would need to be fast and most cost effective. After an in-depth analysis the team proposed:

1. Moving the BI platform to the Cloud to save on maintenance costs and ensure future scalability.
2. Simplifying the DWH architecture and rebuilding it on PostgreSQL, a free open-source database management system, which would allow the Client to have all functions necessary for the analytics.
3. Facilitating data processing by employing open-source Talend Open Studio tool for data integration.
4. Employing Tableau visual analytics platforms to provide convenient and user-friendly end-user reporting.
5. Running extensive on-site staff training across 3 countries, improving their skills in report design and data analysis.
6. Properly documenting the newly upgraded BI stack.

## How did it all go time-wise?

<b>Total project duration</b>	<b>4 months</b>
Setting up Data transformation process (ETL)	2 months
Infrastructure setup (The Cloud, Talend, PostgreSQL, Hadoop, Tableau)	0.5 months
Reports migration	1 month
Training	0.5 months

## Results

### Business User Adoption

	<b>Before</b>	<b>After</b>	<b>Change</b>
<b>Total # of reports generated</b>	130	258	<b>x2</b>
<b>Reports created by the IT team supporting BI</b>	126	80	<b>x0.63</b>
<b>Reports created by other business users</b>	4	178	<b>x44</b>
<b>% of reports actually used</b>	15% (19, during last Q before upgrade)	51% (131, during first Q after upgrade)	<b>x7</b>
<b>Average report delivery time</b>	14 days	3 days (excl. self-serviced reports)	<b>4.5 times faster</b>

## Architecture Complexity and Headcount

	Before	After	Change
# of servers	7 (on-premises)	3 (in the Cloud)	<b>-58%</b>
# of tables in the DWH	800	80	<b>-90%</b>
# of IT staff dedicated to BI	2	0.5	<b>-75%</b>

## Impact on Business User Happiness

	Before	After	Change
CFO			<b>∞</b>
Marketing department			<b>∞</b>

## Costs

The average cost of a similar scope solution at a large telecom company could rise up to €600,000. This covers license, data transformation process (ETL), consulting, hardware and support. However, we were able to provide a more cost-effective solution, using open-source tools for DWH and ETL, and the Cloud hosting, which dramatically reduced hardware maintenance costs. Moreover, the implemented self-service functionality enabled users to create BI reports without the help from IT staff, bringing the overall cost of the project down to €100,000. Today, we can offer BI services starting from €150 / month. Visit our website for more information on [pricing](#).

## About Us

Hello! I am Vaidas, a CEO of Metasite Data Insights, which stands behind MVNOanalytics.

I have been obsessed with Business Intelligence (BI) and analytics all my professional career. Since 2005 I have been helping businesses address their BI pain points, starting with TeliaSonera group.

Today, we work with European telecoms which look for time-efficient and cost-effective ways to upgrade or fix their BI stacks, but are short on internal resources.

Tell us what you desire to achieve and we will give you a hand. [Leave us a message](#) and we will come back to you in 24 hours.

We make our Clients happy by delivering results on time and on budget.



**Vaidas Lauzeckas**, CEO @ Metasite Data Insights ([MVNOanalytics](#))

