

Softec Invenio as Part of MIS Solution in Social Insurance Agency

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- Introduction
- Solution description
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- Conclusion

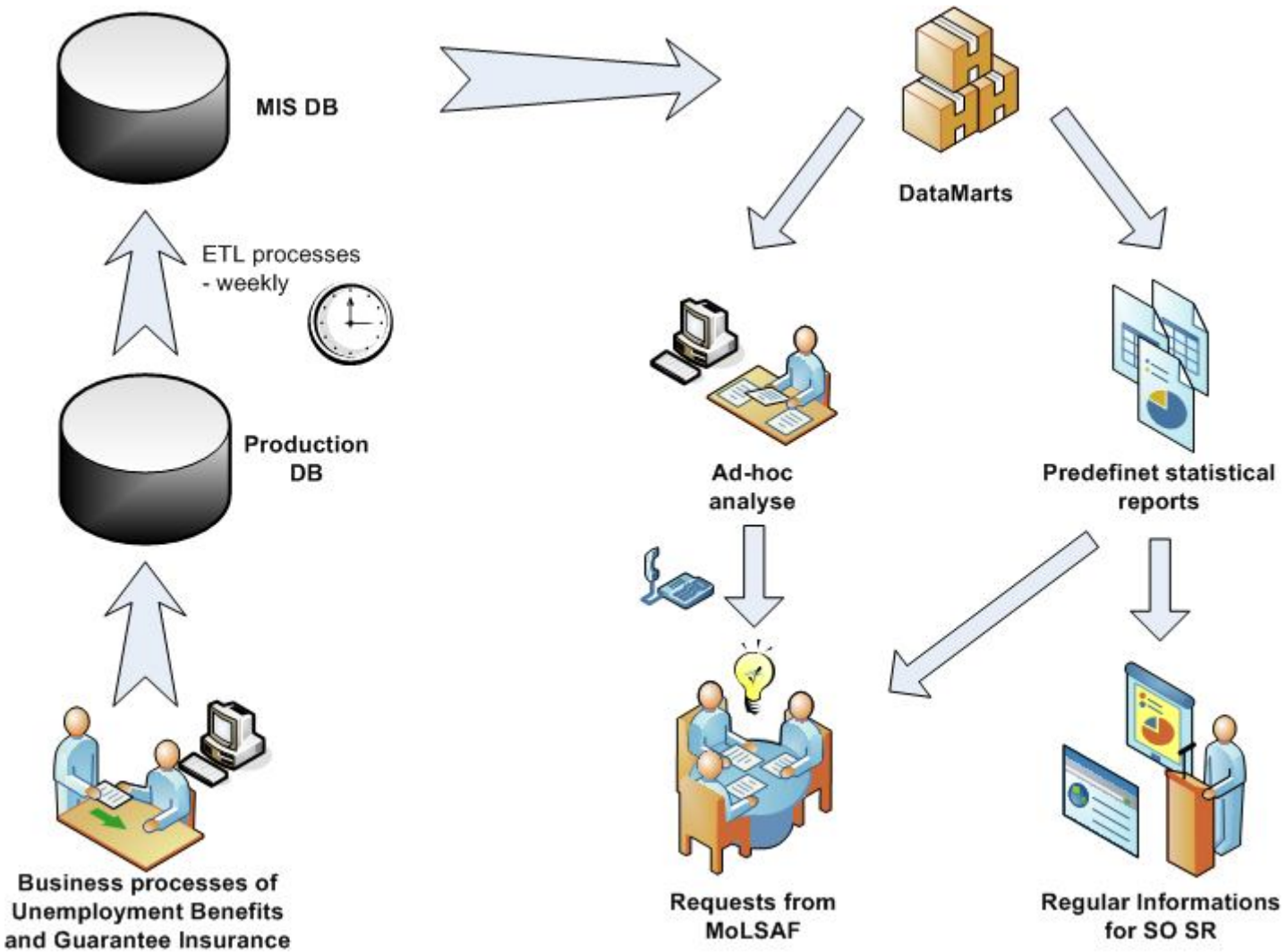
- IS PvNGP – Information System of the Unemployment Benefits and Guarantee Insurance Benefits contains data about:
 - Recipients of unemployment benefits and guarantee insurance benefits
 - Unemployment benefits and guarantee insurance benefits paid off
- Statistical reports are a part of production IS (predefined reports)

Reasons for a New Solution

- Statistical reports created in the production database caused increased loading of DB server
- Reports were generated with a solid structure without possibility to customized criteria (f.e. display SR compilation only, not just by subsidiaries)
- Reports processing without further possibility data handling (eg. export to Excel)
- No possibility of ad-hoc reports creation – these requirements were solved by initialization of scripts in production database

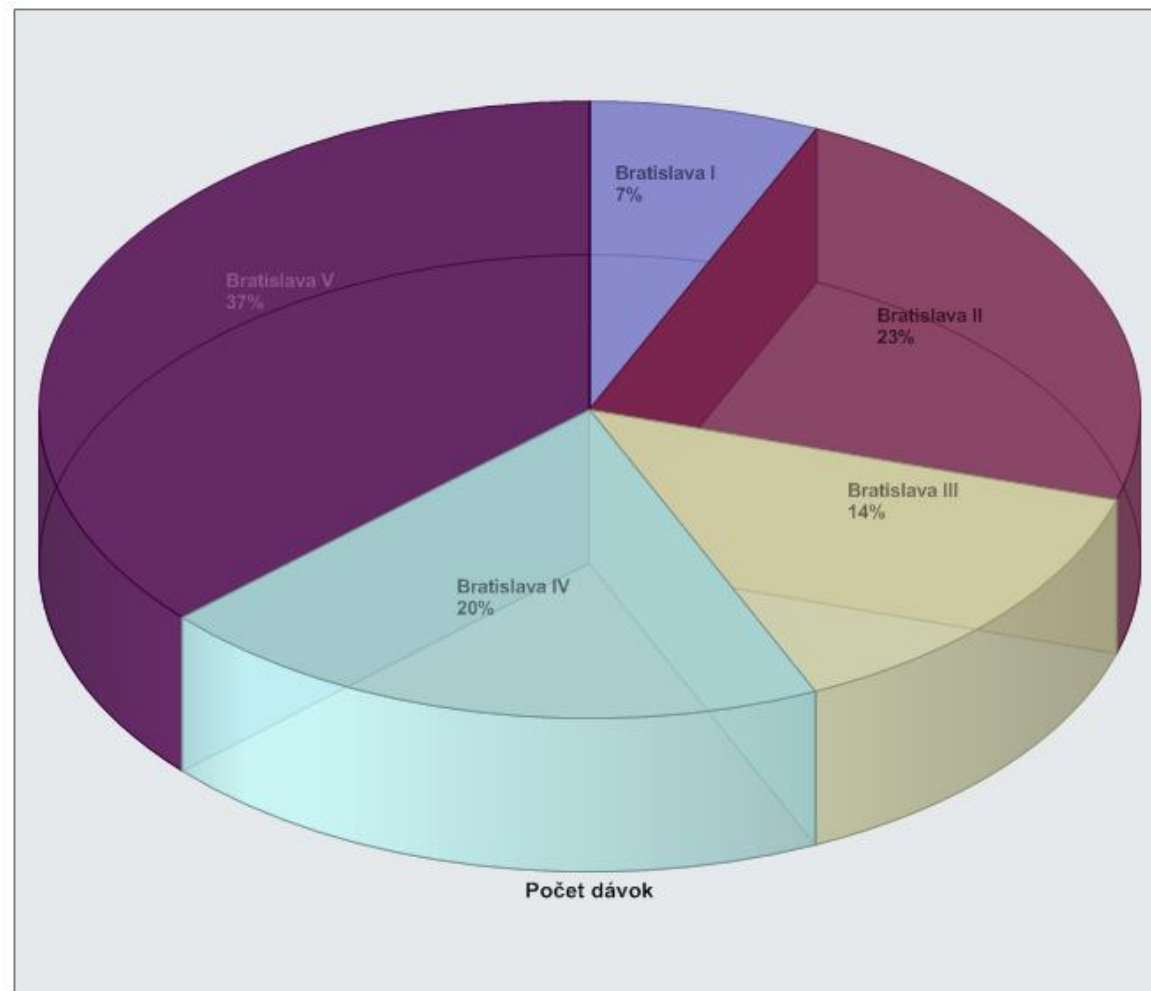
- Implementation of SP MIS which contains:
 - Datamarts for detection of numbers of recipients, amount of paid off benefits, amount of payments and other statistical data
 - Predefined statistical reports allowing quick access to regularly monitored data
- Presentation layer – Softec Invenio

Solution



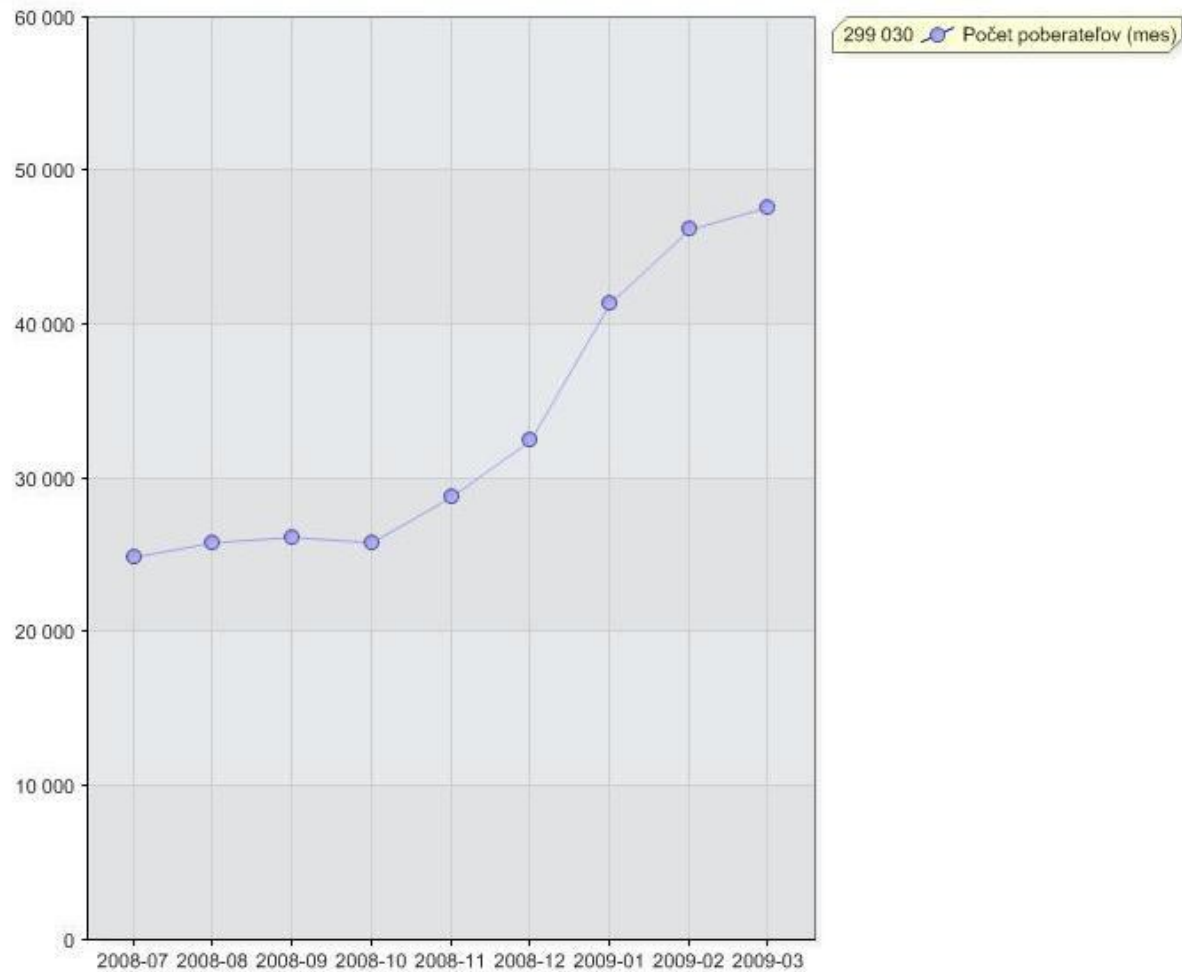
Output

Počet poberateľov (mes)	do 1 mesiaca vratane	od 1 do 2 mesiacov vr.	od 2 do 3 mesiacov vr.	od 3 do 4 mesiacov vr.	od 4 do 5 mesiacov vr.	od 5 do 6 mesiacov vr.	Spolu
Košický	126	149	181	424	208	4 927	6 015,00
Gelnica	7	5	13	20	4	228	277,00
Košice I	13	10	11	22	23	369	448,00
Košice II	8	14	13	25	12	344	416,00
Košice III	11	6	6	20	12	164	219,00
Košice IV	6	7	10	20	10	292	345,00
Košice-okolie	12	16	27	52	30	836	973,00
Michalovce	21	25	24	65	28	722	885,00
Rožňava	9	9	22	52	22	707	821,00
Sobrance	2	4	11	25	4	117	163,00
Spišská Nová Ves	25	28	25	69	33	552	732,00
Trebišov	12	25	19	54	30	596	736,00



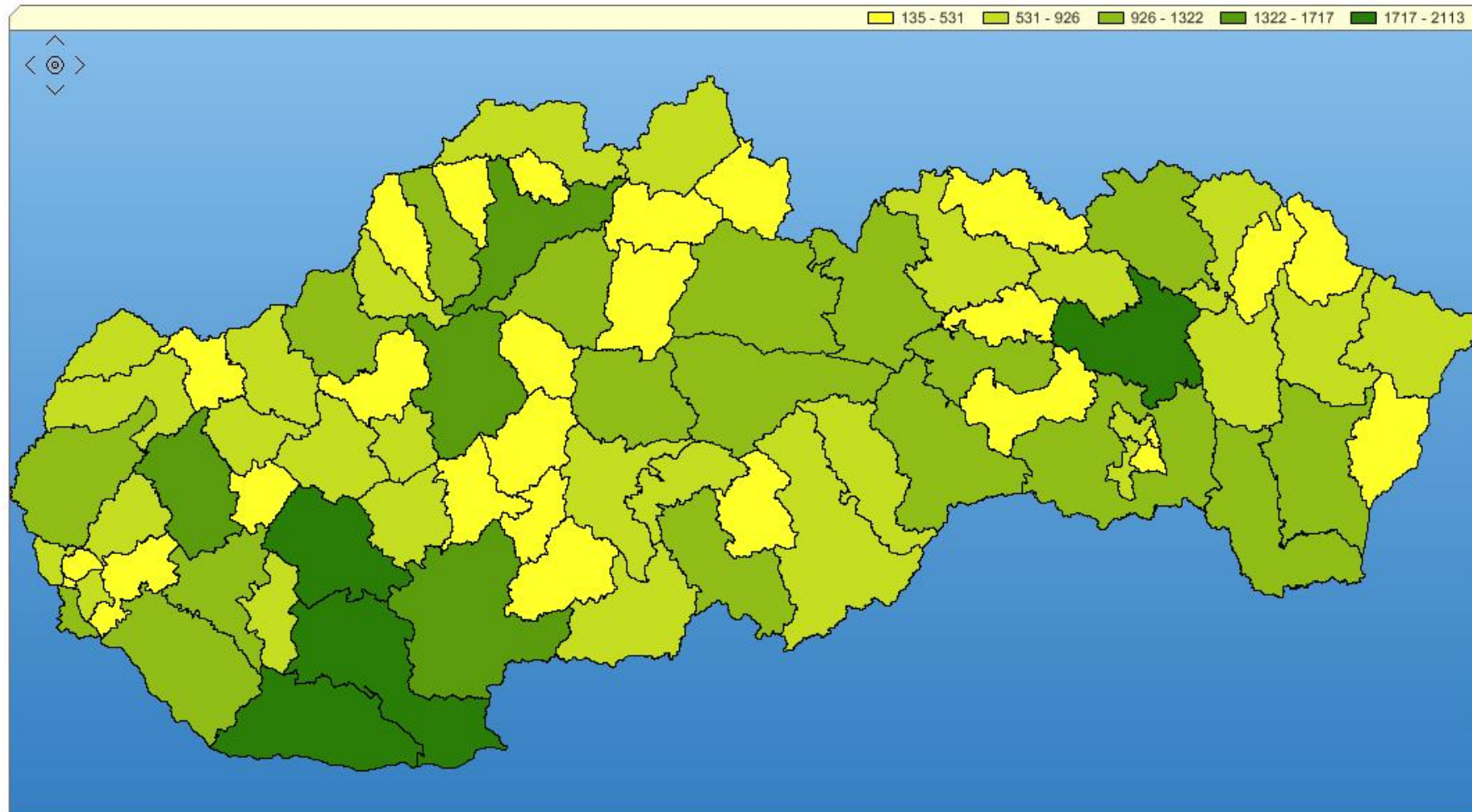
- 8 Recipients of unemployment benefits by districts of Bratislava

Output



Development of the recipients of unemployment benefits in selected period

Output



Current Solution Advantages

- Simplified and accelerated triggering of regular monthly statistical reports for MoLSAF of the SR and Statistical Office
- Possibility of ad-hoc reports creation
- Possibility of graphic data outputs creation
- Unloading production database

Solution Architecture

Softec Invenio

Presentation layer

XML for
Analysis API

Pentaho Mondrian

Dimensional layer

MDX Commands - Translation, Validation and Execute

Star layer

Administration Data Aggregation and Cache Memory

Oracle Relational Database

Storage layer

Data Store and Aggregation

Pentaho Mondrian

- Open-source OLAP Server enabling:
 - High performance, interactive analysis of large or small volumes of information
 - „Datamining“, for example analyzing sales by product line, by region, by time period
 - Parsing of Multi-Dimensional eXpression (MDX) language into Structured Query Language (SQL) to retrieve answers to dimensional queries
 - High-speed queries through the use of aggregate tables in the RDBMS
 - Advanced calculations using the calculation expressions of the MDX language

- Integrated solution designed for data presentation and analysis
- Essential modules
 - Portal
 - Hierarchical structure configuration
 - Analytical tool
 - Ad-hoc data analysis and reports building
 - Configuration browser
 - Set up presentation (tables, charts, maps)
 - Data and set up export (PDF, RTF, XLS)

Application Advantages

- Flexible analytical outputs definition
 - Optimal structure of DWH and datamarts
- Ad-hoc outputs creation
 - Without knowledge of SQL, using metadata
 - Possibility to use advanced analytical functions
 - Simple publication of outputs on the web, portal integration
 - Map outputs
 - Data export
- Initial costs decrease
 - Utilization of existing database infrastructure for DWH and datamarts
 - Zero costs for OLAP database licences
- Maintenance costs decrease
 - Knowledge of IT department database maintenance and productive systems in use
 - Zero added OLAP database maintenance and support payments

Customer Reference

„ Management information system for the agenda of unemployment benefits and guaranteed insurance benefits significantly accelerated and simplified creation of regular monthly statistical reports, enabled precise results and made the creation of ad-hoc reports possible. Last but not least we appreciate the user interface of Softec Invenio enabling simple and fast operation with reports.“

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Thank you for your attention

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