

Customer Profile

Information Builders helps organizations transform data into business value. Our business intelligence, integration, and data integrity solutions enable smarter decision-making, strengthen customer relationships, and drive growth.

Estonia Police and Border Guard Board

Snapshot

Organization

The Police and Border Guard Board is the law enforcement agency of the Republic of Estonia, a country in the Baltic region of Northern Europe with 1.3 million citizens.

The Challenge

As PBGB's data warehouse grew to contain information on 150,000 misdemeanors and more than 30,000 criminal offences, analysts were challenged to automate data quality procedures.

The Strategy

Automatically identify errors in source data to ensure accurate reports and sustainable business processes. Use iWay Data Quality tools to monitor discrepancies as new source data is entered in the warehouse.

The Results

Accurate information in the data warehouse leads to better police decisions, which improves services to citizens.

Information Builders Solution

WebFOCUS BI and Analytics Platform, iWay Data Quality Suite, and Data Profiler.



Estonian Police and Border Guard Boosts Data Quality With WebFOCUS and iWay

Accurate Information Ensures Better Informed Officers and More Comprehensive Police Services

The Police and Border Guard Board (PBGB) is the law enforcement agency of the Republic of Estonia, a country of 1.3 million citizens in the Baltic region of Northern Europe.

The board is under the supervision of the Ministry of the Interior, which supervises the PBGB, the Estonian Internal Security Service, the Rescue Service, the Emergency Response Centre, the IT and Development Centre of the Ministry of the Interior and the Academy of Security Sciences.

With a grant from the European Union, PBGB set out to improve its analytic capabilities. Analysts envisioned a new data warehouse, an agency-wide reporting portal, and a predictive policing system that could help officers make decisions based on their analysis of recent crime trends.

"The process of obtaining data used to take several days but now we can turn inquiries into usable information within seconds."

> Ružena Allas Police Expert Analyst PBGB

Data quality was an important part of the project. The team wanted to minimize the accrual of inaccurate data so that police reports and procedures would be consistent and correct.

To mitigate this problem, PBGB looked for technology that could help clean up its existing database and create a reliable source of police information on an ongoing basis. PBGB purchased Information Builders' WebFOCUS business intelligence (BI) and analytics platform and the iWay Data Quality Suite to automate data quality and data profiling activities.

Cleaning Up the Data Warehouse

PBGB has a Sybase data warehouse that is fed by 10 source systems, including an SAP R/3 enterprise resource planning (ERP) system and several police information systems. The warehouse includes information about the operational management of mobile units and details about traffic accidents, misdemeanors, and criminal offenses. It also includes personnel records, data on police vehicles, and financial data.

As the data warehouse grew yearly by 150,000 misdemeanors and 30,000 criminal offenses and their proceedings, data quality became increasingly important. Bad data can impact each level of the organization and lead to inaccurate decisions regarding how resources are allocated, public order is maintained, and police procedures are conducted. For example, an incorrect date or time field can lead to an inaccurate evaluation of work performance.

"We need good data to offer high-quality police services to citizens, police partners, and to our own staff," says Ružena Allas, police expert analyst at the PBGB.

According to Allas, data quality initiatives involve identifying and correcting errors in the upstream source data to ensure accurate information and sustainable business processes in the downstream reports. Improving the quality of information in its data warehouse was a two-step process: audit existing information for consistency and carefully monitor the addition of new data as it is entered.

iWay Data Quality tools allow the department to set up business rules to monitor and maintain data quality, now and in the future. iWay Data Quality Server is invoked during an iWay DataMigrator process to generate a log of executions. This log is used for internal reporting and communication.

When problems are detected during the processing, iWay sends a list of anomalies for remediation. PBGB continues to use these iWay tools on a day-to-day basis as new information is loaded into the warehouse.

Integrated Reporting and Analytics

The bureau uses iWay Data Quality Suite in conjunction with WebFOCUS to conduct data quality audits. "iWay detects problematic cases that we were not even aware of," Allas says.

Find Out More

To find out how we can help your company succeed, talk to your local Information Builders representative today. Visit us at **informationbuilders.com**, or in the U.S. and Canada, call **(800) 969-4636**. To improve your skills with our solutions, visit **education.ibi.com**.

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> Ružena Allas Police Expert Analyst PBGB

WebFOCUS plays a role in the department's data quality initiative by generating reports that summarize errors and anomalies in the source systems. The board was already using WebFOCUS for operational reporting so it was a simple matter to create these additional data quality reports.

WebFOCUS anchors an agency-wide reporting system with an intuitive, role-based user interface, which increases security and enables the police to work more quickly and efficiently. This reporting system is not only fast, but also flexible and reliable.

Each morning a situation report is sent to users, which includes details about that day's important cases and trends. Analysts can prepare new reports and submit queries themselves, without any programming or technical development.

WebFOCUS is easy to use, which has encouraged adoption. Approximately 1,300 people use WebFOCUS and the user base is constantly growing.

It used to be difficult to view and interpret the types and numbers of crimes. Now users can drill into crimes by region, police authority, the nature of the case, and other variables. They can help themselves to the information via a simple web browser interface.

Accurate Data Equals Better Services

According to Allas, system reliability has increased since the police department started using WebFOCUS and iWay. If errors occur in the process of entering data, it is much easier to detect them and fix the problem.

Better information leads to better decisions, which improves services to citizens. For example, police analysts have analyzed data about traffic accidents to look for correlations in their causes, including weather, road conditions, and profiles of the people involved (age, vehicle type, previous offenses, the impact of the imposed punishment, and other data points).

Understanding these patterns helps the board position its mobile units to improve road safety by preventing similar types of accidents in the future. For instance, PBGB cautioned road users about moped accidents as soon as the number of such accidents increased. The board also uses the data obtained from the data warehouse to prepare campaigns and evaluate results for the Road Administration.

"If police officers have the right information to make better decisions, citizens will directly benefit," Allas sums up. "The process of obtaining data used to take several days but now we can turn inquiries into usable information within seconds."

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