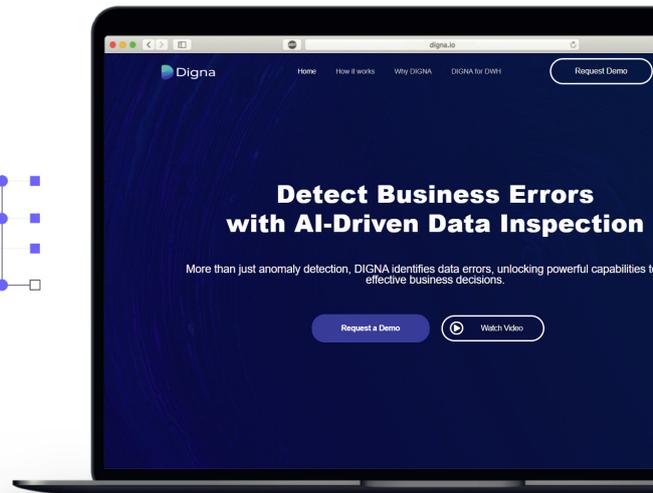
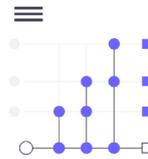


Product Sheet

Overview

Data is the key to analyze the past, manage the present, and discover the future. Good data quality is vital to minimize the risk of failures and boost the growth of your business. DIGNA uncovers all blind spots in your data with its AI-driven anomaly detection algorithm.

DIGNA is an automated anomaly detection software that uses artificial intelligence to find anomalies in your data. Identifying anomalies as they happen is a crucial factor for more accurate, reliable, and rapid business decisions. DIGNA has many out-of-the-box functionalities and can seamlessly be integrated into your daily life cycle with a built-in command-line interface. The web-based DIGNA Dashboard provides you the grand scheme of your data so that you always stay one step ahead of your competition.



DIGNA at a Glance

- Automated anomaly detection with state-of-the-art machine learning.
- Built-in metrics for monitoring.
- Command-line interface for seamless integration.
- Cloud-based, on-premise and stand-alone solution available.
- Browser-based dashboard with responsive design.
- Supported data sources: Teradata, Oracle, MS SQL Server, PostgreSQL, Flat File (other technologies can be supported at customer's request)
- Supported OS: Windows and Linux.

DIGNA Benefits

- No manual search for anomalies anymore.
- Significantly increases data quality.
- Reduction of operative costs.
- Minimal maintenance and small footprint.
- All data sources can be monitored at one central point.
- Artificial intelligence solution from the newest research results.
- Modern software at Low Total Cost of Ownership.

DIGNA Core

The heart of DIGNA can be split up into 3 main blocks: **Profiling, Model Training, and Traffic Light System**. Each block can be integrated into the daily life cycle with DIGNA'S integrated command-line interface.

Profiling

Monitoring every single data point is a tedious job that will squander your resources. That is why DIGNA's built-in metrics compress your data to what really matters, and only the compressed information is analyzed instead of all the data. This way, your system is never overloaded, and you keep track of all your information no matter how big your data is. And if the built-in metrics are not enough for you, no problem! Use **DIGNA's filter functionality to define any metrics** you want to monitor.

Model Training

DIGNA's **unsupervised learning algorithm** uses the profiles of your data to learn how your data behaves as time goes by. This means the model automatically discovers all the trends, seasonalities, and other patterns that are hidden in your profiled data and predict how the data should look like tomorrow. **The more data** you provide to DIGNA, the **more accurate** DIGNA's predictions are.

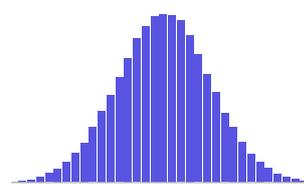
Traffic Light System

Anomalies are defined as large deviations between the observed and predicted values of the profiled data. DIGNA has a self-adjusting assessment system that automatically determines what is significant and classifies each monitored metric into 3 easy-to-understand categories:

-  **Green**
No anomaly found
-  **Yellow**
Suspicious patterns found
-  **Red**
Anomaly found

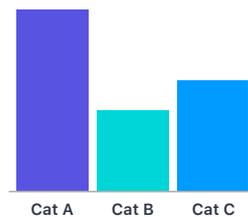
The alerts have a **general-to-specific** structure, meaning that DIGNA provides alerts on several levels. Hence, the data source itself is the most general level, and the metric itself the most specific. This way, you always have a clear view on the general level, and you only drill down to the specifics if an alert happens. And naturally, you have full control over the traffic light system allowing you to **adjust the sensitivity** of the traffic light system to focus on what is really important for your business.

Example of DIGNA's build-in-metrics



Numeric column

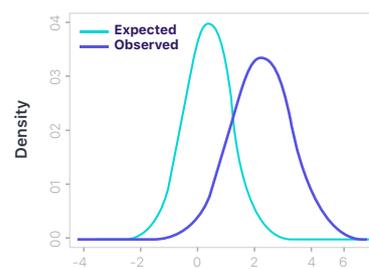
Represent the distribution of the column by key statistics



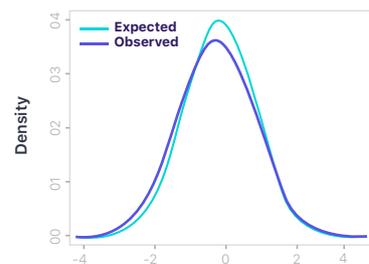
Categorical column

Represent the distribution of the column by category counts

Visualization of DIGNA's anomaly detection algorithm



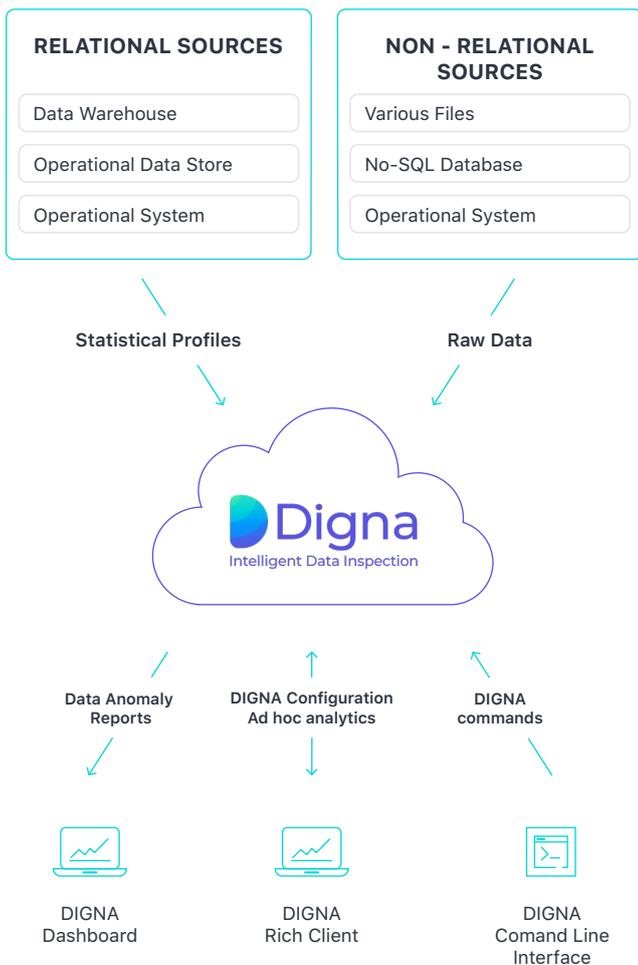
High anomaly score



Low anomaly score

Anomaly score = $\text{abs}(\text{Predicted distribution} - \text{observed distribution})$

Overview of the DIGNA Pipeline



DIGNA Dashboard

Even the best anomaly detection software has only limited value if you do not have the tools that allow you to visualize and manage the alerts. DIGNA has a **web-based Dashboard** with **responsive design** so that you never miss what is happening with your data.

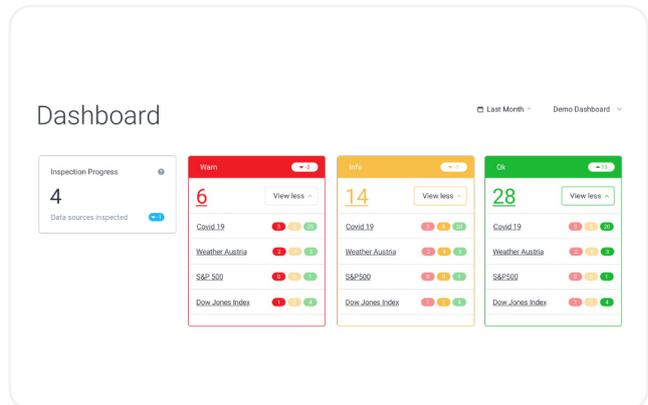
Browser Access

No matter if **desktop, laptop, or mobile device**, you can access the DIGNA Dashboard from anywhere you want. The dashboard is a browser-based solution that is entirely independent of the hardware you use. And no need to worry about your privacy, we offer **private cloud** and **on-premise** solutions so that you do not have to share your data with anyone. In the dynamic world we live in, DIGNA provides you with the flexibility you need.

Alert Timeline

The dashboard has an **integrated timeline** functionality that provides you the **latest status**. This way, you always see where and when the newest alerts happened. Even more, you can go back in time and compare the quality of your past data to the current data.

You can analyze how the data quality progresses over time and can immediately take action if the quality drops.



DIGNA Future

Our unique vision is that DIGNA takes data quality management to the next level. As such, we continuously **improve our anomaly detection algorithm** and **extend the profiling functionality**. We stay tuned to the newest trends and carefully analyze which features to include. Our goals for the near future are to integrate **ticketing and collaboration systems** into the dashboard, **real-time data ingestion** for real-time anomaly detection, and to develop a **mobile app**.

