



ABOUT

- **matrix99** a.s. was founded in 1999 as a spin-off "STROM Telecom", large ICT company that developed and implemented OSS (Operational Support Systems) and BSS (Business Support Systems) for TELCOS
- The idea behind spinning-off **matrix99** a.s. is usage of experiences, solutions and technologies used for solutions in TELCO industries for Utilities (especially Energy) sector.
- **matrix99** developed the Energy Efficiency Platform (www.matrix99.net), based on Microsoft .NET technologies and SOA (Service Oriented Architecture).

matrix 99 a.s.

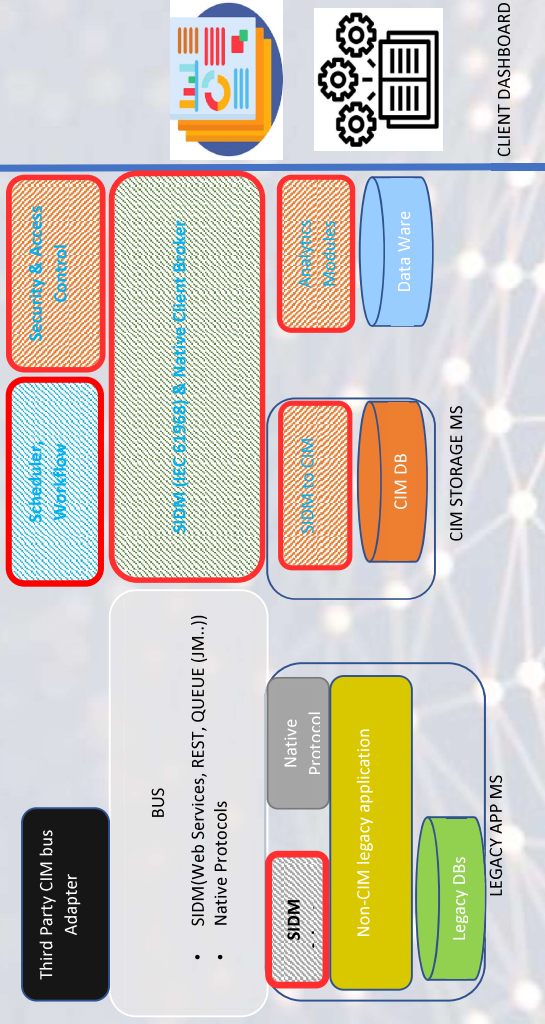
sales@matrix99.net

Melnická 10, Prague 5, 15000, Czech Republic

M: +43 676 549 0499 | F: +420 602 387 063

www.matrix99.net

matrix99.CORE 3.1
Smart Grid Analytics



- ✓ **Integration of different applications EMS (Energy Management Systems) , DMS (Distribution Management Systems) and Customer Relations Management (CRM) systems**
- ✓ **BigData based analytics and ML of data collected in integrated EMS, DMS and CRM**

BENEFITS:

Independent surveys indicate the following average industrial savings when integrating of EMS, DMS, GIS, AMI, Outage Management and CRM:

- ✓ Reduction in maintenance costs
 - ✓ The data is in the IEC standardized model and format. Consequently of the shelf utilities and SW can be used.
- ✓ Reduction in labor costs
 - ✓ Single Point of Entry
 - ✓ Reduced Risk of Errors
- ✓ Increase in production
 - ✓ Team members will be able to communicate better through having exactly the same information available to them at each time. Its saves having to mis-match data between systems and departments.
- ✓ Employees can spend more time on tasks that will help the business to grow, rather than having to replicate data and wait for information to be sent to them from other departments.
- ✓ Real Time Data
 - ✓ Through having integrated information in one system, all of the data is up to date. This is essential for all elements of the organization ranging from marketing communications through to finance.

✓ Revenue protection

- Detection of non-technical losses
- Predictive Maintenance
- Consumption analysis and prediction
- Load Characterization and Classification
- Smart consumption prediction
- Demand response
- ✓ Predictive maintenance
 - Switchgear Health Monitoring
 - Distribution Transformer Health Monitoring
 - Predicting Distribution Transformer Failures
 - Power Transformer health monitoring
 - Machine Learning for Winding Inductance Prediction
 - Machine Learning for Prediction of Dissolved Gas Analysis
 - Machine Learning for AC and DC Motor Health Monitoring
 - Machine Learning for Predicting Electricity Distribution and Transmission Grid Failures

BENEFITS:

According to the U.S. Department of Energy, independent surveys indicate the following average industrial savings when a functional predictive maintenance program is implemented **10 times Return on investment**:

- ✓ **25-30% Reduction in maintenance costs**
- ✓ **70-75% Elimination of breakdowns**
- ✓ **35-45% Reduction in downtime**
- ✓ **20-25% Increase in production**