finder

BIG ENERGY DATA MULTIPURPOSE ANALYTICAL TOOL

Smart metering deployments bring utilities a big amount of various data information which is a new valuable asset for utilities. However, the management of big data presents a new challenge for digitalization and process optimization.
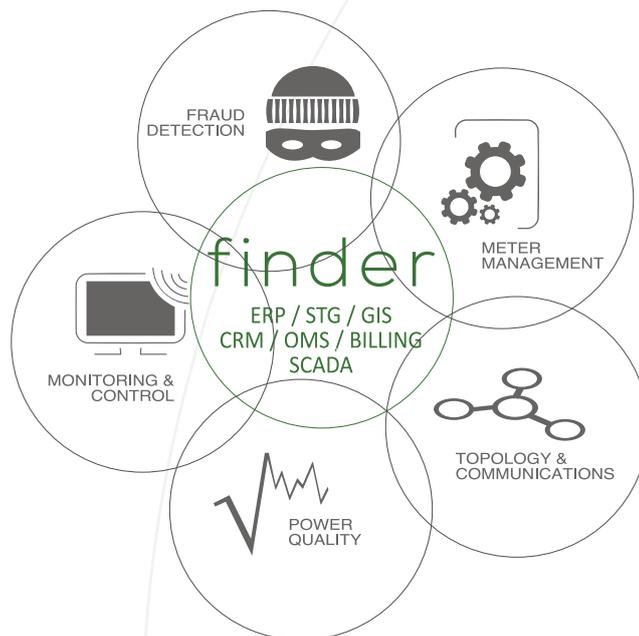
Big Energy Data Analytical Capabilities are required to capture, manage and analyze all the different information. At ARKOSSA, we feel very concerned about this since we believe that proper management of energy and other meter data will assist organizations to take better decisions and process improvements.

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Finder is an innovative analytical tool developed by ARKOSSA to control, transform and monitor smart meters and energy data in the utility distribution network. Finder is a powerful tool for real-time monitoring of utility's distribution networks, providing current and historical graphical/geographical data and reports for an efficient supervision and management. Big Data needs powerful techniques to efficiently process large volume of data within a limited time.

By using ARKOSSA's proprietary algorithms, and through Big Data analysis, **Finder** can perform multiples operations related with daily tasks in electrical utilities' networks. Such as the detection of non-technical losses, power quality, communications supervision, meter management and security. It can perform as well multiple operations in gas and water utilities regardless of the smart metering system vendor.

The main advanced features of **Finder** are:

FRAUD DETECTION

METER MANAGEMENT

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ERP / STG / GIS
CRM / OMS / BILLING
SCADA

MONITORING & CONTROL

TOPOLOGY & COMMUNICATIONS

POWER QUALITY

GENERAL

Flexible Architecture.
Strong ETL Process.
Quality Data.
Integration with any source of data.
Powerful BI and Advanced Analytics.
Easy to use Interface.

COMMUNICATIONS

Advanced Detection of Communications problems.
Calculations of Quality of Signal and Reads Ratios.
Statistics Performance on multiples devices inside Networks.
Levels of Service indicators on multiples scenarios (WAN/LAN/PLC).

ADVANCED FRAUD DETECTION

Smart Algorithms for fraud detection.
Advanced data mining techniques.
Hardware tampering detection.
Powerful Alerts on different levels and groups.

ENERGY BALANCES

Energy Balances at different voltage levels.
Detailed and Accurate Energy Balances on different time scales.
Non-technical Energy Losses identification (electricity).
Multiples Filters for Data Analysis.

POWER QUALITY (Electricity)

Detection of power quality problems.
Unbalanced Loads.
Power outages statistics.
Advanced Analytics over Quality Problems.

MONITORING & CONTROL

Data Concentrators and Meters Supervision.
WAN/LAN Devices Supervision.
Meter/DC Inventory Management.
Smart Monitoring of Data and Workflow Process.

METER MANAGEMENT

Wrong Meters Reads Detection.
Data Quality Supervision.
Hardware Failures Detection.
Advanced Analytics over Meter Data.