add.BI - Introduction

Power & Utilities
ADD Ltd - Business Solutions Department

- 21 years in BI/CPM area
- 22 Consultants in BI/CPM area
- 160+ Successfully finished BI/CPM projects
- 24+ Countries with our solutions
- Microsoft Country Partner of the Year 2016
- Winner FLP 2015 Award for Big Data in EMEA region (Microsoft & HP)
- Microsoft Gold Data Analytics, Data Platform, Cloud Platform, Cloud Productivity
- Microsoft Gold Collaboration and Content, Datacenter, Messaging
- Premier Pyramid Analytics Partner
- Regional Kepion Partner
- Cloudera Bronze Partner
- Iris Carbon Partner
Power & Utilities Experience
Different Market Players + Technology Expertise + Business Knowledge + Guidance

- Power Generators
- Transmission Operators
- Distribution Operators
- Traders (WHS)
- Suppliers (RTL)
- Best Practices & GAP-FIT Models
- Business Consultants & Technology Experts

Cross-Industry best practice sharing
Data integration “one version of truth”

Data Quality & Master Data

All kind of data (structured, unstructured, mass...)

Artificial Intelligence

Reference models & Best practices

Relevant Content & Scenarios
What we do?

- Understanding of Business Challenges
- Best practices & Fast Track frameworks
- Data preparation & management
- Analytics & Information management
  - Monitor Strategic & Operational KPI’s
    - Performance monitoring dashboards
  - Set Targets on Strategic & Operational Level
    - Budgeting & forecasting solution
  - Understand What is Happening & What Happened
    - Analysis & reporting tools
  - Get Insights on What Will Happen & What To Do Next
    - Advanced analytics models
Power Generation & Distribution
The Value Chain

Financial
(goals & metrics)

Operational Efficiency & Effectiveness
(goals & metrics)

Product Profitability
Demand Management
Demand Forecast,
Forecast Accuracy,
Lost Sales
...

Sales & Marketing
Contract Values,
Trade Value
...

Projects & Activities
Actual V Budget,
On-time delivery,
Work cost,
Material cost
...

Sourcing & Procurement
Purchase Orders,
Supplier Performance,
Production GWh,
Scheduled GWh
...

Distribution
Losses,
Outages,
SAIDI,
SAIFI
...

Customer Service
Complaints & Claims,
Customer Segmentation,
Customer Life time Value
...

Financial & Risk Management
Human Resources & Assets Management
IT & Services

Asset Utilization & Efficiency,
Losses, SAIDI, SAIPI, CAIFI,
Plant Efficiency, Fuel usage per MWh, A/R Days, GMROI,
CMROI, Operating Costs, etc.

Gross profit, Net profit, ROCE,
ROA, ROI, Working Capital,
COGS, SGA etc.

Dashboards
KPI Monitoring
Story telling
Alerting

Ad-hoc Analysis
Reporting
Advanced Analytics
What-if
Budgeting
Forecasting
Streaming
Data Integration

Value Chain
Sales & Marketing
Demand Forecast,
Forecast Accuracy,
Lost Sales
...

Operational Efficiency & Effectiveness
Product Profitability
(goals & metrics)

Asset Utilization & Efficiency,
Losses, SAIDI, SAIPI, CAIFI,
Plant Efficiency, Fuel usage per MWh, A/R Days, GMROI,
CMROI, Operating Costs, etc.

Gross profit, Net profit, ROCE,
ROA, ROI, Working Capital,
COGS, SGA etc.
Energy Trade & Supply
The Value Chain

Financial (goals & metrics)
- Gross profit, Net profit, ROCE, ROA, ROI, Working Capital, COGS, SGA etc.

Operational Efficiency & Effectiveness (goals & metrics)

- Product Profitability
  - Demand Management
    - Demand Forecast
    - Forecast Accuracy
    - Lost Sales
  - Sales & Marketing
    - Contract Billing
    - Volume Price Mix Variance
    - Incremental Sales
  - Portfolio Management
    - Contract Valuation
    - Portfolio Balancing
    - Profitability
  - Sourcing & Procurement
    - Purchase Orders
    - Delivery Notes
    - Supplier Performance

- Supplier Profitability
  - On-time delivery
  - Costs per delivery
  - Time interval

- Customer Profitability
  - Customer Service
    - Complaints & Claims
    - Customer Segmentation
    - Customer Lifetime Value

- Finance & Risk Management
- Human Resources & Assets Management
- IT & Services

Customer Acquisition & Retention, Profit per contract, Market Growth, A/R Days, DSO, M2M, VaR, etc.

Dashboards
- KPI Monitoring
- Storytelling
- Alerting

Ad-hoc Analysis
- Reporting
- Advanced Analytics
- What-if
- Budgeting
- Forecasting
- Streaming
- Data Integration

Gross profit, Net profit, ROCE, ROA, ROI, Working Capital, COGS, SGA etc.
We understand Industry challenges

Cross-Process Collaboration
Smotherer Operations
Connected Marketing, Sales & Service
Regulatory Compliance

Customer as a center
New Innovative Services
Personalized experience
Collaborate with a customer

• High volatility in prices
• Regulatory Requirements
• Industrial and transport sector consumption
• Environmental and demographic changes
• Unpredictable fuel costs
• Opening up of market places

Cross company and process collaboration
We have Industry Related Experience...

**IT Perspective**
- Enterprise Data warehouse
- Master Data Management
- Data Quality
- OLAP Analysis
- Self-service BI
- Reporting
- Dashboarding (KPI’s)
- Planning & Budgeting
- Predictive Analytics
- Time Series Data Analysis
- Statistical Analysis
- External data acquisition and integration (Weather, EEX, Metering data, SouthPool...)

**Business Perspective**

**RETAIL**
- Contract Valuation (SLP modeling, Fix, Flex)
- P&L Statements
- Portfolio Management (RTL&WHS, Balancing)
- Demand/price forecasting
- Price policy (Volatility, Margin, Risk Premiums...)
- Tariff Management
- Risk Calculation
- Scheduling
- External data (consumption, price, weather, etc.)

**TRADE**
- Contract management (Physical, CBTC, Financial...)
- Demand/Price forecasting
- Price volatility and Currency Clause
- Scheduling
- Imbalance Statements
- Cross-border Trading
- Risk Calculation (MtM, VaR etc.)

**GENERATION, DELIVERY**
- Telemetric data readings (SCADA, devices)
- Load and Production Aggregation
- Assets Monitoring
- Long/Short-term forecast Load and Production
- Scheduling (day-ahead, intraday)
- Trade day valuation
- Project Valuation (work hours, material, machine hours)
- External data (consumption, production, capacity, weather...)

**OTHER AREAS**
- Billing
- Financials (Costs, Revenue, Assets...)
- Collections (Account Receivables and Payables)
- Cash Flow
- Campaign Management
- CRM
- Call Center Analytics

Power & Utilities CPM Framework
We Provide Reference Business Models
Power & Utilities DWH Industry Framework ➔ What happened, will happen ...

Generation
Producer

Wholesale Market
Trader

Retail Market
Supplier | Distributor

Contract & Portfolio Analysis

Price Analysis & Forecasting

Risk Management

Operations

Demand/Load Analysis & Forecasting

Projects

Production & Schedule

External data

Weather | Prices | Exchange Rates | Bloomberg

Prices | CBTC | Macro | Market

Smart Meter | AMR

Metering Data & Analysis

Telemetry | Readings

CRM

Finance

Billing

Debtors

Budget & Forecast

Procurement

Analytical Platform

MDM

Data Governance

Report & Analysis

Monitoring

KPI's

Self-service

Predictive Analytics

Budgeting & Forecasting

Analytical models

Security, Auditing

Regulatory Reporting
BI/DWH Evolution to Analytical Platforms

**What happened?**

- **Agile DWH practice**
  - Agile DWH (Step-by-step) MPP, Conf. dimensions
  - Business & Operational Data ...

**What is happening?**

- **Big Data Analytics**
  - Extended DWH architecture
  - Big Data Storage
  - Big Data Query Engines

- **IoT Analytics**
  - Connect different devices
  - Stream data in real-time
  - Align data with corporate assets.

**What will happen?**

- **Advanced Analytics**
  - From historical data to prediction and prescriptions.

- **Self-service Analytics**
  - Provide Analytical Tools
  - To enable users do self-service BI.
Smart “Everything” Challenge

- Connectivity to devices
- Bi-directional communication
- Real-time analytics
- Data Explosion (signals, granularity, unstructured...)
- Historical data (store and analyze huge amount of data- structured & unstructured – RAW)
- Extract knowledge using Advanced Analytics (from what happen to what will happen)

Alignment of Operational & Business Analytics
Modern Analytics Platform

Value Add Services (Custom Portals, APIs, Mobile platform, ...)

- Data Modeling
- Visualization, Reporting
- Data Discovery
- Publications, Distribution, Storytelling, Alerting
- Predictions / AI
- „Managed“ Analytical models
- Self-service analytical models

Data Quality & Master Data

- Corporate Data Warehouse
- Big Data Platform

Data Ingestion

- Data Ingestion / IoT
- Internal Data Sources
- External Data Sources
- Streaming Data Sources

Internal Data Sources

External Data Sources

Streaming Data Sources

Data Governance

Security, Audit Trail

Budgeting & Forecasting

Data Virtualization

Big Data Platform

Power BI

SQL Server

Azure Databricks

Azure Cosmos DB

CLOUDERA

Modern Analytics Platform

Security, Audit Trail

Budgeting & Forecasting

Data Virtualization

Big Data Platform

Power BI

SQL Server

Azure Databricks

Azure Cosmos DB

CLOUDERA

Modern Analytics Platform
Any questions please address to:
Andrej Hudoklin, Strategic Sales Director – ADD Ltd.
Mitja.hafner@add.si

Marko Škufca, BI Unit Manager – ADD Ltd.
(Microsoft P-TSP/P-SELLER Application Platform)
marko.skufca@add.si