

## poslovna inteligencija

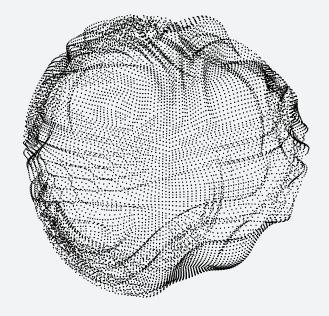
Poslovna means Business



# Data Warehouse Data Model for Banking

E-book

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## **About Us**



We are a **Data & Analytics consulting company** committed to delivering great solutions and products that enable our clients to **unlock hidden opportunities within data**, become **data-driven**, and make better business decisions.



20+

YEARS

Of providing Data & Analytics solutions

100+

CLIENTS

Present around the globe

200+

**EMPLOYEES** 

Constantly developing and growing

250+

**PROJECTS** 

Delivering projects across industries

Our distinct experience and understanding of business processes is based on working closely with a large number of big and medium companies across industries. We have delivered more than 250 projects to our clients from telecommunications, manufacturing, banking, insurance, distribution and retail sectors.

While nurturing our strong partnerships with all the leading technology vendors, we are technology agnostic.

With more than 200 employees and with over 20 years of experience in the largest Data & Analytics, Performance Management, Data Migration, Data Engineering and Machine learning projects, we lead the way in enabling companies to create value from their data.

The company HQ is in Zagreb and we operate from offices in London, Vienna, Stockholm, Ljubljana, Zagreb, Belgrade, Podgorica and Sarajevo.

# E2E Cloud Data & Analytics Solutions

#### **Data Governance**

DG, MDM, DQ

Implementing practices, concepts and processes dedicated to leveraging data as valuable asset.

Design data models, improve data quality and master data, protect data, manage whole data supply chain and make data available for any relevant business need.

### **Advanced Analytics**

Planning & Budgeting, Financial Consolidation, Data science

Automate budgeting and forecasting, financial consolidation and performance management reporting.

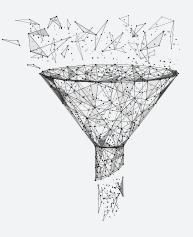
Use machine learning algorithms to uncover the unseen patterns, insights and trends in data and derive meaningful information.

#### **Data & Analytical Solutions**

DI, DE, BI, E2E Analytical Solutions

Utilize data and answer business questions through data integration. data engineering, reporting, self-service Bl and data visualization.

Collect and store data at scale, from multiple sources and formats, and make them reliable and consistent for analysis.



### **Data Migration**

#### Data migration to Cloud

Helping companies modernize their environments and migrate data from existing to new modernized solutions. Data analysis, architecture and development of migration to cloud solutions.

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## **Reference Customers**

The PI DWH Banking Data Model has been continuously developed since 2010, drawing on the insights and experiences gained from various financial organizations.





Addiko Bank











# Implementation Partners

With a worldwide network of implementation partners, some of which are listed below, we help businesses transform into data-driven organizations, no matter where they are located.

#### **Atos**

Atos is a global leader in digital transformation with 112,000 employees and annual revenue of c. € 11 billion.



#### BBI

BBI is a leading global technology provider focusing on Al-powered, Cloud-native, digital transformation.



#### **ERETEAM**

Ereteam is a leading IT and consulting services organization providing Big Data Analytics and Business Optimization solutions.



#### **WEVIOO**

Wevioo provides digital innovation solutions perfectly adapted to customers' agility, performance and development challenges.

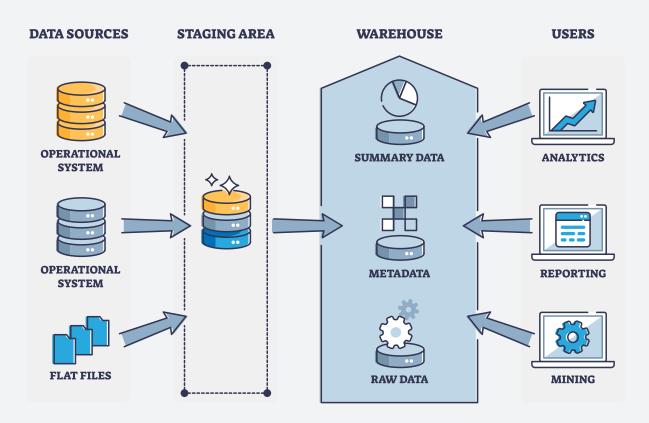


## **DWH Introduction**

DWH model is a critical tool for organizations that need to store, manage, and analyze large amounts of data. It allows businesses to centralize data from multiple sources and make it available for reporting and analysis. By using a DWH, organizations can gain valuable insights into their operations, customers, and markets, which can help inform strategic decision-making and improve overall performance.

Additionally, DWH models can improve data governance, data quality and data security for the organization. DWH can also be used for data mining, data modeling, data integration and data visualization to support business intelligence, decision making and reporting.

In short, DWH is an essential tool for companies looking to unlock the full value of their data and stay competitive in today's data-driven landscape.



The image shows an example of datawarehouse function in the organization.

## **Model Benefits**

#### **Analytics Accelerator**

The DWH model streamlines the development of business analytics, serving as a base for other analytics systems to connect to (such as reporting or predictive analytics). It has undergone extensive testing in various implementations and provides an excellent starting point for fulfilling future analytics requirements.



#### **Modern DWH Architecture**

In developing the DWH model, we employed the latest technologies and industry-standard best practices for data warehousing. Its design is scalable, modular, and adaptable, making it simple to integrate with other systems and process vast amounts of data. The model also includes data governance and security measures to guarantee the stored data's safety, security, and compliance.



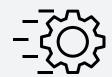
### **Simple Licensing**

The DWH model offers a user-friendly licensing model, facilitating its usage and management.



### **Simple Customization**

We understand that every organization has its specific needs, which is why we have designed the DWH model to be easily adaptable.



# **Model Highlights**

- Based on practical field experience
- Open to customizations
- 360 customer view
- 180+ Standard Banking KPI's
- Work on the model is a continuous endeavor, in respect to: banking regulations, IFRS standards, new analytical requirements, new markets, data modelling standards

**7**Data Marts

- Customer Account Summary
- · Credit Portfolio
- Deposit Portfolio
- · General Ledger

- CustomerExperience
- · Employee Summary
- NPL

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Subject Business Areas

- AML
- Business Items, KPI's
- CAPEX
- Classification
- Contact Center
- Credit Protection
- Customer
- Customer Account
- Customer Feedback
- ETL Process Execution
- Forbearance
- GDPR
- General
- General Ledger
- Human Resources
- Liquidity Potential

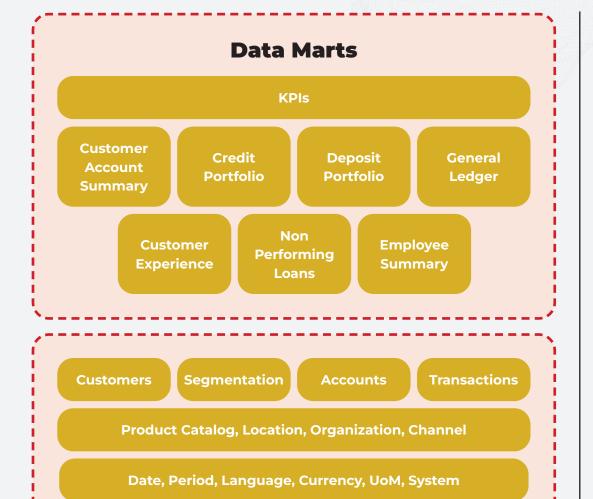
- Location
- Loyalty Program
- Marketing Campaign
- Mobile Payments
- Operational Risk
- OPEX
- Party
- Portfolio
- Product
- Rates
- Reporting
- Resource Item
- Risk Type
- Sales
- Segmentation
- Transaction

# **ETL Audit**

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# **Model Highlights**

## **Business Areas - Logical View**



**Model Base Layer** 

## **Technical Features**

#### **Developed in ERwin**

The model is developed using ERwin. The licence is not included but can be obtained through PI.

#### **Detailed Documentation**

Model documentation provides detailed information on all attributes and entities, including examples.

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TABLES

6.102

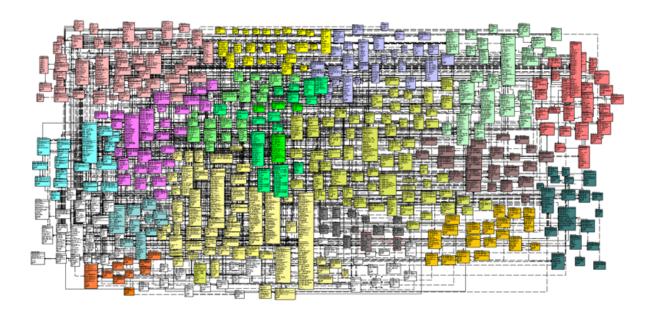
COLUMNS

1.840

**KEYS** 

1.611

INDEXES



The image shows the actual model, each subject area is distinguished by a different color.

## **Database Independent**

The model is database independen and is able to create DB schema on any of the standard RDBMS (Greenplum, Netezza, Vertica, MS SQL Server, Oracle, DB2, Teradata, Sybase IQ...)

## **Technical Features**

## **Modeling Principles**

- Standardization of data types (usage of domains)
- Standardization in naming (ID, Source ID, Name, Desc)
- SCD (Slowly Changing Dimension) handling:
- Hybrid SCD (Type VI) modeling approach
- Depending on the data volume one hystorical table or each changing attribute has it's own table

## Minor Release (3.X) Available 3 Times a Year

- New tables in existing subject areas
- New attributes in existing tables
- Other minor enhancements

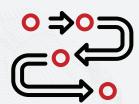
## Major Release (X.0) Available Every 2 Years

- New subject areas and related supported analytics and KPI's
- Everything included in minor relases

### **Model Package**

- 1. PI Banking DWH Model in ERwin format and exported to other required formats
- 2. PI Banking DWH Model Subject Areas Documentation (~50 pages)
- 3. ERwin Model Report Documentation for PI Banking DWH Model (~400 pages)
- 4. PI Banking DWH Model Business Glossary (with 150+ definitions)
- 5. PI Banking DWH Model KPI list (with 180+ standard banking KPI definitions)
- 6. PI Banking DWH Model Implementation guide
- 7. PI Banking DWH Model Release Notes
- 8. PI Banking DWH Model Knowledge Transfer Detailed Model content and Methodology Powerpoint Presentation (300+ Slides)

# **Implementation** Methodology



DWH Model implementation is an additional service that guarantees your model is implemented according to industry-best practices.



#### **Requirements Definition**

In the first 2-3 weeks, we conduct a series of workshops to establish the general requirements, set expectations, and identify the project timeline.



#### **Model Customizations**

The model is customized and source-to-target mappings are done based on the functional groups defined during the workshops.



#### **Prioritization**

The "General and Party" functional group is always the first to be customized due to its dependencies with other entities.

The order of other functional groups is determined by the client according to priority.



### **Implementation**

Customization and mapping for each functional group may take 4-8 weeks, depending on the complexity.

## Contact

If you want to learn more about DWH models, contact us or visit online resources.

#### **Contact Us**



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#### poslovna *i*nteligencija

Poslovna means Business