Data Warehouse & Business Intelligence Fundamentals

Todor Kichukov

todor.kichukov@bipartner.biz

https://www.facebook.com/groups/SUDWBI2022/

Faculty of Mathematics and Informatics

Sofia University

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Data Warehouse & Business Intelligence Fundamentals

Course Scope

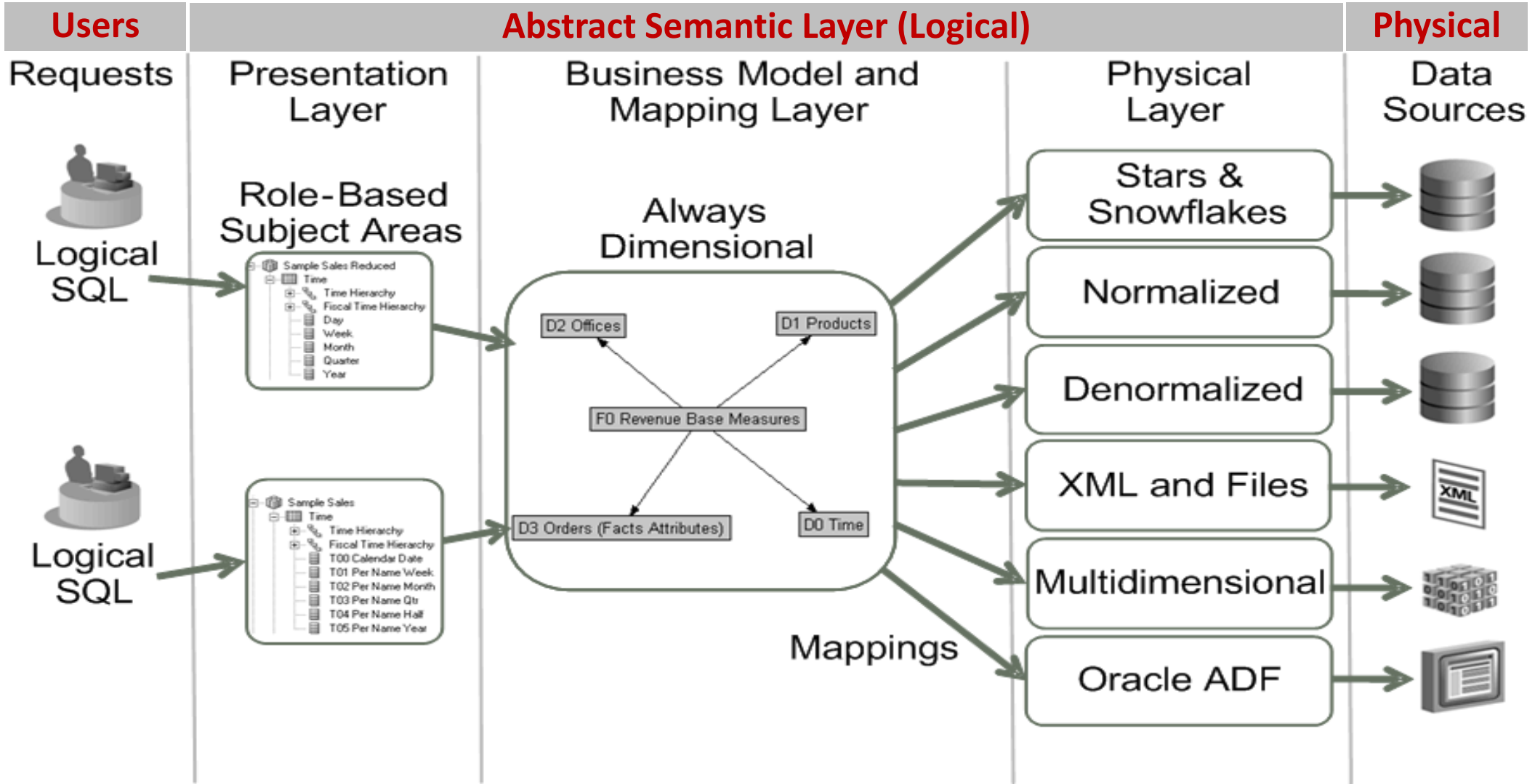
- DW Concept
- DW Architecture
- DW Data Modeling
- Data Integration
- Gathering and Analyzing Requirements
- Business Intelligence
- Deployment, Support and Maintenance

Business Intelligence Part II

- BI Apps - Abstract Semantic Layers
- BI Apps - High-Level Architecture
- Project Work

BI Apps - Abstract Semantic Layers 1/2

Oracle BI Example

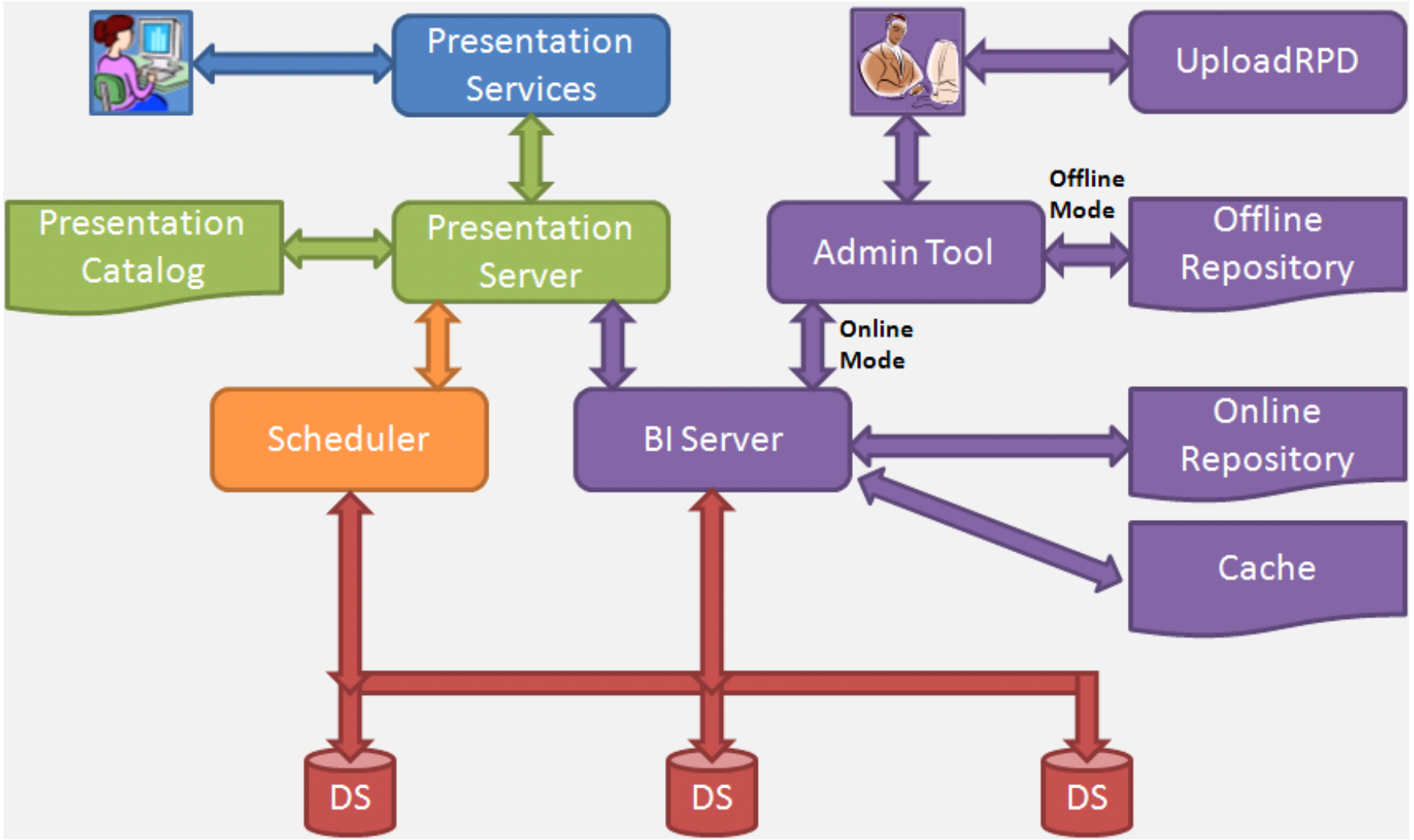


BI Apps - Abstract Semantic Layers 2/2

- **Abstract Semantic Layer** – logical representation of a physical reality, defining its meaning or interpretation.
- **Physical Layer** – logical description of each physical data source with its data model.
- **Business Model and Mapping Layer** – represents the logical model of the data and specifies the mapping to the Physical layer schemas. Business models are always dimensional. Several business models can coexist. Each business model contains logical tables, attributes, and joins.
- **Presentation Layer** – contains all specific presentation views based on the Business Model.
- **Subject Area** – specific presentation view on a business model or part of it; an equivalent to a virtual Data Mart.
- **Data Mashup** – functionality to the business users to integrate additional data sources to their subject areas.

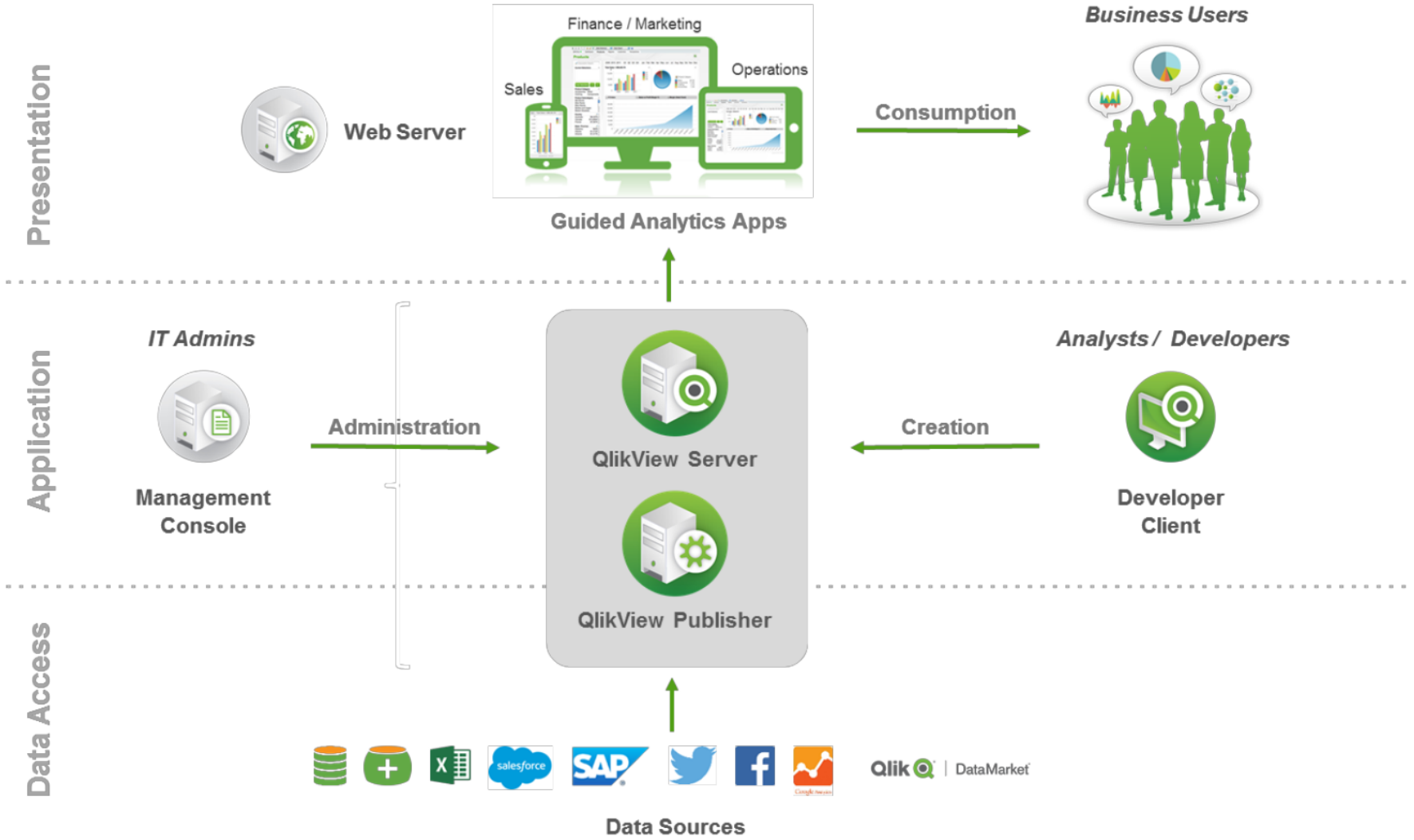
BI Apps – High-Level Architecture 1/2

Oracle BI Example – for reference only



BI Apps – High-Level Architecture 2/2

Qlik View – for reference only



Terminology

- Abstract Semantic Layer
- Business Model
- Subject Area

Project Work

- Today
  - Review of created models (Staging Area, DWH) and uploaded data
  - Clarify all open questions
- Next steps
  - Create at least 2-3 useful reports with DWH data