

Data Governance and Master Data Management as a part of IBM BDW project

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CONTENT

- IBM BDW projects
- Implementation methodology
- Data Governance
- Master Data Management
- Conclusion and Lessons Learned

IBM BDW IMPLEMENTATION

UKRAINIAN MARKET OVERVIEW

SINCE 2007

PRIVATBANK

FIRST UKRAINIAN INTERNATIONAL BANK (FUIB)

STATE SAVINGS BANK OF UKRAINE (SSBU)

DELTABANK

IBM BDW IMPLEMENTATION

PRIVATEBANK

- Top 1 Retail bank in Ukraine
- Purchased IBM BDW
 - Fully replaced old ETL tools by IBM Data Stage
 - Reduced time of data download
 - Decided to stay with old DWH
 - Around 300 people support current DWH and BI
- Since 2016 has been purchased and refinanced by the Ukrainian Government to avoid the bankruptcy

IBM BDW IMPLEMENTATION

FUIB

- Top 5 biggest corporate bank in Ukraine
- Purchased IBM BDW
 - Implemented IBM BDW as a Bank Data Model
 - CFO was a Project Sponsor
 - Project has been done by external IT partner
 - MIS unit was created under CFO
 - External IT partner lost a development team, competence was not transferred to the bank
- DWH has been since 2013

IBM BDW IMPLEMENTATION

DELTABANK

- Top 10 biggest retail bank in Ukraine
- Purchased IBM BDW
 - Used IBM Data Stage as ETL and IBM Cognos as BI
 - Used IBM BDW as a Bank Data Model
 - Project has been done by external IT partner in Belarussian Branch
 - Started from Customer Data
- Project had been stopped. In 2015 Deltabank went to bankruptcy

IBM BDW IMPLEMENTATION







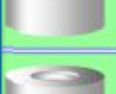

SSBU

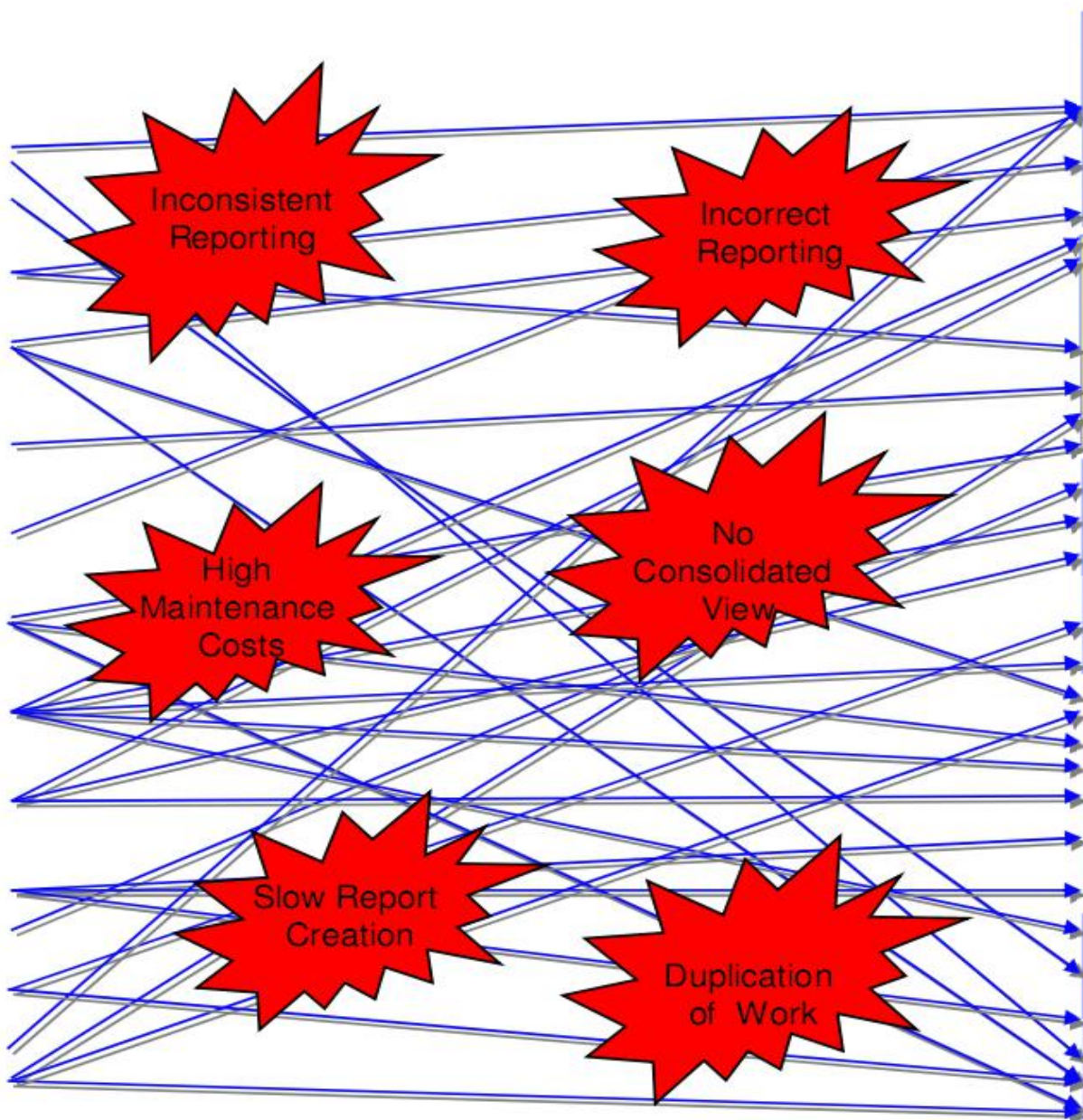
- The second Retail bank in Ukraine with the biggest retail network
- 100% owned by State since 1991
- Around 36000 employees
- Purchased IBM BDW in 2011
 - Used IBM Data Stage as ETL and IBM Cognos as BI
 - Customized IBM BDW and used IBM BDW as a Bank Data Model
 - CFO was a Project Sponsor
 - Project has been done by internal MIS team
 - MIS Department was created and was directly responsible to CFO
 - Has been in production since 2012
- SSBU is open to reference visits to IBM clients:
<http://www-3.ibm.com/press/ru/ru/pressrelease/41575.wss>

REPORTING WITHOUT DWH

SSBU, 2011-2012

Operational Sources

CBS 26 inst.	
Internal accounting 13 inst.	
Internal accounting 13 inst.	
Processing	
CRM	
...	
External data	
Communal payments ~400	



Internal Portal	  
Finance applications	  
Corporate Business Application	  
Risk Application	  
Other	  

IBM BDW IMPLEMENTATION

SSBU, 1st release 2012-2013

- Core Banking and GL data
 - postings, transactions, contracts, products
- Customers' data
 - Corporate customers (with a golden number and master data)
 - Retail customers (without a golden number and master data)
- FTP Application
 - Calculation of transfer income/charge
 - FPT yield curves modelling
- DWH Control Application
 - Monitoring of data uploads from sources to SOR & DM
 - Centralised management of DWH dictionaries (400 reference files and technical tables)
 - Launching and monitoring of DWH analytical applications' calculations
 - Running of auto tests
 - Monitoring of Samples
 - Monitoring of Web services

VENDORS' ANALYSIS

SSBU

Oracle, IBM, SAP, SAS

- Gardner reports
- DW data model
- ETL tools
- BI tools
- Licensing and costs
- References from customers
- Domestic market business cases
- Readiness to support from local offices
- Personal impressions

KEY STRATEGIC IT DECISION

SSBU

- Domestic automated banking systems:
 - have limited functionality for IFRS reporting, management accounting and risk management
 - All data are arranged around GL and accounting data, not contracts
 - fully compatible with regulatory reporting requirements of the NBU

- Western banking systems:
 - Support IFRS reporting, management accounting and risk management reporting
 - All data are arranged around contracts, not GL data
 - incompatible with regulatory reporting requirements of the NBU

- Implement a new Core Banking System or finance a development of local centralized Core Banking “Bars-Millennium”?

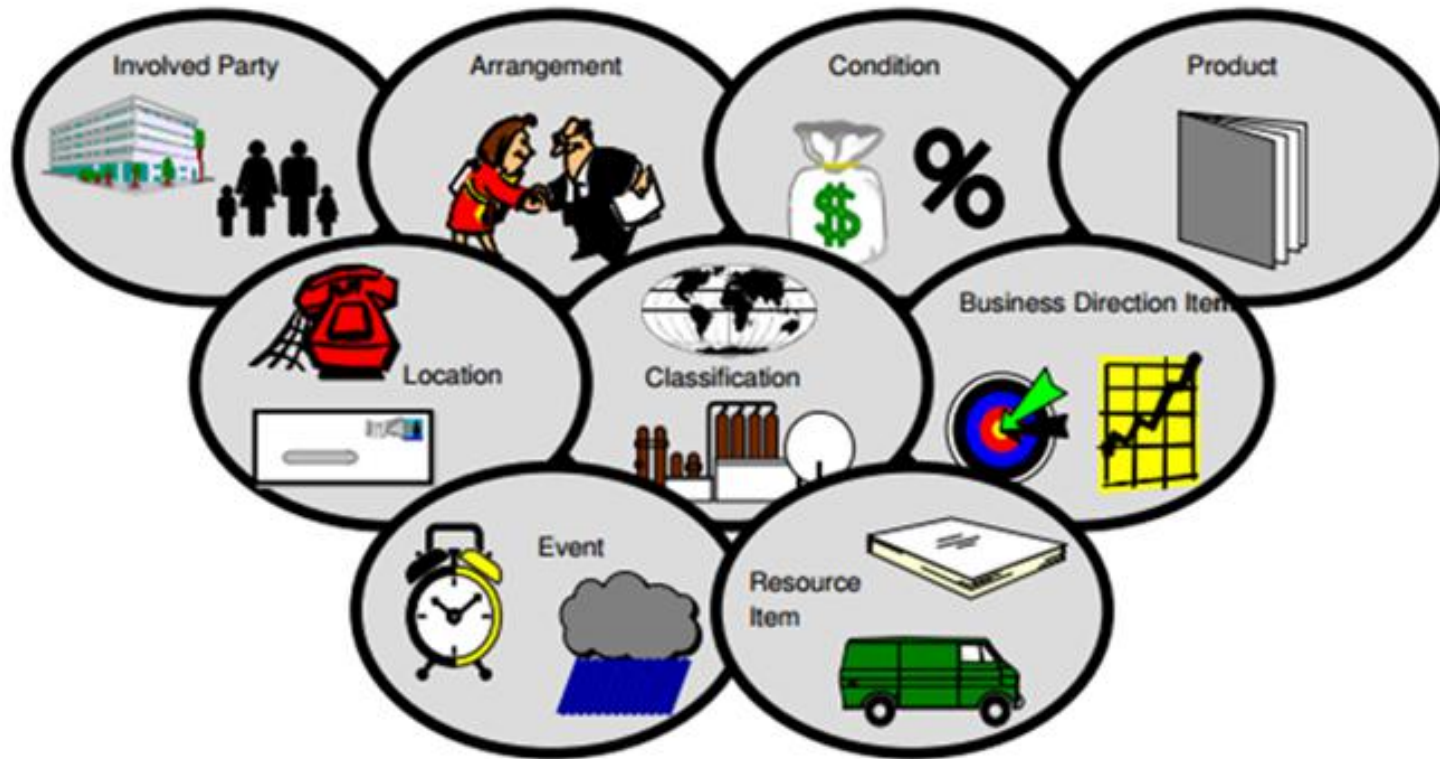
- Use IBM BDW as an example for the local Core Banking System development

PROJECT SOFTWARE

SSBU

- IBM Banking Data Warehouse
- IBM Information Data Architect
- IBM DataStage and IBM QualityStage
- IBM Metadata Workbench
- IBM Fast Track
- IBM Information Governance Catalog
- IBM Cognos BI and IBM Cognos TM1
- Control system of DWH
- DB management facilities
- Atlassian tools (Jira, Bamboo, Crucible)

IBM BDW CONCEPTUAL MODEL



The Nine Data Concepts

IBM BDW SOR & DM

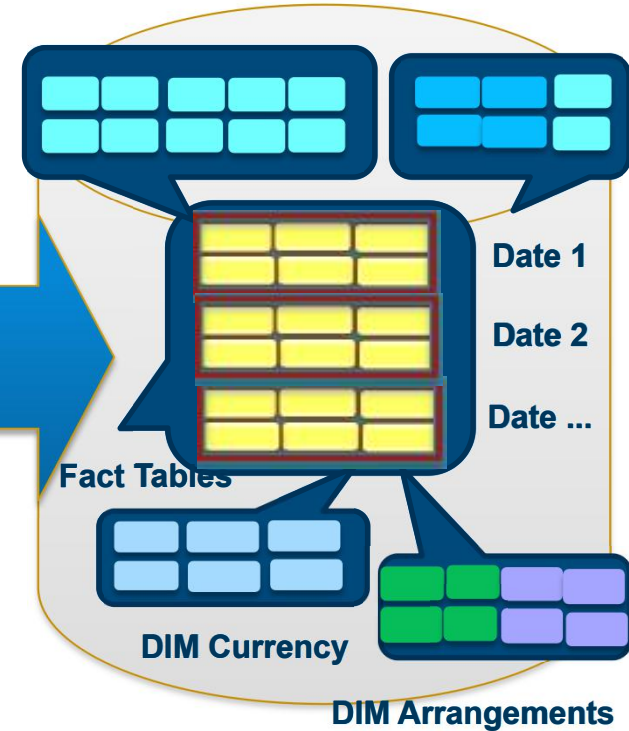
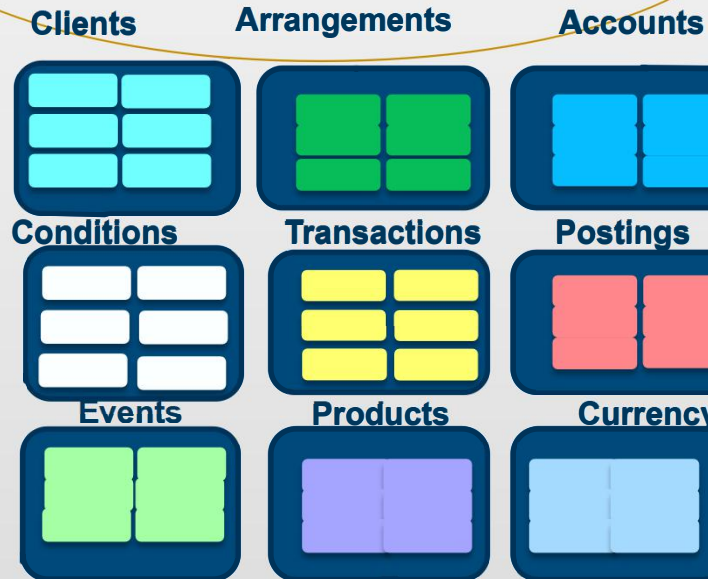
**Data Sources:
Core Banking
Open Way**

IBM BDW: SOR

**IBM BDW:
DM GL**

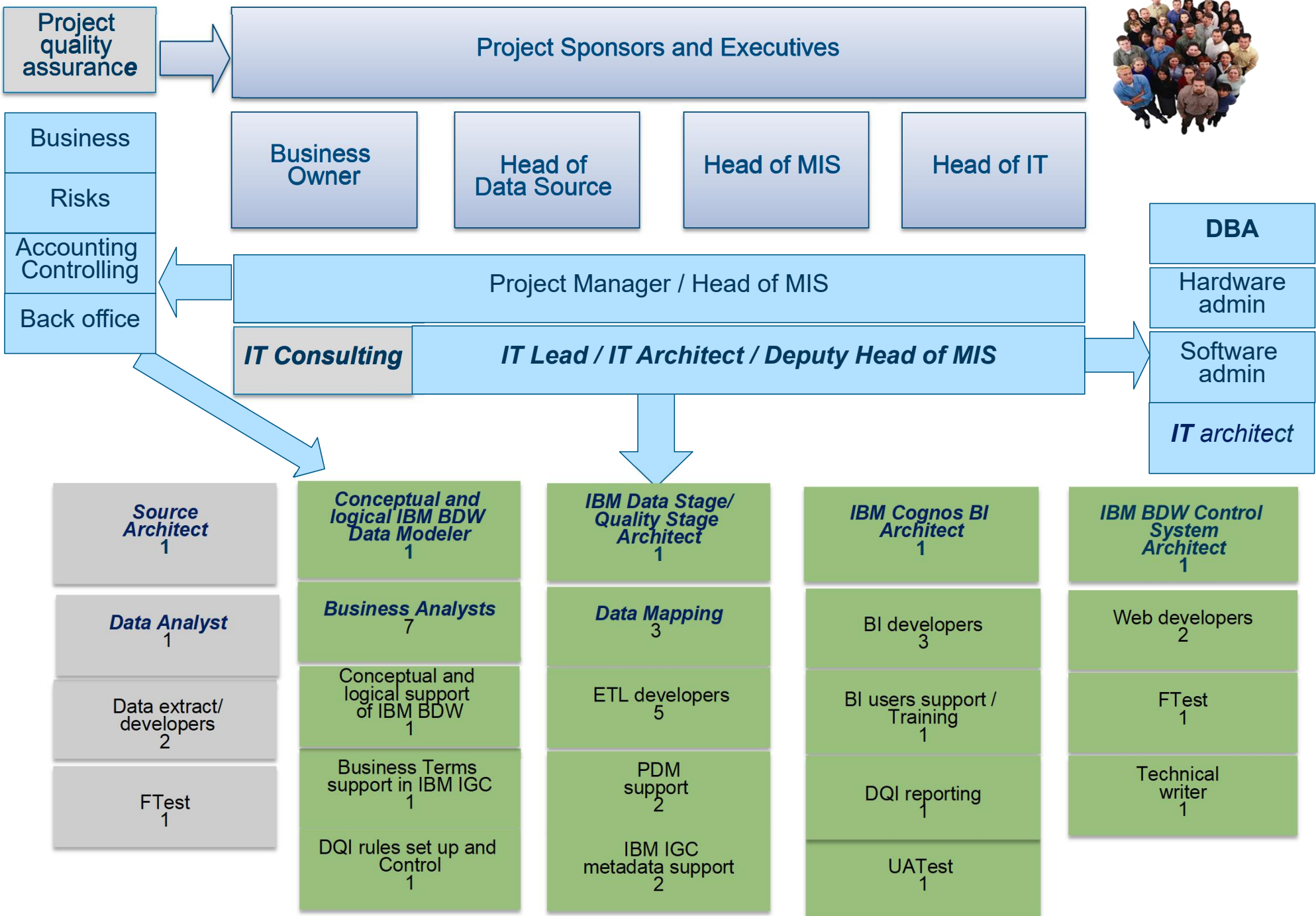
DIM Customer

Dim Accounts



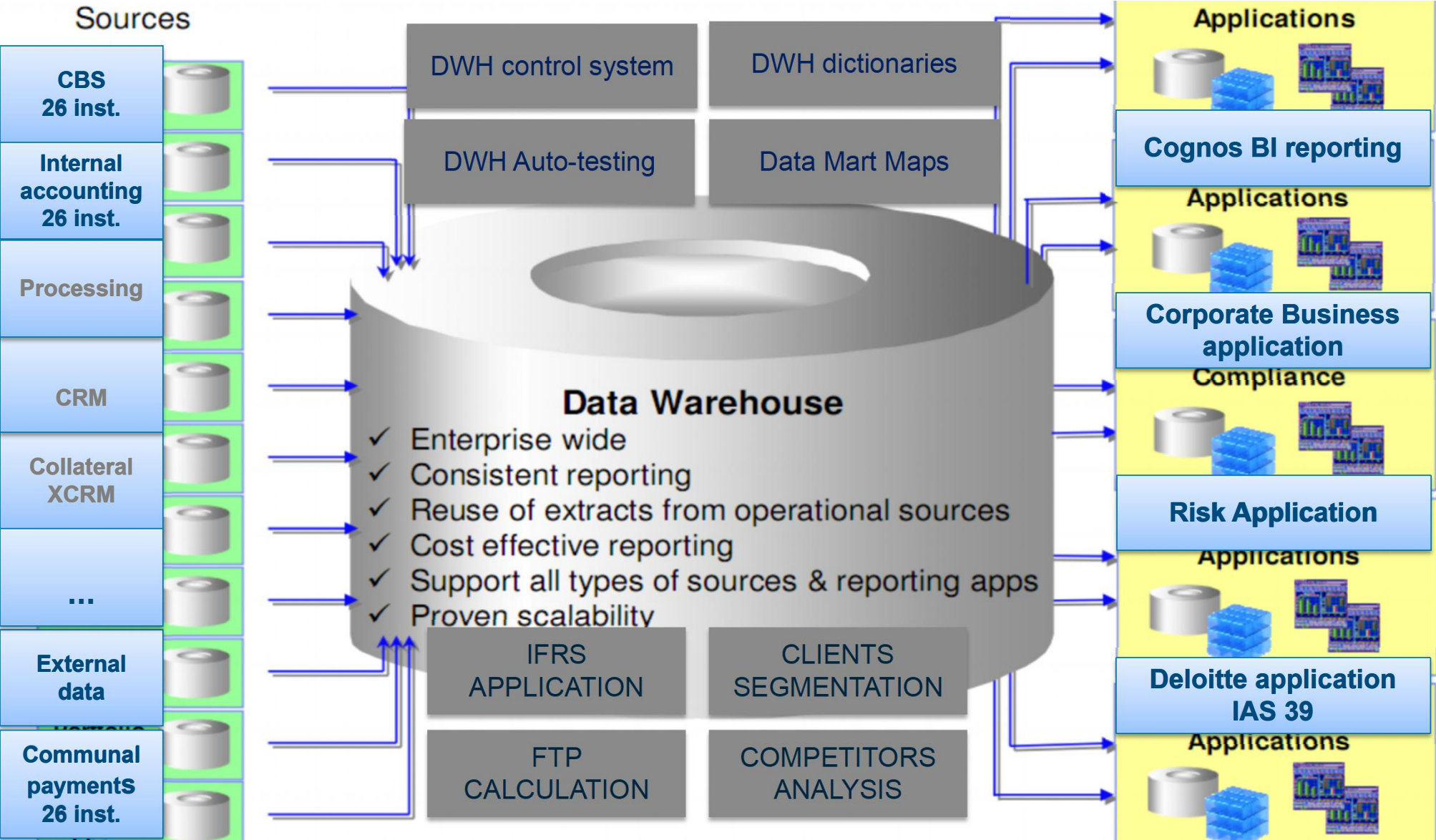
Project phases

- Business requirements
 - Business Experts
 - Data Stewards
- Analysis & Design
 - Business Analysts
 - IBM BDW modeller
 - BI Architect
 - Data Analysts
 - Source Architect
 - Lead IT Architect
- Implementation
 - ETL developers
 - BI developers
 - Web developers
 - DBA
 - FTA + UAT
- Knowledge Transfer



REPORTING WITH DWH

SSBU, 2013-2015

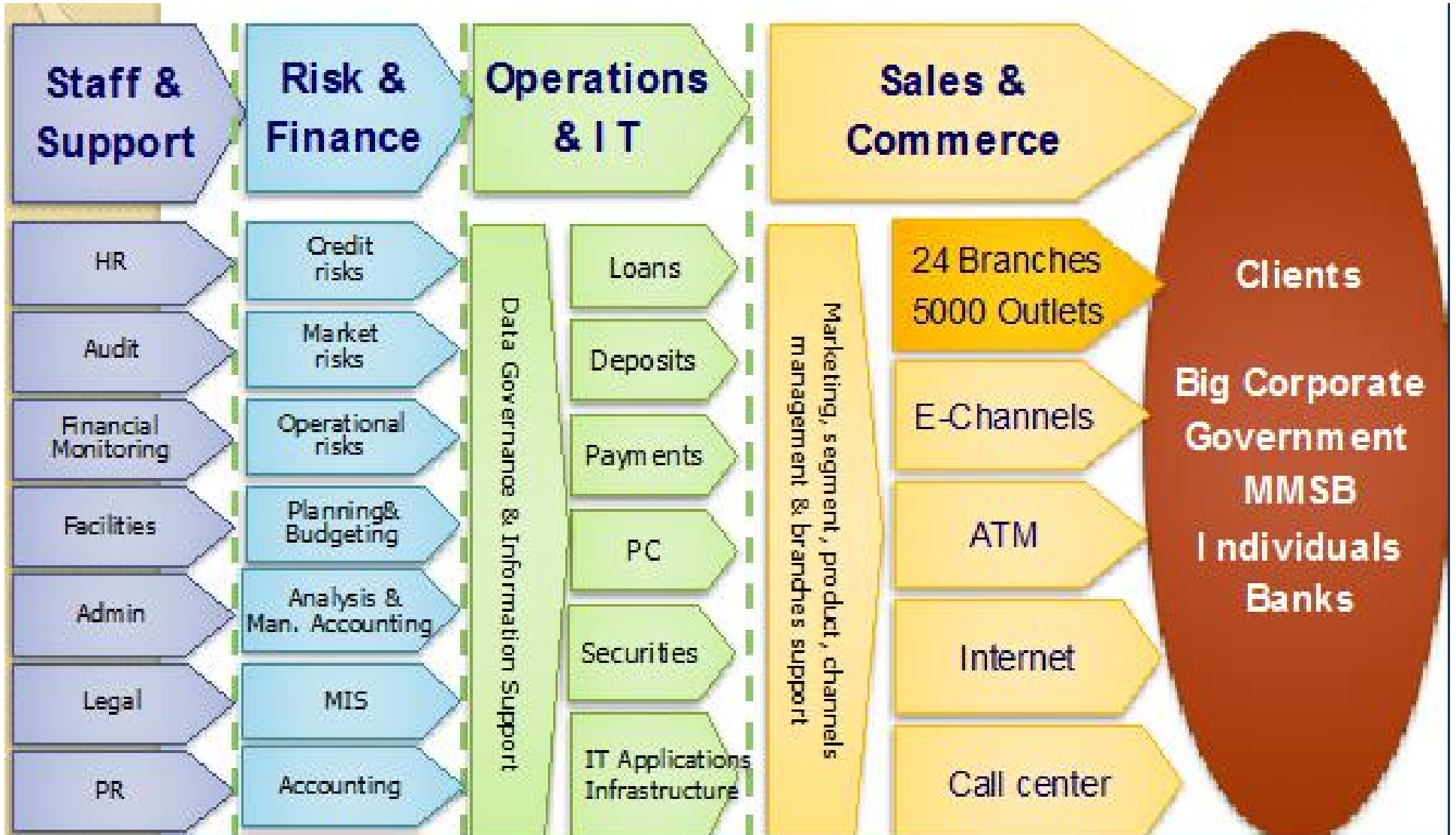


IMPLEMENTATION METHODOLOGY

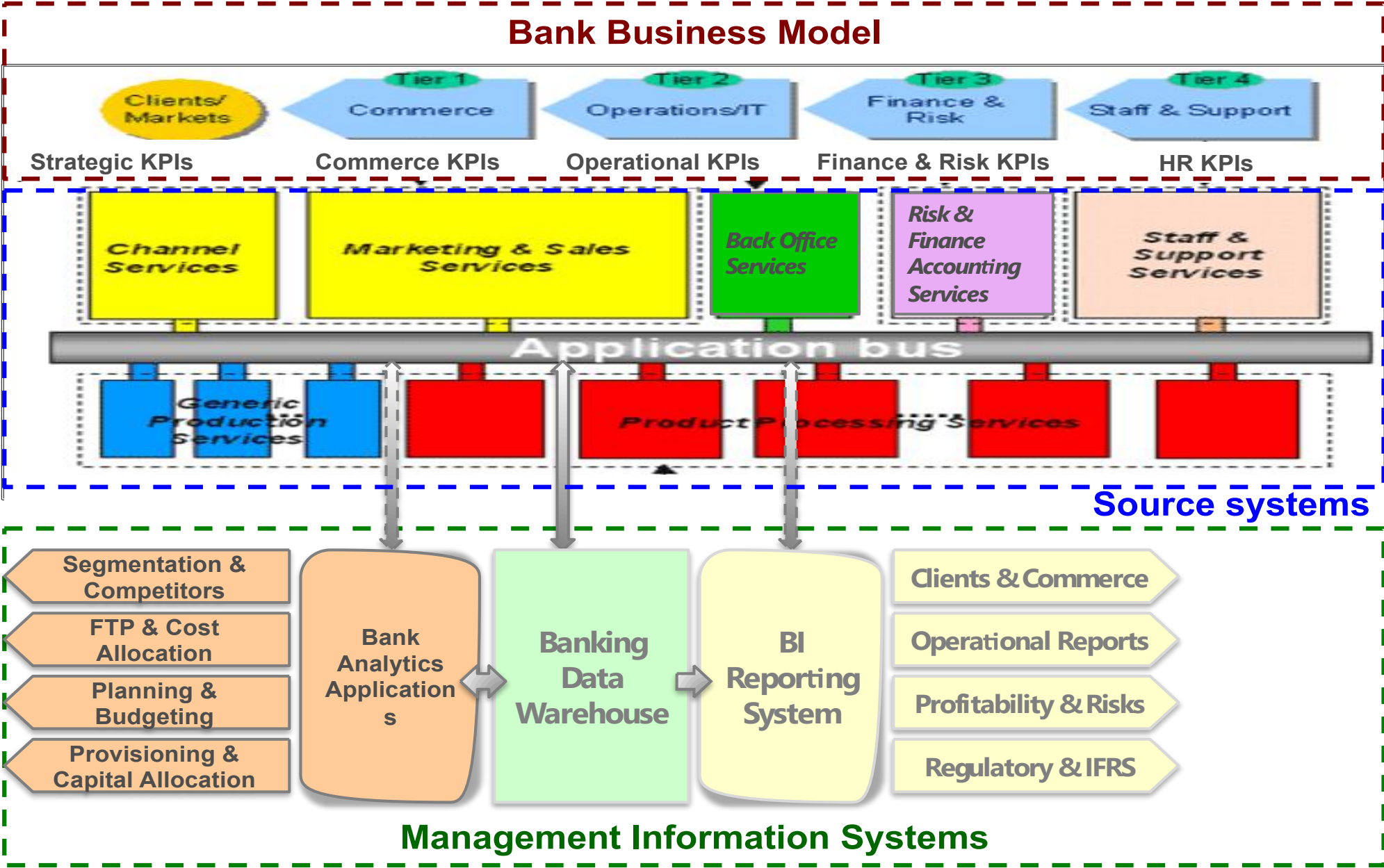
		Analysis	Design	Development	Testing	Operations
Management consulting	Project organisation	MIS diagnostic: MIS architecture, MIS users & MIS implementation team	MIS staff, staff outsource plan, consulting and training plan & budget	Detailed Project Plan & Budget IT Budget, Tender & Purchase	Business owners involvement, dictionaries support, UAT	Training of PMO staff and MIS development team
	DWH	Business strategy, business architecture & KPIs, key methodologies	MIS Conceptual model of SOR MIS Conceptual model of DM	Logical and Physical model of DWH	DWH data base SOR & DM testing tests & optimization	DWH owners trainings
	Applications	Methodologies analysis	MIS Business requirements	Technical requirements, application architecture, applications development	Tests & optimization	Application owners trainings
	ETL	Data analysis in data sources	Logical mapping of data from sources-systems to DWH (Source to Target)	Technical data mapping ETL architecture and development	Data download, ETL testing	ETL owners trainings
	BI	Report requirements analysis	Reports design	BI architecture and reports development	BI reports testing & optimization	BI reports owners trainings
	Technical support	IT architecture, IT processes, IT support team	New IT architecture, IT processes, IT staff, IT staff outsource	Soft & hard installation, prod & dev & test split up, back ups	DB optimization, Stress-testing	DBA & IT support, IT team training, outsourcing

Project management & Data Governance

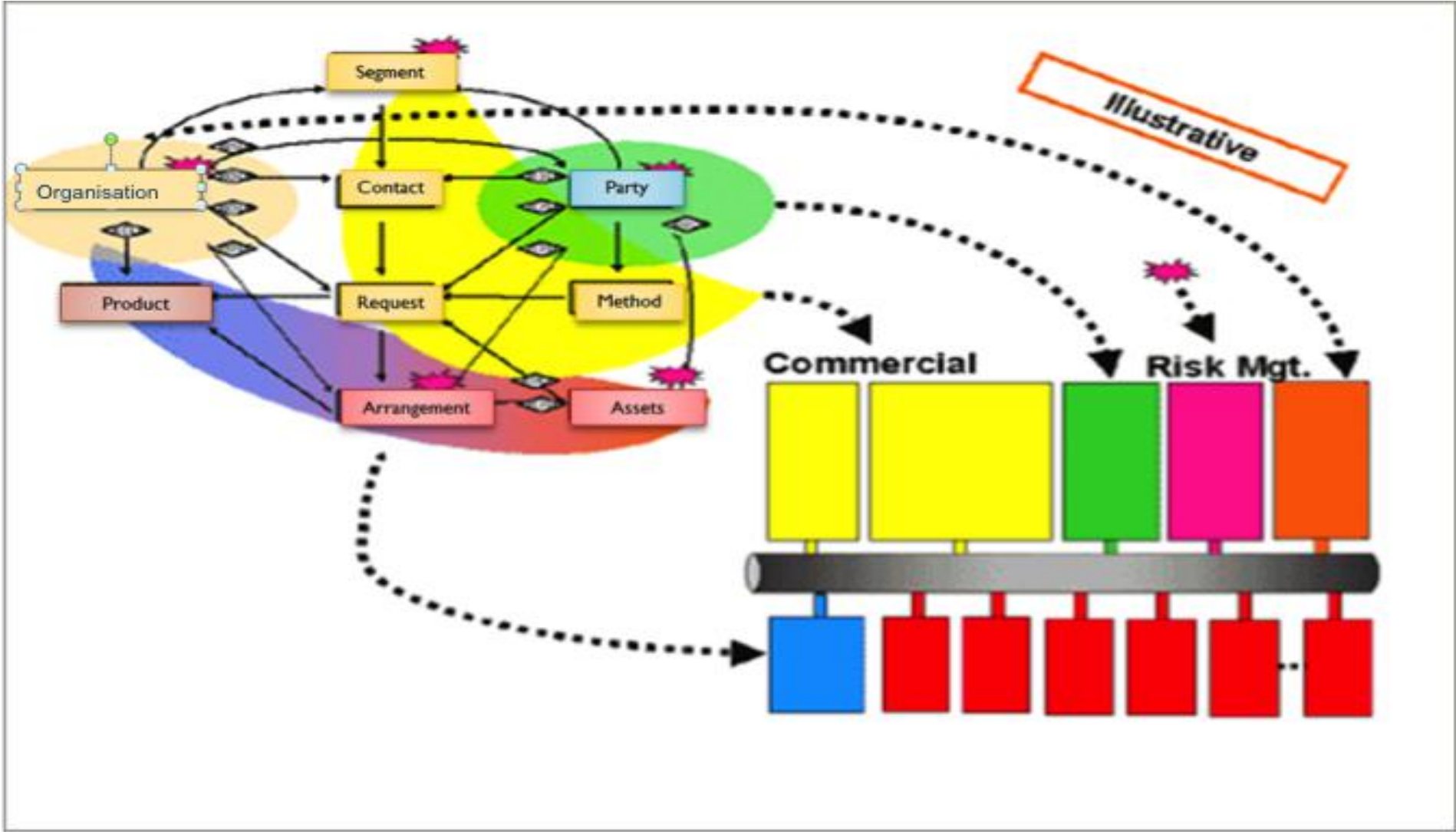
BANK BUSINESS



BANK IT ARCHITECTURE

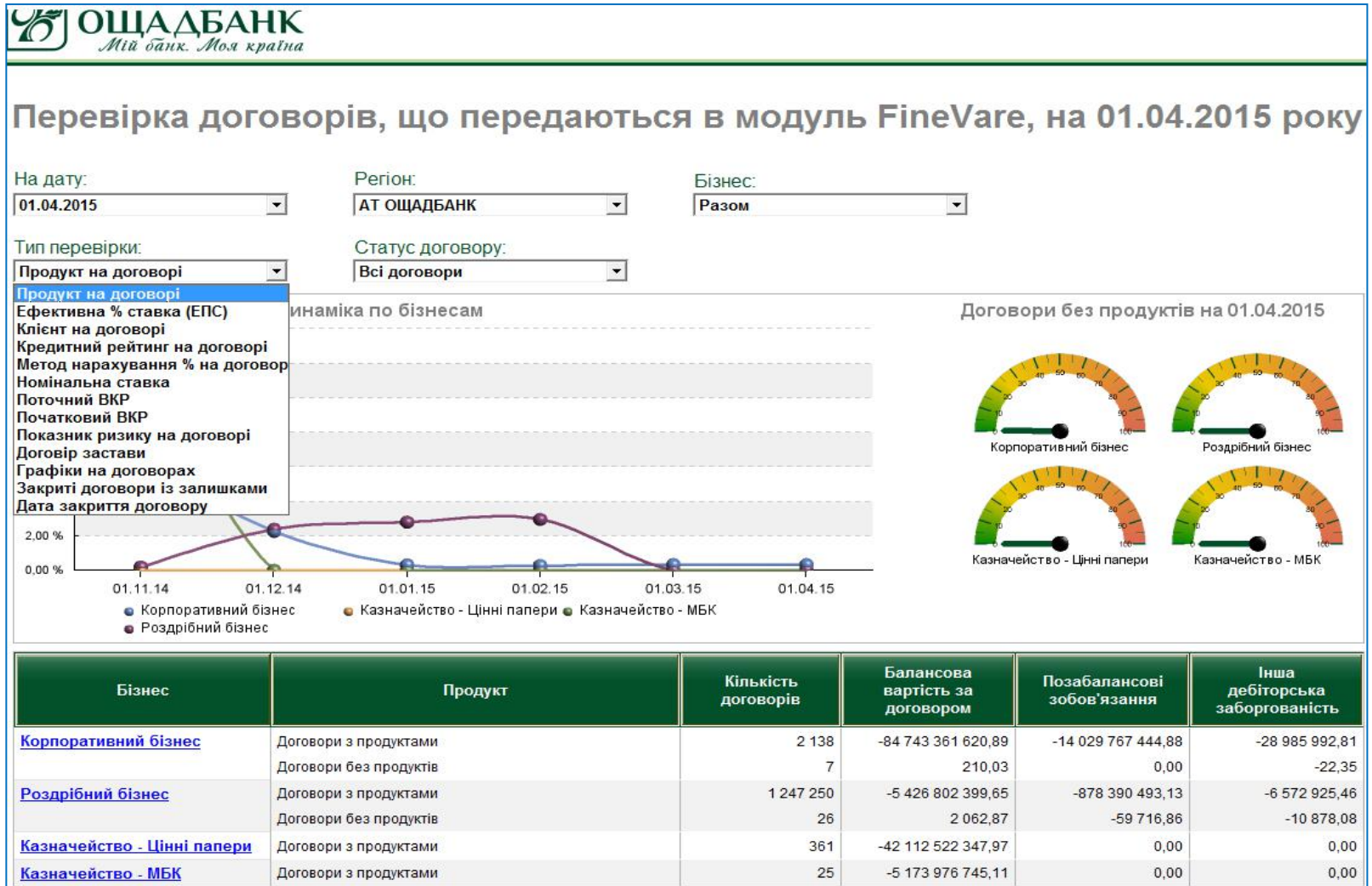


BANK AND SOUCES DATA MODEL



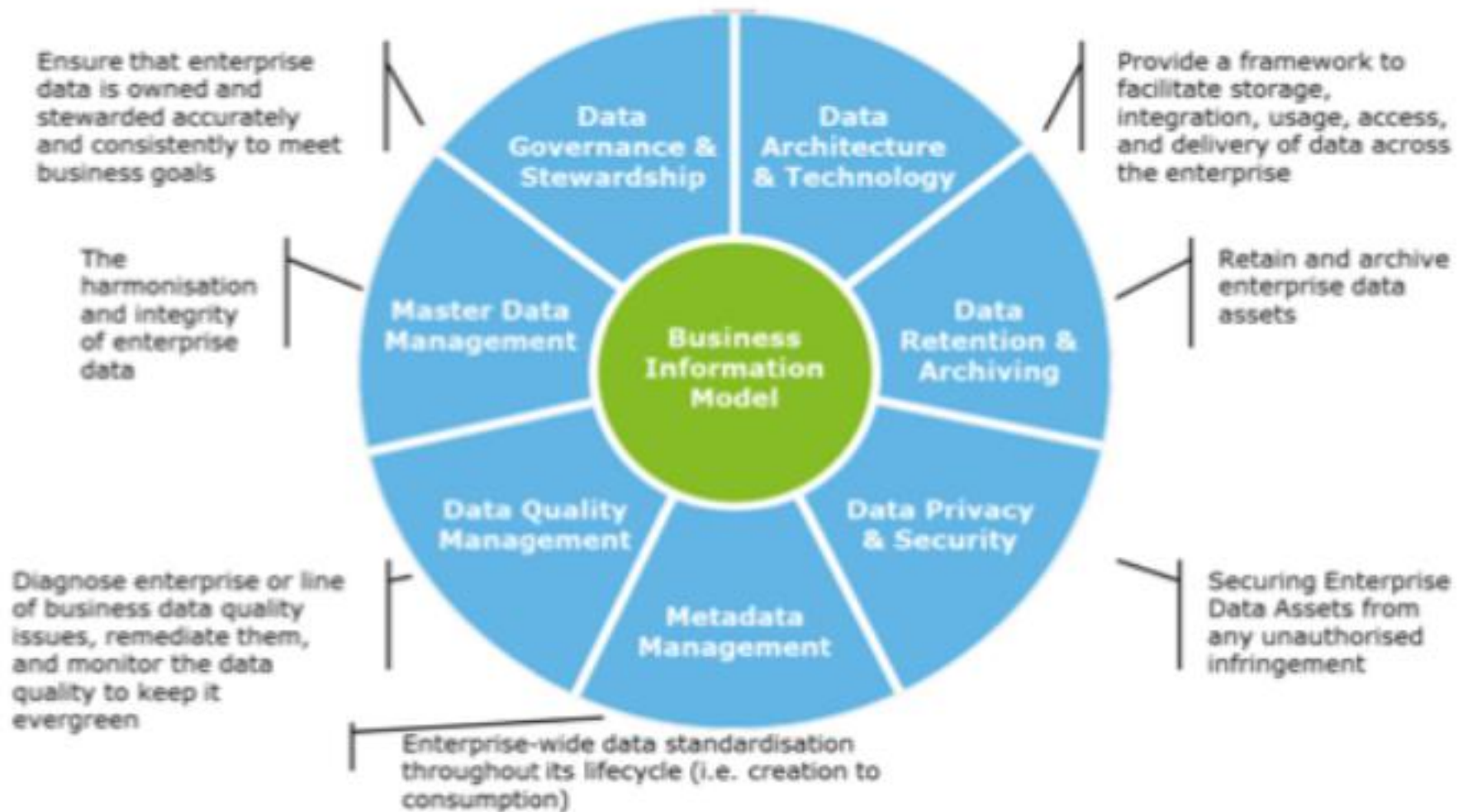
MIS REPORTING

DQI



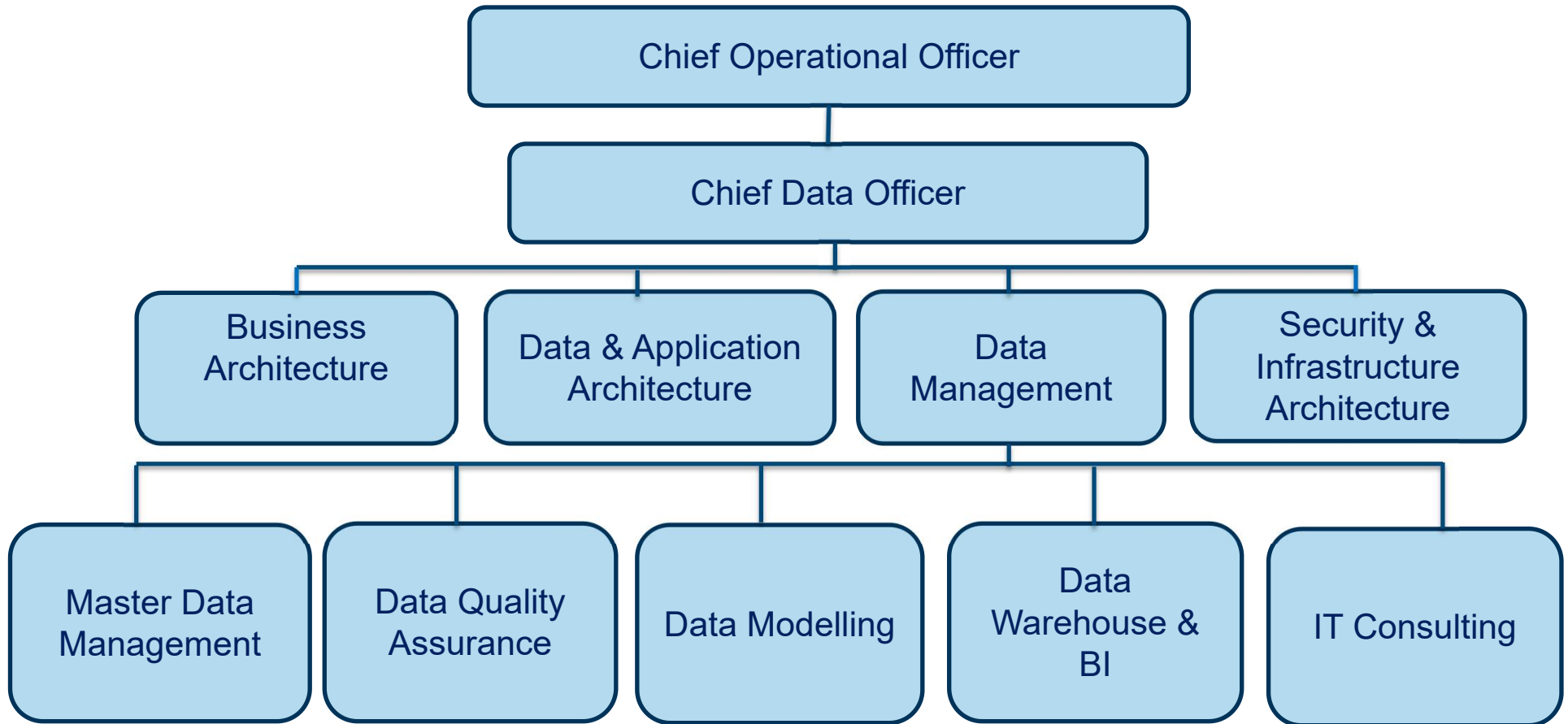
DATA GOVERNANCE

DELOITTE, 2017



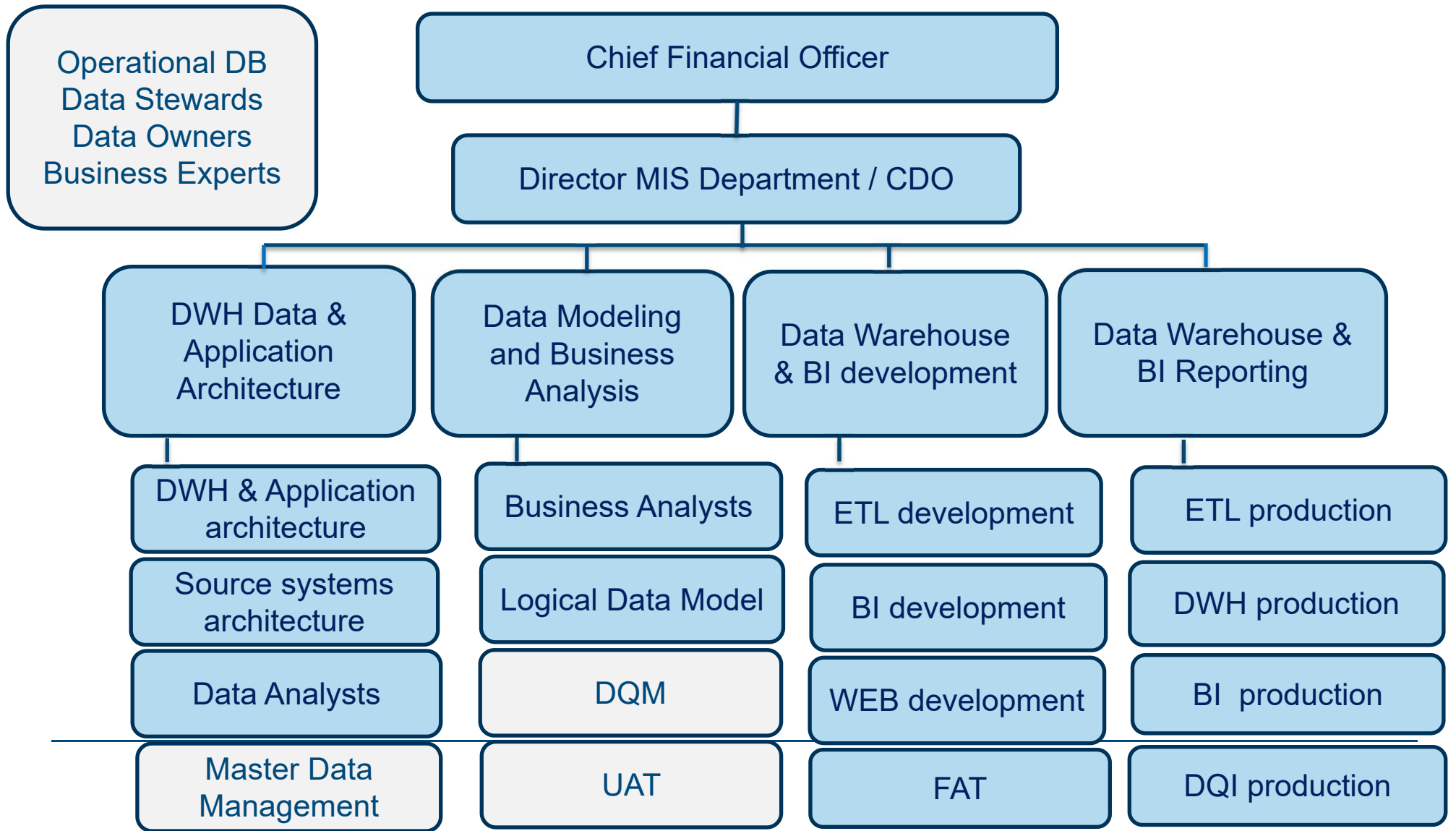
DATA GOVERNANCE

DELOITTE, 2017



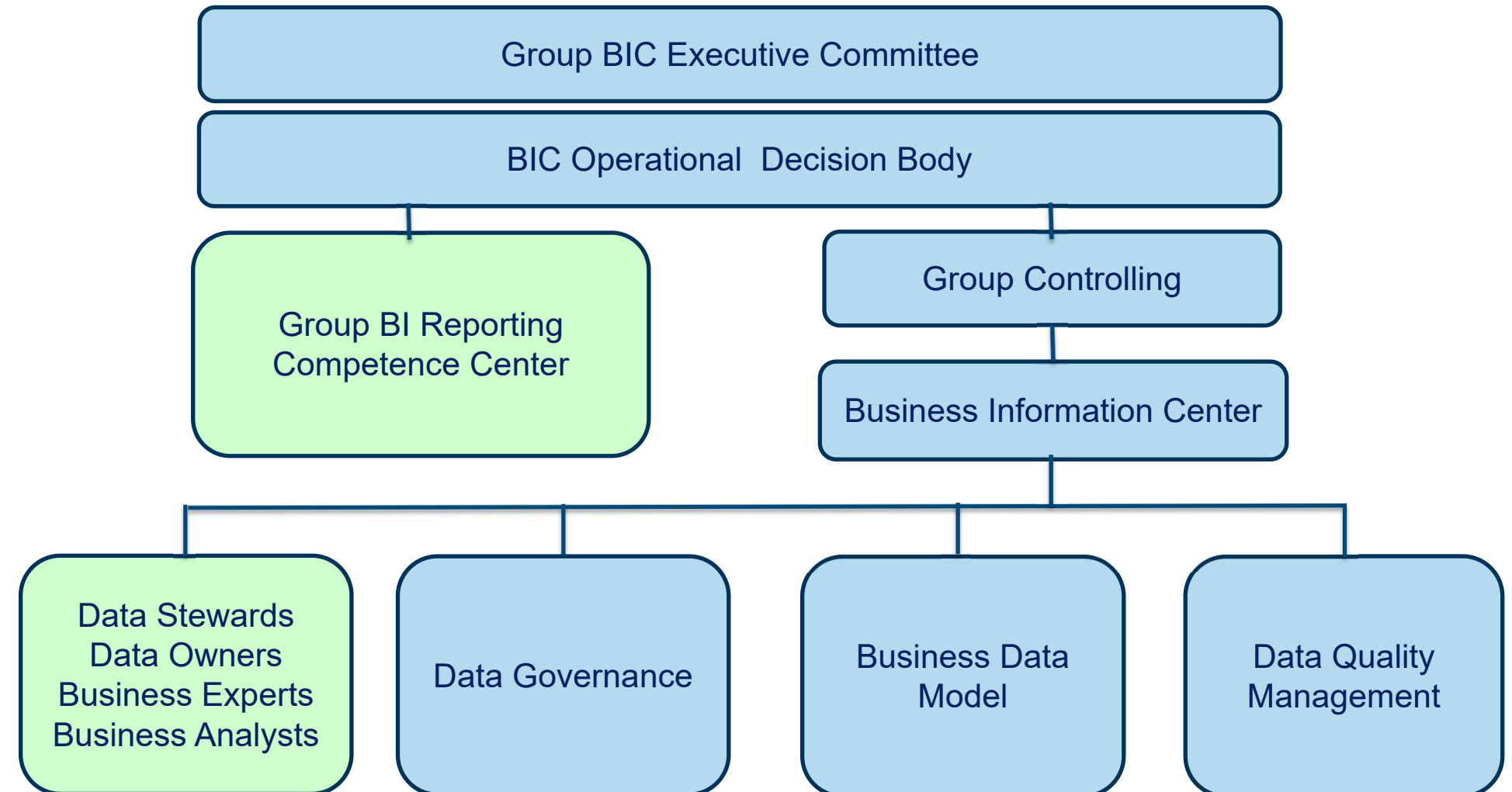
DATA GOVERNANCE

SSBU, 2017



DATA GOVERNANCE

ERSTE GROUP DG NETWORK, 2017



LESSONS LEARNED

UKRAINE

- The Chairman must support and regularly control the project performance
- The Business Sponsor (at the level of Deputy Chairman) must be appointed to take care of project deliverables
- Business users/experts must spend their time on business requirements, business terms and dictionaries definition
- A reliable IT consultant is important to mentor in IBM BDW, ETL and BI
- A future MIS owners should be appointed at the earlier stage to get transfer of IBM BDW knowledge
- A Project Manager must have the business knowledge, as well as strong leadership and communication skills, understand business and IT
- A DWH and applications architect is a key role in the project
- A qualified IBM BDW modeller is a second key role in the project
- Implementation team must be selected thoroughly; they must be fluent in English and be able to learn IBM BDW model and IBM tools
- It is important to involve source owners at early stages of the project
- IT must organise and maintain the IT infrastructure of DWH
- The key are information and relationships management

LESSONS LEARNED

AUSTRIA

- Data Governance Strategy
- Data Stewards
- Data Owners
- Business Analysts
- Business Experts
- Bank Data Manager
- Bank Data Modeller
- Data Quality Management
- BIC Operational Decision Committee
- BIC Executive Committee
- Harmonisation through locations