Telecommunication

Case Studies

Djezzy

Algeria

ABOUT DJEZZY

Djezzy is Algeria's leading mobile network operator, serving over 17 million subscribers with coverage exceeding 95%. Now part of VEON Group, Djezzy sought to stabilize its Business Objects environment, which had become unstable after hundreds of operational reports were deployed.

CHALLENGE

Rapid DWH rollout and hundreds of new reports destabilized BO, architecture gaps threatened scalability, and advanced features were needed, all within a nine-day window.



Business Objects Architecture Upgrade

Six-Pillar Delivery Across Stability, Scalability & Feature Enablement

01

Environment Review

Detailed review of BO server configurations to pinpoint the critical performance bottlenecks behind instability

02

Load Balancer Tuning

Optimized load balancer configurations to improve server efficiency and distribute report workloads

03

Production Stabilization

Resolved live production issues affecting environment stability as quick-win remediation

04

Scalable Architecture

Recommended long-term architectural changes to sustain scalability as reporting demand grows

05

Features & Security

Activated auditing and email notifications and strengthened the security matrix in line with best practice

06

Optimization Roadmap

Delivered a detailed environment review report with actionable insights and a roadmap for ongoing optimization

Stable BO Platform | **Advanced Features On** | **Hardened Security** | **9-Day Delivery**

Zain Group

Kuwait

ABOUT ZAIN

Zain Group is a leading mobile telecommunications company founded in 1983 in Kuwait, with a commercial presence in eight countries and around 50 million active customers. Zain aimed to establish a unified data warehouse strategy to support its complex, multi-region operations.

CHALLENGE

A multi-operator ecosystem with diverse DWH needs, complex comparisons of IBM, SAP and Oracle tools, and the need to align vendor strengths with Zain's unique requirements.



End-to-End Data Warehouse Consultation

Six-Pillar Delivery Across Requirements, Tool Evaluation & DWH Strategy

01

Requirement Analysis

Exhaustive analysis of every Zain operator's DWH needs, focused on scalability, reliability and performance

02

360° Evaluation Framework

Designed a framework covering DWH models, appliances, ETL, BI tools, data mining and big data

03

Vendor Assessment

Compared leading DWH platforms on features, scalability and cost against Zain's requirements

04

Provider Consultation

Partnered with DWH solution providers to surface tool-specific advantages and trade-offs

05

Tool Short-Listing

Short-listed the platforms that best fit Zain's technical and business requirements

06

DWH Roadmap

Provided a clear roadmap and evaluation strategy for selecting and adopting DWH technologies

- **Unified Requirements**
- **Evaluation Framework**
- **Tool Short-List**
- **Clear DWH Roadmap**

Djezzy

Algeria

ABOUT DJEZZY

Djezzy is Algeria's leading mobile network operator, serving over 17 million subscribers with more than 95% coverage. Part of the VEON group, Djezzy set out to upgrade from Oracle to a Teradata-based enterprise data warehouse and modernize its reporting on Business Objects.

CHALLENGE

Transforming 100+ operational reports within two months, managing 18 million customers and 8 years of history, plus ambiguous requirements and data quality issues.



Migration to a New Enterprise Data Warehouse

Six-Pillar Delivery Across Teradata Migration, ETL & BO Reporting

01

Teradata Migration

Migrated the enterprise data warehouse to Teradata for high scalability and performance

02

ETL Enhancement

Enhanced ETL processes to handle 18 million customers and 8 years of history efficiently

03

Report Transformation

Converted legacy reports into Business Objects reports aligned with the new data model

04

Universe Redesign

Improved BO Universe design and data models for better usability and performance

05

Data Quality Fixes

Identified data quality issues and recommended practical solutions to resolve them

06

Early Delivery

Delivered all Business Objects reports ahead of schedule and to a high quality standard

100+ Reports Migrated | **Ahead of Schedule** | **Scalable Teradata EDW** | **Improved Data Quality**

Etisalat (e&)

Egypt

ABOUT ETISALAT

Etisalat e& Egypt, part of the e& Group, is a leading telecommunications provider established in 2007, offering mobile, fixed-line, internet and enterprise solutions to millions of subscribers. Etisalat needed to expand its Cloudera CDP platform by five nodes to support growing data management needs.

CHALLENGE

An undocumented legacy production setup, strict timelines with limited downtime windows, and live data in critical systems that required uninterrupted operation.



Cloudera CDP Expansion

Six-Pillar Delivery Across Cluster Health, Storage & Seamless Scale-Out

01

Cluster Health Check

Assessed the existing undocumented production cluster to establish a reliable baseline

02

Prerequisites

Implemented all technical prerequisites ahead of the node expansion

03

Storage Analysis

Analyzed the existing storage solution to inform the expansion design

04

Custom Expansion Plan

Customized the implementation plan around strict timelines and limited downtime windows

05

Five-Node Scale-Out

Added five nodes to the CDP platform with minimal service interruption to live systems

06

Performance Uplift

Enhanced overall system performance and scalability for growing data workloads

- 5 Nodes Added
- Zero Deviations
- Minimal Downtime
- On-Time Delivery

Ooredoo

Maldives

ABOUT OOREDOO

Ooredoo Maldives is a leading mobile operator providing GSM and value-added services, and was the first in the Maldives to launch 3.5G HSDPA. Ooredoo aimed to migrate and revamp its DWH into a modern, best-practice telecom model supporting near real-time data and better analytics.

CHALLENGE

An obsolete DWH unable to support KPIs, poor data quality with no metadata or glossary, DataStage-to-Informatica and Cognos-to-BO migrations, and parallel BSCS and IN upgrades.



Full DWH Revamp and Migration

Six-Pillar Delivery Across Telecom Data Modeling, Quality & Real-Time BI

01

Telecom DWH Model

Built a model covering subscription, traffic, service, prepaid transactions, revenue and POS data

02

ETL & BI Migration

Migrated ETL from DataStage to Informatica and BI from Cognos to Business Objects

03

Data Quality Profiling

Ran full data quality profiling to address poor quality and missing metadata

04

KPI Standardization

Standardized company KPIs across business domains for a single version of truth

05

Corporate Dashboards

Implemented performance dashboards with near real-time transaction and network data

06

EDW Roadmap

Delivered a scalable roadmap for future EDW strategy and empowered the DWH team

Near Real-Time Data | **Standardized KPIs** | **Modern DWH Model** | **Future EDW Roadmap**

Vodafone

Egypt

ABOUT VODAFONE

Vodafone Egypt, the country's largest mobile network operator, was established in 1998 and offers 4G, 3G, broadband and more from its Smart Village headquarters. Vodafone needed a data archiving solution to manage data growth, improve performance and resolve report delays.

CHALLENGE

Rapid data growth hurting performance, performance issues affecting database activity, and the need to customize standard modules for specific business needs.



Oracle Siebel Data Archive Implementation

Six-Pillar Delivery Across Archiving, Access, Security & ILM Enablement

vodafone

01

Cold Data Archiving

Implemented Oracle Siebel Data Archiving for cold data, cutting production DB size by over 50%

02

Unified Access Layer

Built a seamless access layer spanning archived and production databases

03

Process & Scheduling

Applied best practices for archiving process implementation and scheduling

04

Security Matrix

Implemented a security matrix governing data access and archive operations

05

Module Customization

Customized standard modules to meet Vodafone's specific business requirements

06

ILM Enablement

Trained CRM, ERP and DBA teams to run ILM tools and processes independently

50%+ DB Reduction | **Faster Performance** | **Seamless Data Access** | **ILM-Ready Teams**

Vodafone

Egypt

ABOUT VODAFONE

Vodafone Egypt, the country's largest mobile network operator, was established in 1998 and offers 4G, 3G, broadband and more from its Smart Village headquarters. Vodafone sought to enhance its reporting and business intelligence capabilities by upgrading to SAP BusinessObjects 4.

CHALLENGE

Migrating 20,000 SAP BO2 reports, integrating MS Active Directory on Linux, deploying via WebLogic instead of Tomcat, and supporting 2,500 business users.



Upgrading SAP BO2 to SAP BO4

Six-Pillar Delivery Across Report Migration, Integration & Enablement

vodafone

01

BO2 to BO4 Migration

Seamlessly managed the platform migration from SAP BO2 to SAP BO4

02

20,000 Reports Moved

End-to-end support for migrating and optimizing 20,000 SAP BO2 reports

03

Active Directory

Integrated MS Active Directory into the new Linux-based BO4 environment

04

WebLogic Deployment

Deployed web applications on WebLogic in line with SAP's recommendations

05

Corporate Dashboards

Delivered three corporate dashboards supporting Vodafone's operations

06

User Training

Trained Vodafone's business and IT teams to adopt the new BO4 system

20K Reports Migrated | **2,500 Users Served** | **3 Dashboards Live** | **Fully Operational BO4**

Ooredoo

Algeria

ABOUT OOREDOO

Ooredoo Algeria, part of the Ooredoo Group, is a top telecom provider offering mobile, internet and digital services. Ooredoo needed a scalable solution to archive historical SAP ERP and Siebel CRM data, cutting storage costs and meeting retention rules while keeping data accessible.

CHALLENGE

Growing CRM data volumes degrading system performance, strict telecom data retention mandates, and the need to keep archived data easy to retrieve for business and compliance.



SAP ERP & Siebel CRM Data Archiving

Six-Pillar Delivery Across Data Lifecycle, Compliance & Automation

01

Data Assessment

Analyzed data volumes and identified historical and redundant data suitable for archiving

02

Platform Selection

Selected a secure, compliant archiving platform aligned with retention requirements

03

Archiving Rules

Defined data classification, retention and retrieval rules for the archive

04

Data Migration

Migrated CRM data into the archive with minimal disruption to operations

05

Workflow Automation

Automated archiving workflows to reduce manual effort and sustain data management

06

Validation & Training

Validated archived data integrity and provided training and documentation

- Faster ERP & CRM
- Regulatory Compliance
- Lower Storage Costs
- Accessible Archives

Etisalat (e&)

Egypt

ABOUT ETISALAT

Etisalat e& Egypt, part of the e& Group, is a leading telecommunications provider established in 2007, offering mobile, fixed-line, internet and enterprise solutions to millions of subscribers. Etisalat aimed to upgrade to SAP BO 4.1 SP6 to improve its reporting and BI capabilities.

CHALLENGE

Migrating 35,000 SAP BO2 reports, integrating MS Active Directory on Windows, deploying web applications through Tomcat, and serving 1,500 business users.



SAP BusinessObjects XI R4.1 SP6 Upgrade

Six-Pillar Delivery Across Upgrade, Report Migration & Enablement

01

Platform Upgrade

Completed the upgrade to SAP BusinessObjects XI R4.1 SP6

02

35,000 Reports Moved

Migrated the full estate of 35,000 SAP BO2 reports to the new platform

03

Active Directory

Integrated MS Active Directory into the upgraded Windows environment

04

Tomcat Deployment

Deployed and configured BO web applications on Tomcat

05

Limitation Fixes

Addressed and resolved limitations of the previous BI system

06

Team Training

Delivered comprehensive training to Etisalat's business and IT teams

- 35K Reports Migrated
- 1,500 Users Served
- Smooth Upgrade
- Trained Teams

Etisalat (e&)

Egypt

ABOUT ETISALAT

Etisalat e& Egypt, part of the e& Group, is a leading telecommunications provider established in 2007, offering mobile, fixed-line, internet and enterprise solutions to millions of subscribers. Etisalat wanted dynamic dashboards tracking key CIO KPIs for top management reporting.

CHALLENGE

Risks from large data volumes, data quality issues, and the need to keep the dashboards aligned with business expectations for top management.



Development of Corporate Dashboards

Six-Pillar Delivery Across Requirements, Prototyping & Executive Insight

01

Requirement Analysis

Thorough analysis of CIO KPIs covering customer base and network activities

02

Practical Prototypes

Built working prototypes to validate designs with business stakeholders early

03

Xcelsius Dashboards

Designed and implemented SAP Xcelsius dashboards for real-time data visualization

04

Query Optimization

Applied data analysis and query optimization to handle large data volumes

05

Documentation

Delivered detailed documentation to ensure continuity and maintainability

06

User Training

Provided comprehensive training to maximize long-term value and adoption

Real-Time CIO KPIs | **Interactive Visuals** | **Better Decisions** | **Long-Term Value**

Ooredoo

Tunisia

ABOUT OOREDOO

Ooredoo Tunisia, part of the Ooredoo Group, is the largest telecom operator in Tunisia, serving over 7.5 million subscribers since 2002. Ooredoo needed a new telecom data model to improve data accuracy, performance and scalability across its analytics landscape.

CHALLENGE

Complex business requirements and rules, performance issues in the source system, migration from the old DWH, and persistent data quality issues.



Development of a New Telecom Data Model

Six-Pillar Delivery Across Data Modeling, Migration & Near Real-Time Loads

01

Telecom Data Model

Designed a robust telecom data model on Greenplum with Informatica PowerCenter AE

02

Source Optimization

Optimized data extraction and resolved gaps in the existing source systems

03

DWH Migration

Migrated data from the legacy data warehouse into the new model

04

Near Real-Time Loads

Moved to near real-time processing, improving daily load performance and availability

05

Auto-Recovery

Introduced auto-recovery processes that increased data accuracy

06

Future-Proof Strategy

Enabled the DWH team on new tools and future-proofed the strategy for growth

- **Higher Data Accuracy**
- **Near Real-Time Data**
- **Scalable Model**
- **Enabled DWH Team**

Etisalat (e&)

Egypt

ABOUT ETISALAT

Etisalat Egypt, a subsidiary of the Etisalat Group, is a leading telecom operator offering voice, data and internet services across Egypt with high-quality network coverage. Etisalat needed a real-time Operational Data Store to support real-time data integration and application services.

CHALLENGE

Integrating multiple source systems and a new CRM project, with customer data scattered across systems and no unified, real-time data layer.



Online ODS End-to-End Solution

Six-Pillar Delivery Across Real-Time Strategy, Integration & Web Services

01

Real-Time ODS Strategy

Defined an end-to-end strategy for a real-time Operational Data Store

02

Successful POC

Validated the approach through a proof of concept on Informatica Real-Time Edition

03

Consolidated ODS

Implemented a real-time ODS unifying structured and unstructured sources

04

CRM Data Integration

Enabled efficient integration of customer data for the new CRM project

05

Portal Integration

Connected the ODS to the Etisalat portal for enterprise application access

06

SAP Query Web Services

Enhanced enterprise application integration via SAP query web services

- Real-Time ODS
- Unified Customer Data
- CRM Integration
- Web Service Access

Maroc Telecom

Morocco

ABOUT MAROC TELECOM

Maroc Telecom, part of the e& Group, is Morocco's leading telecom provider offering mobile, internet and fixed-line services. It needed to modernize its legacy BSCS 7 billing system with the more flexible CBIO platform to handle growing volumes and complex billing structures.

CHALLENGE

An outdated BSCS 7 system limiting scale and innovation, critical CRM, ERP and digital channel integrations, weak billing transparency, and high maintenance costs.



Modernizing Billing Infrastructure

Six-Pillar Delivery Across Migration, Integration & Customer Experience

01

Data Migration

Migrated customer, billing and operational data from BSCS 7 with minimal errors

02

CBIO Implementation

Designed and implemented CBIO to handle higher volumes and complex billing

03

System Integration

Integrated CBIO seamlessly with existing CRM, ERP and digital channels

04

Customer Experience

Enabled faster processing, transparent billing and personalized services

05

Cost Optimization

Replaced the legacy system to cut operational and maintenance costs

06

Continuity & Compliance

Ensured compliance and uninterrupted reporting throughout the migration

Scalable Billing | **Seamless Integration** | **Better CX** | **Lower Costs**

Etisalat (e&)

UAE

ABOUT ETISALAT

Etisalat UAE is a prominent multinational telecom company operating across 15 countries and serving over 167 million customers worldwide. Etisalat needed to migrate its production data warehouse from Teradata to IBM Netezza to resolve performance issues and meet current business needs.

CHALLENGE

Migrating a live 50TB production DWH with complex transformations, low performance and poor data quality, 150 million daily records, and outdated ETL with no metadata management.



Full Data Migration

Six-Pillar Delivery Across Architecture, Code Migration & Governance

01

Database Architecture

Defined and implemented the target Netezza database architecture

02

Security Matrix

Designed and applied a security matrix for the migrated environment

03

Script Migration

Migrated 450+ BTEQ scripts and 60+ stored procedures to Netezza

04

ETL Redesign

Redesigned ETL processes for full compatibility and performance on Netezza

05

Live 50TB Migration

Moved the live production DWH while handling 150M daily records

06

Migration Governance

Established best practices for data migration and governance

50TB Migrated | **450+ Scripts Moved** | **Redesigned ETL** | **Governed Migration**

Ooredoo

Algeria

ABOUT OOREDOO

Ooredoo Algeria, part of the Ooredoo Group, is a top telecom provider offering mobile, internet and digital services. Facing an outdated data integration platform, Ooredoo aimed to migrate to a modern ETL solution, improve data quality and enhance data warehouse performance.

CHALLENGE

An unsupported SAP Data Services version, weak data quality tooling, a platform not built for growing data needs, and a complex migration that could not disrupt business.



Data Integration Revamp

Six-Pillar Delivery Across ETL Modernization, Data Quality & Performance

01

Platform Migration

Migrated from legacy SAP Data Services to Informatica PowerCenter

02

ETL Redesign

Redesigned ETL workflows for better performance and reliability in PowerCenter

03

Data Quality

Integrated Informatica Data Quality for accuracy, completeness and consistency

04

Performance Tuning

Optimized the platform to handle growing data volumes and complex needs

05

Joint Delivery

Worked closely with Ooredoo's data management team to ensure smooth data flow

06

Business Continuity

Executed the migration with minimal disruption to ongoing operations

Modern ETL Platform | **Higher Data Quality** | **Optimized Performance** | **Zero Disruption**

Etisalat (e&)

Egypt

ABOUT ETISALAT

Etisalat Egypt, a subsidiary of the Etisalat Group, is a leading telecom operator offering voice, data and internet services across Egypt with high-quality network coverage. Etisalat sought advanced data integration services to meet real-time business needs through Operational Data Stores.

CHALLENGE

Integrating real-time data across multiple IT source systems and delivering a unified, efficient data layer for CRM and other business applications.



Data Integration and Data Service Development

Six-Pillar Delivery Across Real-Time ODS, Unstructured Data & CDC

01

Real-Time ODS

Implemented a real-time ODS on Informatica Real-Time Edition

02

Multi-Source Integration

Unified structured and unstructured data sources into one data layer

03

Unstructured Formats

Integrated unstructured and complex data formats during Phase 1

04

Web Service CDC

Added Etisalat portal integration with web service change data capture in Phase 2

05

CRM Integration

Seamlessly connected the real-time ODS to CRM and other applications

06

Data Services

Enhanced enterprise application capabilities through web services

Real-Time ODS | **Unified Data Layer** | **CDC Integration** | **Enhanced Apps**