SAP data transformation for leading utilities company in the Middle East

Using EPI-USE Labs' proprietary PRISM solution, PwC in the Middle East and EPI-USE Labs deliver SAP data unification for one of the largest utility companies in the region.

Over 4 million classes and characteristics updated

Over 15 million equipment, orders, notifications and maintenance plans reassigned

Over 150 million records updated in custom tables

Data unification of huge amounts of SAP master, transaction and historical data

Complex data harmonisation of millions of data fields

Automation of complex data mappings at scale

Consistent, compliant, accurate data with automated validation reports

> " EPI-USE Labs expedited our journey in the data unification project. Their software played a critical role where millions of records were transformed without error and with speed.

Noor Basha, Functional Lead, PwC Middle East

About the client

The client is a leading power and utilities company in the Kingdom of Saudi Arabia, responsible for generating, transmitting, and distributing electricity to millions of residential, commercial, and industrial customers across the region.

As a key player in supporting the nation's economic growth and development, the client continuously invests in modernising its organisation's infrastructure and optimising operational efficiency to meet the growing demand for reliable and sustainable energy.

Project overview

The client embarked on a large-scale restructuring initiative, partnering with PricewaterhouseCoopers (PwC) in the Middle East to streamline and unify their business operations across multiple regions in Saudi Arabia. A critical aspect of this transformation was the Data Unification project for huge amounts of master, transaction and historical data, which aimed to standardise and harmonise master data from diverse regional systems into a single, consistent structure.

Recognising the complexity and scale of the SAP data transformation required, PwC Middle East sought the expertise of EPI-USE Labs. EPI-USE Labs used their PRISM transformation solution, which combines specialist services and proprietary software, including the Data Sync Manager Landscape Transformation (LT) Suite, supported by EPI-USE Labs' global delivery model. This approach helped PwC Middle East complete the SAP data transformation efficiently and effectively. PwC Middle East contributed significantly by providing SAP functional expertise and business knowledge, ensuring the project was a success.

> ❝
>
> Collaboration with EPI-USE Labs was critical for such a project for the largest utility client in the Middle East. We received constant support from the EPI-USE Labs data expert team and, together, achieved this success.
>
> Siddique Akbar, Project Manager, PwC Middle East

The challenge: Fragmented operational data

Following the implementation of Enterprise Asset Management (EAM), the client's operational data over the years was fragmented across different regional divisions, each with unique data definitions, structures and naming conventions. The client decided to implement a common unification policy to their equipment and assets across the region. The lack of standardisation made it difficult for them to gain a unified view of their operations, impacting reporting, decision-making, and operational efficiency.

The master, transaction and historical Data Unification project required:
- High-volume data transformations: Millions of data fields needed to be mapped and transformed accurately.
- Complex data harmonisation: Aligning data definitions across all regions while maintaining data integrity.
- Risk mitigation: Manual data transformation was not only time-consuming but also posed a high risk of errors.

To address these challenges, PwC Middle East needed a solution that would automate the transformation process, reduce risks, and enhance efficiency.

Specialist data transformation at scale

EPI-USE Labs was engaged by PwC Middle East as a specialist data transformation partner, bringing in the EPI-USE Labs' PRISM solution along with specialist software and consultants to handle the data transformation needs, as one team working with PwC Middle East and the client.

Components of the solution

Components included:
- Data identification to preview and validate data in scope.
- Automation at scale: The PRISM solution automated complex data mappings and executed transformations with precision. This significantly reduced the need for manual intervention, accelerating the project timeline.

- Advanced transformation capabilities: The engine not only automated standard transformations but also handled complex scenarios, ensuring seamless data unification across the client's regions.
- Data consistency and accuracy: Applying predefined mapping rules provided by PwC Middle East and the client ensured that the final transformed data output was both consistent and reliable.
- Effective validation reports: EPI-USE Labs assisted PwC Middle East in developing automated validation reports to ensure accuracy and integrity throughout the transformation process.

"

This joint exercise with EPI-USE Labs has enhanced our rapport and confidence with the client. We were able to deliver operational efficiency and lower the cost due to centralised data management.

Asif Iqbal, Project Director, PwC Middle East

Collaboration and global delivery model

EPI-USE Labs assembled a skilled team from across the globe, including experts from the UK and Europe, to support the project. The team worked closely with PwC Middle East's project managers and technical and functional leads through daily interactions, fostering strong collaboration and effective problem-solving.

This global techno-functional delivery model enabled PwC Middle East and EPI-USE Labs to provide a precise and reliable software-powered solution, ensuring that not only the data transformation requirements were met, but also that the broader functional needs of the client's project were addressed.

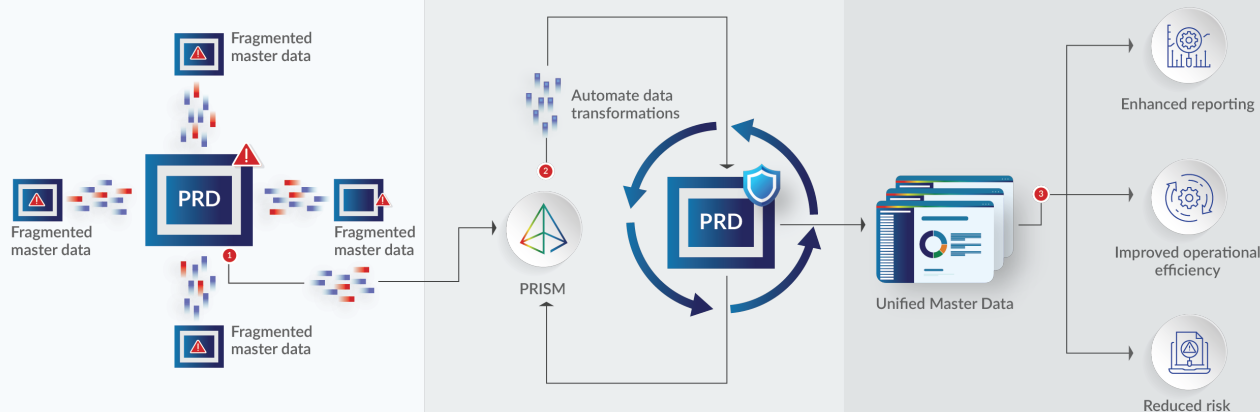| **1** Input stage	**2** Transformation stage	**3** Output stage
Data sources: ■ Multiple regional databases with fragmented master data. **Initial state:** ■ Inconsistent structures, varying naming conventions, and siloed data.	**EPI-USE Labs' role:** ■ Utilisation of the PRISM solution to automate data transformations. ■ Execution of complex data mappings, applying predefined rules from PwC Middle East. ■ Integration of both functional and technical expertise to address evolving project needs. ■ Significant volume of data to be referenced. **Technical approach:** ■ Automation versus manual effort, with huge efficiency gains. ■ Handling of data inconsistencies and real-time adjustments.	**Unified Master Data:** ■ Harmonised data model supporting our client's restructured business processes. **Business impact:** ■ Enhanced reporting, improved operational efficiency, and reduced risk.

The outcome: A hugely successful project

The successful completion of EPI-USE Labs' scope of the project contributed to the broader objectives of the client's data unification initiative.

The results included:
■ Enhanced efficiency: PRISM transformed millions of data fields quickly and accurately, saving PwC Middle East and the client both time and resources.
■ Reduced risk: By automating the process, EPI-USE Labs minimised the potential for human error and ensured data consistency across the board in the data transformation.
■ Operational continuity: The unified master data model enabled the client to streamline reporting and business processes, laying a strong foundation for continued operational optimisation.
■ Compliance: The unified master, transaction, and historical data improved compliance by enabling better regulatory oversight and mitigating risks.

Strategic partnership and future opportunities

This project not only met the technical needs, but also strengthened the partnership between PwC Middle East and EPI-USE Labs, by aligning closely with PwC Middle East's project objectives and demonstrating the effectiveness of EPI-USE Labs' PRISM approach. This project demonstrated that together, PwC Middle East and EPI-USE Labs can effectively tackle big SAP System Landscape Optimisation (SLO)/Data Migration and Landscape Transformation (DMLT) and migration/transformation projects in challenging environments.

About EPI-USE Labs

As a global software solutions and managed services company, EPI-USE Labs helps you to maximise the performance, management and security of your SAP® and SAP SuccessFactors® systems. Our clients tell us every day how we have transformed their business operations.

Contact us to find out how we can help you solve your business challenges.

epiuselabs.com | info@labs.epiuse.com
EPI-USE Labs is a member of Group Elephant.