EKR Interfaces – Data Sync

Data Exchange & Synchronization – Case Study
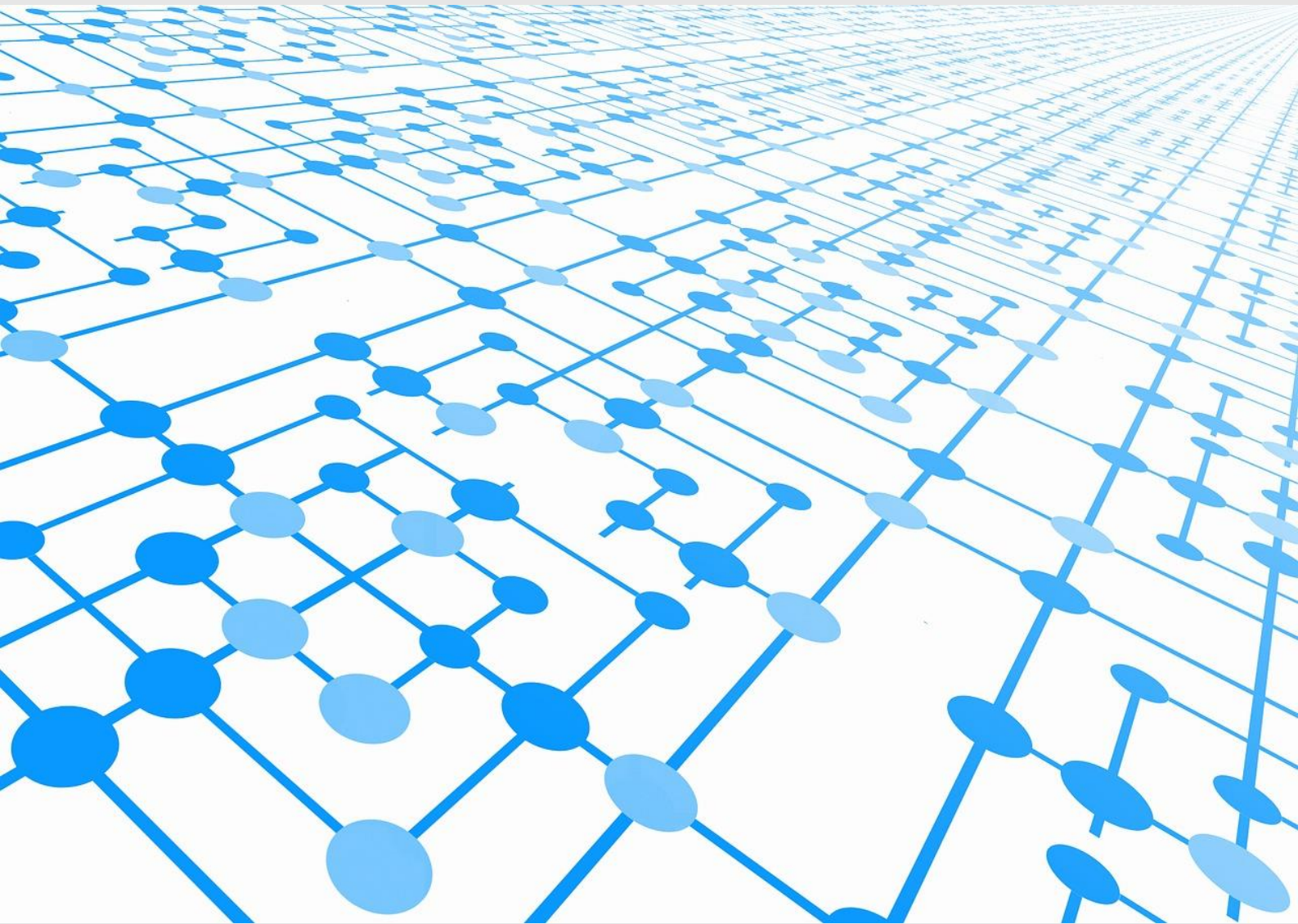
Summary

This reputed Apparel company has multiple Applications on different technologies and the need for transferring data among these applications & their parent Group companies. These Interfaces basically ensure synchronization & consistency of data. Most of these Interfaces were developed with the help of HP Unix specific libraries.

Most of the interfaces were using their own data format to send/receive the data between the application and their parent Group companies.

DIRECTION
Software LLP

Challenges

Unable to move the domain expertise from legacy systems to any other projects.

More than 360 interfaces jobs running 24/7 with continuous movement of data between applications and the group companies keeping all the expertise busy with the user's queries for the data was a major hurdle to utilize their domain knowledge for new SAP project.

Immense volume of the data was spread across the application was big challenge to upgrade the database from Oracle 10g to 19c.

Maintainability of the Interface was difficult due to involvement of old and multiple technologies.

No proper process followed for tracking and coordination on the daily work for the production system.

Deployment was not smooth on integrated test and production system.

Performance issue due to processing of big volume of data (8 digit article change).

Multiple client team involved hampering the resolution time for the issue.

Solutions

Consolidation of all interfaces with Upgrading with platform independent technology.

Migrated complex interfaces in PL/SQL & KETLLE - open source ETL tool. Automating and Implementing new technologies for code deployment i.e. Jenkins and RPMS. Agile methodology (Kanban) for the maintenance project along with Kettle migration work. Independent handling of the issue by the Development Team, having admin privilege to handle end to end process.

The initial study analyzed the requirements of the client. The solution took care of the user queries and upgrading the complex and legacy technology to the simple and new technologies.

- Onsite / Offsite Partnership business process.

- All the domain experts were able to move to another projects within 3 months of this project.

- Onsite team gathers the user's requirements and pass it to the Offsite team.

- Documentation of all undocumented interfaces.

- Migrated complex interfaces to simple and new technology.

- Migrated interfaces to platform independent technology.

- Enhancing the batch framework to adapt new technology.

- Enhancing interface code by optimizing, splitting complex interfaces and cleaning the code by coordinating with respective department.
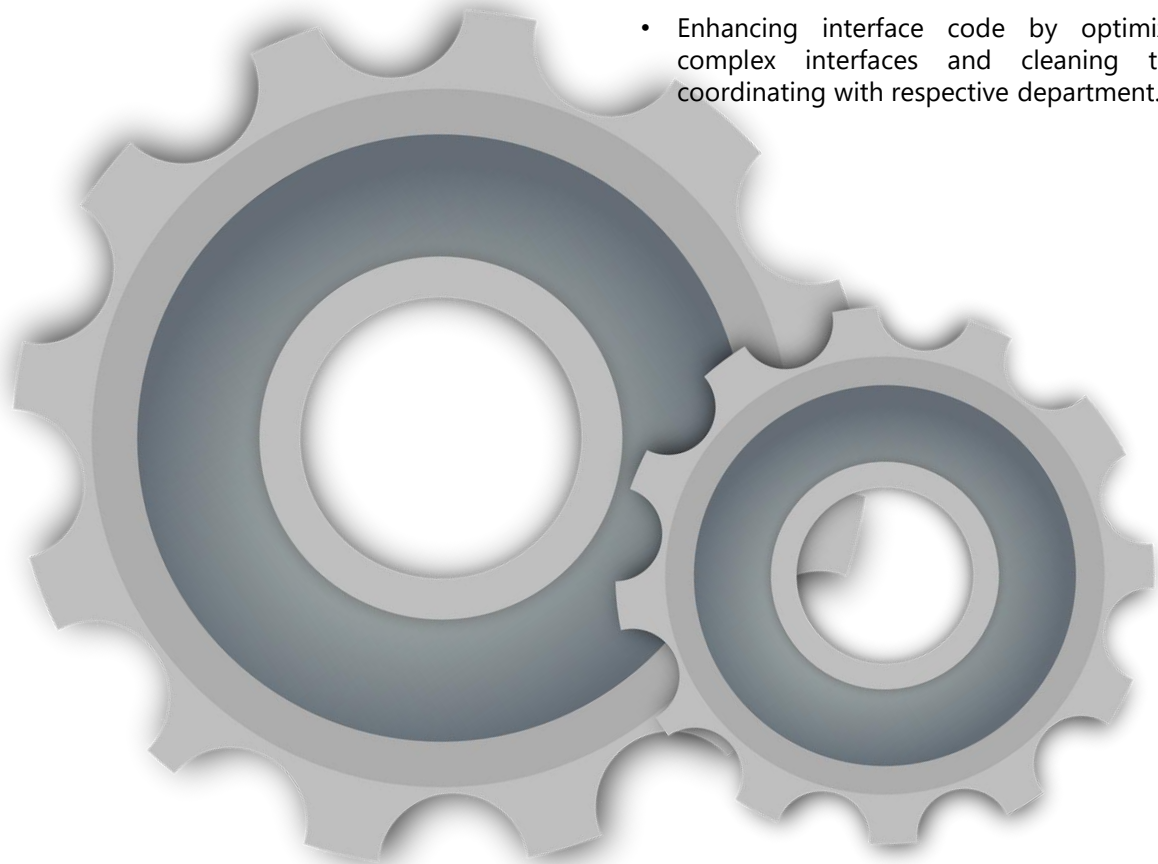
Benefits

Stability and Low Cost of Maintenance

- Users have got single point of contact for any data related queries.

- Domain experts were contacted only in case of exigencies.

- The number issues raised by users regarding data were reduced by 80%.

- Rigorous testing of all the interfaces helped to upgrade the Oracle database with 100% accuracy.

- All the interfaces developed with legacy programming languages were upgraded with new technology which are platform independent (Pentaho Kettle).

- Reduced the cost of maintaining HP-UNIX servers as jobs migrated to Linux.

- Less involvement of multiple team, resulting in better resolution time and cost benefits.

Technology

- C, Pro*C
- C++, JAVA
- PL/SQL
- Tera Data
- Shell Script
- Jenkins and RPMS
- Pentaho ETL tool (Kettle)