

Helping with Business agility via Data agility

THE PROBLEM

Firms continually struggle with data and the ability to confidently use it as a source of information to support their corporate strategies. This is a vital part of any organisation's survival for the future. However, we consistently see many [organisations] still struggling with the basics – the lack of a 'fit for purpose' data management platform with core coverage underpinning customer, product and services reference and transactional data.

We find that businesses face a number of common challenges. These include:

- Years of developing business transformation logic which exist in numerous platforms and EUC's
- Complex proprietary and expensive data management software often not perceived not to be adding value
- Decades worth of legacy estate development
- Heavy dependency with 'Central Data' teams
- Mergers and acquisitions creating challenges integrating multiple platforms and data sources
- Significant investment sunk into old technology and a lack of appetite to switch to more modern technologies and architectures
- High cost of ownership and increasing talent scarcity in running old technologies
- Frustration by business consumers caused by no proper data management, quality and governance functions

EXF INSIGHTS – KEY CAPABILITIES

We have created a platform called **EXF Insights** which is collection of **components, utilities, accelerators and AI/ML pattern matching modelling** to accelerate organisations journey towards Data agility.

Data migration acceleration:

EXF **Insights** leverages both ETL and non ETL tools in a two-stage engineering approach. This accelerates the data migration, management and integration delivery for both structured and unstructured data and is inter-operatable with existing applications.

Automation framework for data loading and transformation:

EXF Insights is a cloud native, comprehensive feature-rich platform that streamlines and automates data loading and data transformation. It reduces the need for manual analysis and contains all of the necessary user interfaces and audit capabilities to underpin these processes. It is also DevOps centric and is resilient, scales and controls aware.

ML pattern matching for data quality automation:

EXF Insights improves accessibility, consistency and the quality of data across your legacy systems and multiple data sources. It leverages our proven metadata **ML/AI driven scoring mechanism**. The components includes utilities for full instrumentation, lineage, cataloguing and dashboards along with automated prediction, prevention & fixing of data errors.

Utility for Data governance:

EXF Insights repository management has governance utilities such as intelligent lineage of sources and target, versioned business glossary and transformation rules with integration to Meta-data repository.

Deployment utilities:

EXF Insights has a number of utilities that enable your data loading and source to target transformation outcomes to be packaged up as 'Run Books' and deployed. These utilities can be event driven or scheduled. Deployment can be made to a Snowflake platform or other cloud native repository or existing client vendor platform repositories.

TYPES OF CHALLENGES WE LOOK TO SOLVE

Whatever data challenges or strategic objectives you have we provide a comprehensive set of services to address them. Here are a few examples – there are many more – of the typical challenges we look to help with.

Data Conversion and Migration

Our platform has a unique set of tools which we use to help accelerate your end to end data migration and integration deliveries however complex they may be.

We leverage a two-stage, ten step engineering approach that meets the requirements for both structured and unstructured data.

The first stage involves reverse engineering, reconciling and cleansing your legacy ETL and business transformation logic. We use **AI/ML capability** as part of this process.

The second stage involves the deployment of your cleansed business logic into your target platform. Again we use our AI/ML tool kit here to accelerate this process along with our data quality automation tools.

Data Analyst Automation

We help automate key aspects of the Data Analyst function by initially analysing multiple disparate data sets and scoring them for alignment.

We apply **Natural Language Processing (NLP)** on the attribute name and underlying value and score the outcomes. All of the relationships are catalogued with an inventory of aligned data for which to do source to target mapping. This is presented visually to the Analyst through our **Analyst UI**.

A practical illustration:

We cater for all data source types – file, message, queues, spreadsheets, unstructured data and relational databases; including Snowflake Data Warehouse.

Once the Analyst is ready to sign-off a Source to target master, EXF Insights provides a fully documented and versioned specification including visualisation and data ownership.

Fuzzy Matching

Dataset Upload MongoDB Query

Levenstein

Select Target Application

Bloomberg Mnemonic

Enter your Key

CPN

Note: All Inclusion and Exclusion key words need to be in comma separated!

Inclusion

coupon

Exclusion

code

Percentage Match Cutoff

20

Left Percent

00

Right Percent

00

Search

Reset

Show Tags

Intelligent Data Quality Automation

Workflows are provided to not only to identify data quality issues but also to make AI/ML driven recommendations for intelligent automation correction to these problems.

Some examples include:

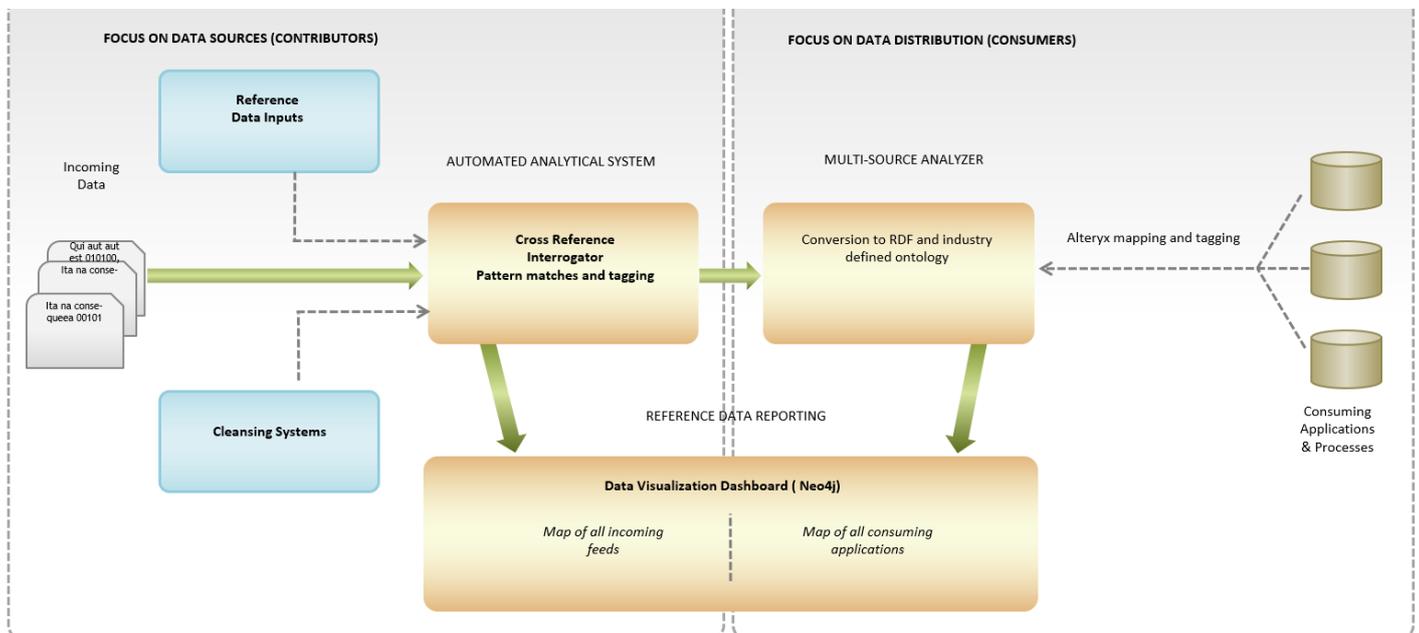
- The identification of price breaks that arise from a Corporate Action split. In this example rules are provided to ensure that day over day price tolerance checks are included looking at Corporate Actions not just to report a price break, but also to return a Corporate Action alert message to operational teams.

- Stale prices can be detected, and then secondary or tertiary data sources invoked to let Operations personnel know that another source was verified with recommendation to use.

Controls for Production

EXF Insights uses the proven utility of the Cloud Control solution **APPZ**:

- Provides scanned and secured images to the latest CIS standards
- Automates and provides continuous monitoring
- Reduces CyberSecurity risk whether deployed in a Legacy, Private Cloud or Public Cloud.
- All Code, Database, Network and Key and Secrets management are locked down and monitored for vulnerabilities and drift.



- Automated alerts generated for your cloud or our managed service operations team.

WHO WE ARE

Exfluence is a global firm led by a team with decades of Tech & engineering expertise and experience in the financial services industry. We provide new cost-effective solutions across industrial device monitoring, IoT, healthcare and financial services. As a managed service provider, we are happy to share our experiences and expertise to make you more successful.

Holley Holland offers practitioner-led consulting in business, digital and data technology change. This together with deep global sector client experience facilitates scaled delivery at pace focused on business outcomes. HolleyHolland offers

a complete range of data and analytics services and covers the full end to end journey from helping you define your data & analytics strategy through to delivering on it.

Holley Holland and Exafluence work together in a trusted partnership. We believe that the unique combination of business and delivery expertise, coupled with the EXF Insights platform, brings you a powerful team to help you design and deliver your data need for the future.