



Service Definition Document

G-Cloud 15 | Dataactics

Contents

Company Overview.....	4
About Dataactics	4
Our Value to the Public Sector.....	4
Our Unique Value Proposition	5
What is data quality?.....	5
Why is data quality important?	5
Our approach to data quality.....	5
Our Platform: Dataactics Augmented Data Quality (ADQ).....	7
Data Profiling.....	7
Data Quality Rules Definition	7
Data Quality Cleansing.....	9
Data Quality Monitoring.....	10
Data Issues Management.....	10
Data Issues Remediation	11
Data Quality Reporting.....	12
Predictive DQ Insights.....	12
Connectivity & integration	13
Data Matching and Mastering.....	14
Dataactics and Master Data Management (MDM)	14
Artificial Intelligence & Machine Learning.....	14
Security.....	14
Our Services.....	16
Our G-Cloud 15 Services.....	16
Engagement Model.....	17
Engineer + Tool.....	17
Try before you buy	17
Platform Installation	17
Support.....	18
Training.....	18
Account Management.....	18
Realising DQ Objectives through the Dataactics Platform	19
Case Studies.....	20

NHS BSA	20
NHSSupply Chain.....	20
Renfrewshire.....	21
Home Office.....	21
Surrey County Council	21
Financial Ombudsman Service	22

Company Overview

Dataactics is an industry recognised provider of software and associated services in the areas of data quality and matching. The Company has grown organically and has invested extensively in research and development for AI / ML and natural language processing to reduce manual effort in data quality, data preparation and matching. Our proprietary platform aims to put power in the hands of the subject matter experts, thereby reducing reliance on the client's IT function and making for rapid deployment. Our solutions are fast, scalable and can be deployed inside a client's private cloud (or on-premise) for rapid processing of very large volumes of data.

About Dataactics

Dataactics has extensive experience in delivering successful outcomes for many public sector clients, including national data quality initiatives for central government.

The Dataactics team of engineers, data scientists and consultants work with government to deliver innovation in data quality. This can range from the simplest implementation of our platform, using the extensive out-of-the box features, to more complex implementations which involve many stakeholders across a department. We can support your organisation in their journey to implement data quality processes by providing services from our experienced consultants, including enablement of your team to implement complex workflows and the promotion of full self-sufficiency in data quality.

Our Value to the Public Sector

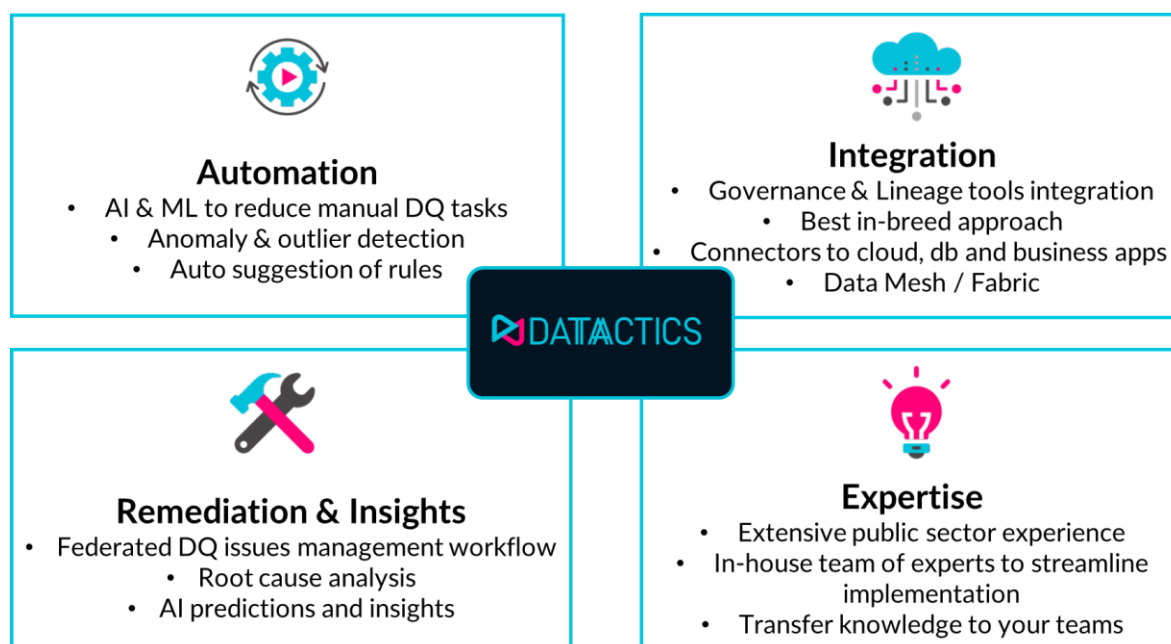
Public sector organisations rely heavily on data in order to run reliable services and perform analysis to reveal trends that help them to make more productive and profitable decisions. However, data analysis is useless if the quality of the data is poor. This has become even more important in an era of Open Data as public sector data comes under increased scrutiny when released into the public domain.

Many public sector organisations are dealing with legacy systems filled with out-of-date, inaccurate and often 'messy' data. Dataactics helps organisations to:

- Profile data to understand its structure & quality and determine if it is fit for its business purpose.
- Measure / monitor data quality across different sources / silos.
- Cleanse / remediate data quality issues automatically or by alerting data stewards.
- Match data from different sources to deduplicate and generate a single view.

The ultimate goal is to provide a reliable base of information on which you can run services and intelligent analytics.

Our Unique Value Proposition



What is data quality?

Data quality is the measurement of the condition of data based on dimensions such as completeness, accuracy, consistency, reliability and timeliness. Measuring data quality levels can help organizations identify data errors that need to be resolved and assess whether the data that flows through its systems is fit for purpose.

The emphasis on data quality has increased with the increasing use of data analytics to help drive business decisions. Data quality is a core component of the overall data management process, and data quality improvement efforts are often closely tied to data governance programs that aim to ensure data is formatted and used consistently throughout an organization.

Why is data quality important?

Data Quality is foundational to becoming a data-driven organisation. With a robust data quality framework in place, you can improve reliability and trust in your data which can inform more data-driven decisions across the business.

Data quality use cases are now pervasive across all business activities and user groups, and they provide accelerated time to value, reduced risk and increased competitive advantage.

Our approach to data quality

At Dataactics, we believe Data Quality (DQ) solutions should empower data stewards across all data domains to get on top of quality issues and provide an easy mechanism to remediate data for which they are responsible.

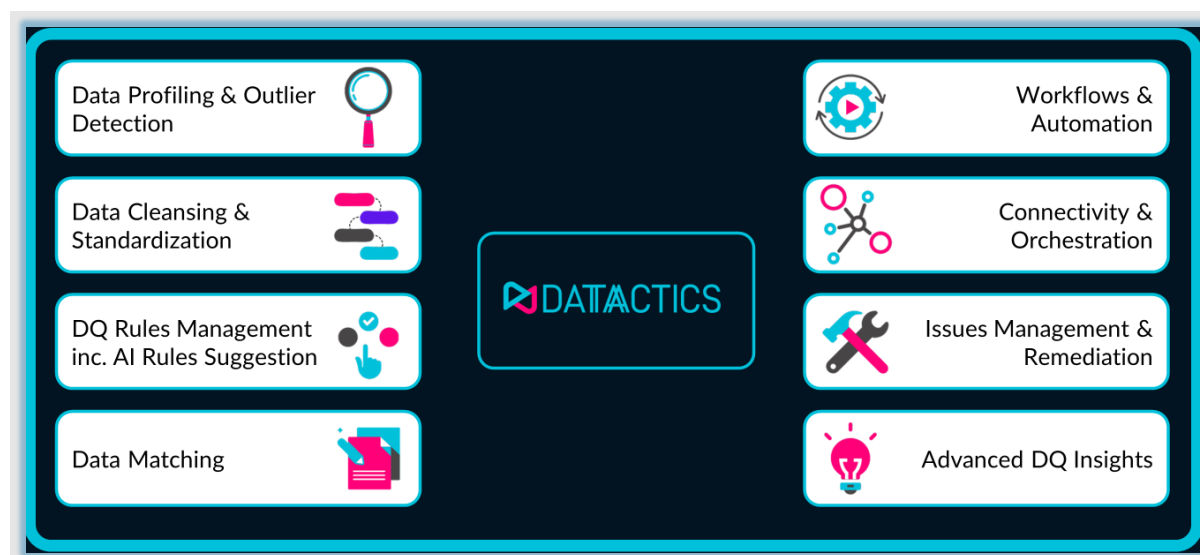
In order to meet the growing demands of increasing Data Quality use cases, we have designed a platform that matches the skillset of less technical users – zero programming is required to stand up an end-to-end solution in Dataactics.

Modern data quality solutions like Dataactics offer augmented data quality capabilities to streamline how we solve data quality issues. This is achieved by metadata to increase coverage of data quality, and Artificial Intelligence/Machine Learning to improve automation of data quality processes.

Modern data ecosystems and complex application architectures need augmented Data Quality solutions that can integrate with designs like data fabrics or data mesh and improve overall financial governance. This requires good integration capabilities, agile deployments and a bidirectional exchange of intelligence (metadata) with other data management functions.

Our Platform: Dataactics Augmented Data Quality (ADQ)

Dataactics Augmented Data Quality (ADQ) solution offers a comprehensive suite of built-in capabilities to help our clients implement a robust Data Quality framework. The Dataactics Platform offers data quality and powerful matching software to profile, cleanse, match / de-duplicate and remediate all types of data. The software tools can be deployed in a private cloud environment, in a VM environment or in on-premise hardware.



Data Profiling

Data profiling is a crucial part of the data quality process where users review source data, understand its structure, content, and interrelationships, identifying potential data quality errors. The output from the data profiling process helps users define relevant data quality rules to apply to the data set going forward. Context is added by metadata from the glossary and lineage layer.

Dataactics dynamically profiles data on input. Attributes are profiled in diverse ways, including character profile, data profile, fill rate, pattern, frequency, distribution, standard deviation, min, max etc. The rules studio can profile datasets to detect different patterns and can profile data from various sources for the various data dimensions. This empowers business users to quickly understand their data universe in order to build and apply data quality rules to the correct attributes using the Dataactics platform.

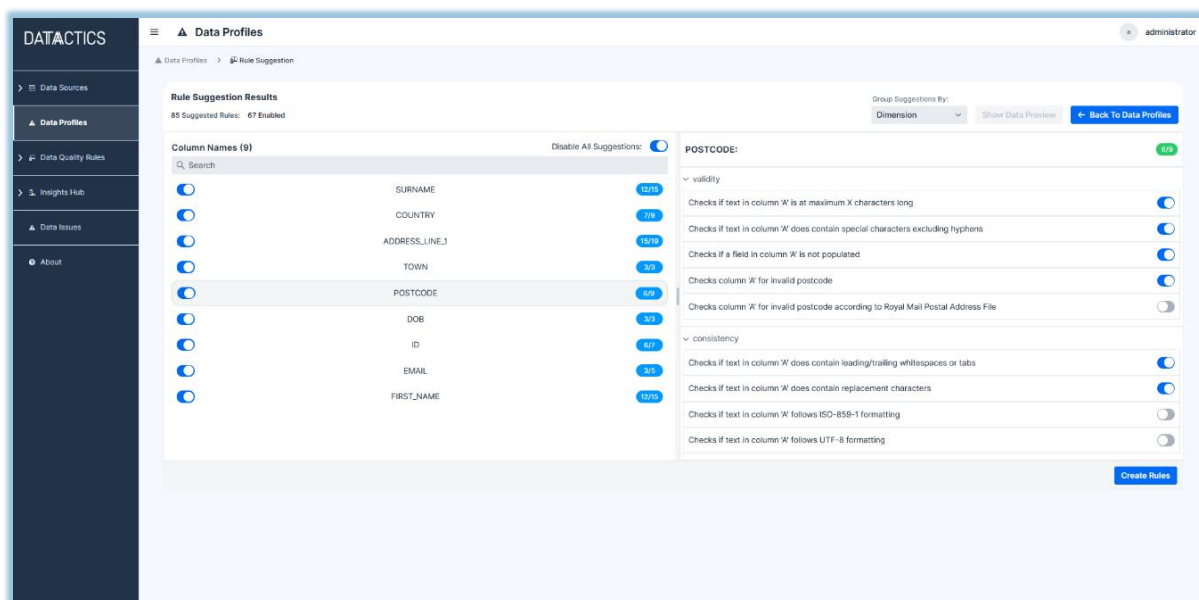
Outlier & Anomaly Detection

Dataactics employs advanced profiling and statistical techniques, enhanced by machine learning, for effective outlier detection in large datasets. This approach is part of a comprehensive data quality management framework, ensuring accurate identification of anomalies and irregularities. Designed to be scalable and user-friendly, it allows users of varying technical expertise to manage and improve data integrity efficiently, making sophisticated data analysis accessible and integrated within the broader data quality toolkit.

Data Quality Rules Definition

Rules Suggestion / Proposal

Dataactics comes with data quality rules out of the box, to measure data against the common dimensions of data quality and provide detailed metrics. Not only does Dataactics make it easy to implement large volumes of data-domain specific data quality rules, but rules are also simple to audit and can be enriched with contextual metadata, so that root cause of “DQ breaks” can be found and breaks can be investigated.



Dataactics' Rule Suggestion feature leverages the knowledge and experience of data engineers to automate the suggestion / proposal of pre-configured data quality (DQ) rules. Utilizing AI, it suggests relevant DQ rules by analyzing metadata and data content. This reduces manual effort at the start of a DQ project and enables subject matter experts to focus on more complex tasks. It enhances the efficiency of the data quality process, ensuring reusable and accurate rule sets for diverse data scenarios, thereby streamlining data governance and quality initiatives across organizations.

Custom / Complex Data Quality Rule Configuration

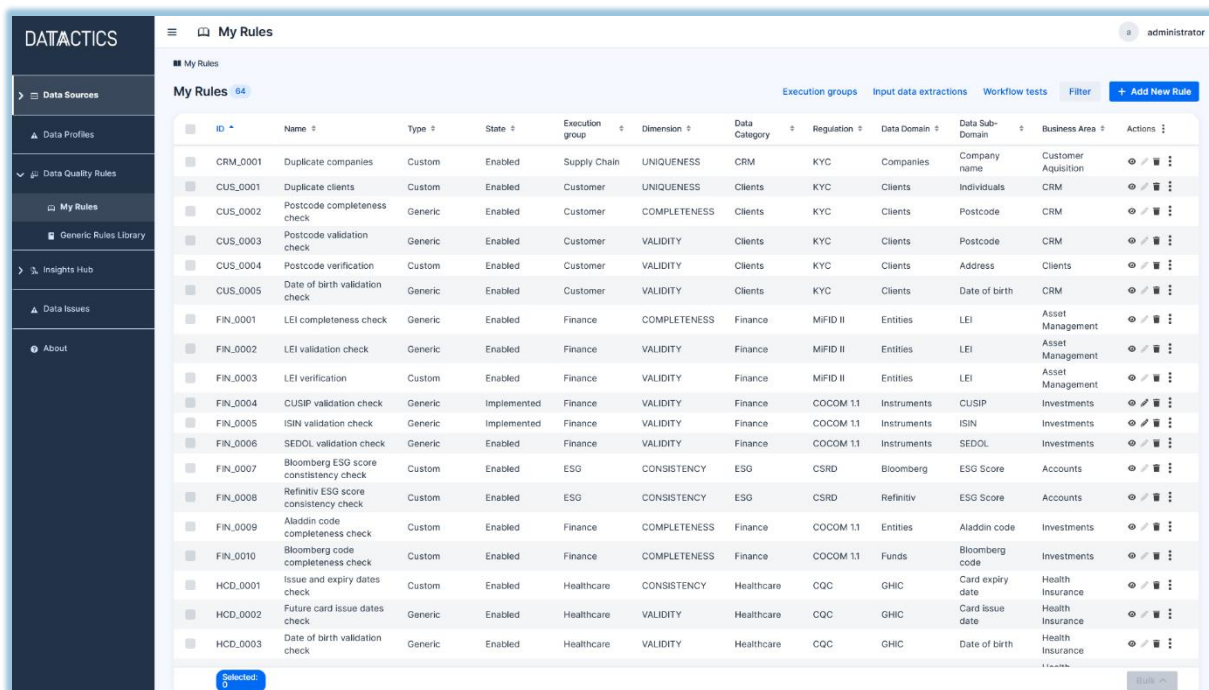
Custom data quality rules can be rapidly configured within the user-friendly Dataactics rules studio before being defined and stored in the rule library. A major advantage of the Dataactics platform is that programming/coding is not needed in the development of even the most complex data quality rules. The rules engine allows users to quickly implement custom or complex data quality rules by utilising a large volume of pre-configured logic in the areas of:

- Profiling
- Validation
- Parsing, Splitting & Uniting
- Cleansing & Standardisation
- Enrichment
- Matching, Linking & Merging

Central Rules Management ‘Hub’

In Dataactics ADQ, custom and generic rules are centrally managed through an intuitive interface, allowing users to create, store, and apply data quality rules across different datasets. This central repository ensures consistency and reusability of rules, facilitating efficient data

governance. Users can craft custom rules tailored to specific needs or utilize generic, pre-built rules for common data scenarios. The integration of these rules into automated workflows enhances data management efficiency, ensuring standardized and accurate data quality processes throughout the organization. Users with the correct permissions can manage access to different rule sets in ADQ as well as promoting rules from test into production.



ID	Name	Type	State	Execution group	Dimension	Data Category	Regulation	Data Domain	Data Sub-Domain	Business Area	Actions
CRM_0001	Duplicate companies	Custom	Enabled	Supply Chain	UNIQUENESS	CRM	KYC	Companies	Company name	Customer Acquisition	
CUS_0001	Duplicate clients	Custom	Enabled	Customer	UNIQUENESS	Clients	KYC	Clients	Individuals	CRM	
CUS_0002	Postcode completeness check	Generic	Enabled	Customer	COMPLETENESS	Clients	KYC	Clients	Postcode	CRM	
CUS_0003	Postcode validation check	Generic	Enabled	Customer	VALIDITY	Clients	KYC	Clients	Postcode	CRM	
CUS_0004	Postcode verification	Custom	Enabled	Customer	VALIDITY	Clients	KYC	Clients	Address	Clients	
CUS_0005	Date of birth validation check	Generic	Enabled	Customer	VALIDITY	Clients	KYC	Clients	Date of birth	CRM	
FIN_0001	LEI completeness check	Generic	Enabled	Finance	COMPLETENESS	Finance	MiFID II	Entities	LEI	Asset Management	
FIN_0002	LEI validation check	Generic	Enabled	Finance	VALIDITY	Finance	MiFID II	Entities	LEI	Asset Management	
FIN_0003	LEI verification	Custom	Enabled	Finance	VALIDITY	Finance	MiFID II	Entities	LEI	Asset Management	
FIN_0004	CUSIP validation check	Generic	Implemented	Finance	VALIDITY	Finance	COCOM 1.1	Instruments	CUSIP	Investments	
FIN_0005	ISIN validation check	Generic	Implemented	Finance	VALIDITY	Finance	COCOM 1.1	Instruments	ISIN	Investments	
FIN_0006	SEDOL validation check	Generic	Enabled	Finance	VALIDITY	Finance	COCOM 1.1	Instruments	SEDOL	Investments	
FIN_0007	Bloomberg ESG score consistency check	Custom	Enabled	ESG	CONSISTENCY	ESG	CSRD	Bloomberg	ESG Score	Accounts	
FIN_0008	Refinitiv ESG score consistency check	Custom	Enabled	ESG	CONSISTENCY	ESG	CSRD	Refinitiv	ESG Score	Accounts	
FIN_0009	Aladdin code completeness check	Custom	Enabled	Finance	COMPLETENESS	Finance	COCOM 1.1	Entities	Aladdin code	Investments	
FIN_0010	Bloomberg code completeness check	Custom	Enabled	Finance	COMPLETENESS	Finance	COCOM 1.1	Funds	Bloomberg code	Investments	
HCD_0001	Issue and expiry dates check	Custom	Enabled	Healthcare	COMPLETENESS	Healthcare	CQC	GHIC	Card expiry date	Health Insurance	
HCD_0002	Future card issue dates check	Generic	Enabled	Healthcare	VALIDITY	Healthcare	CQC	GHIC	Card issue date	Health Insurance	
HCD_0003	Date of birth validation check	Generic	Enabled	Healthcare	VALIDITY	Healthcare	CQC	GHIC	Date of birth	Health Insurance	

Data Quality Cleansing

Dataactics goes beyond just reporting on Data Quality issues and enables users to cleanse data quality issues in bulk to ensure consistency. The following rules logic in this area is available out of the box in Dataactics:

Rule	Description
Parsing	Data is not always presented in the style you would like. The ability to parse data from its stored or presented form into a form more suited to your purpose is key to processing the data accurately. Parsing involves breaking data apart into multiple specific components by identifying patterns of items within a larger string of text.
Splitting	Similar to parsing, splitting entails breaking data down into components based on a single character or using lists and patterns of items.
Uniting	The process of taking data stored in a range of columns and combining the contents into a single column.
Cleansing	Data cleansing improves the consistency and accuracy of data. By making the data more accurate, you improve the quality of matching. Cleansing entails changing the contents of a column of data by using lists and patterns of items to replace the existing contents with something else or by removing the original content entirely where it is incorrect.
Standardisation	Transforming data from its current state into one that is uniform and consistent. This can include ensuring that data items adhere to naming or

	spelling conventions, establishing constraints on data contents or verifying that the data follows expected patterns. Standardisation contributes to the overall efficiency and accuracy of data allowing analysis and matching to be more effective.
Enrichment	Data can be enriched using other internal or external data sources. An example is utilising the Global Legal Identifier Index published by GLEIF to enrich corporate entity records with the most up-to-date LEI.
Matching, Linking & Merging	Data matching is a less publicised core competency of the Dataactics platform. Prebuilt and custom rules can be implemented to compare data from one or more sources to another, identifying similarities or relationships between them. This is particularly important to firms that require a single client view for compliance or for operational management of customer, transaction, product, or entity data. Dataactics enables multiple match strategies, including tight or loose fuzzy, deterministic, rule-based matching or matching that leverages NLP and machine learning to predict matches on low-confidence match scores. The extensive DQ and data preparation capabilities of ADQ act as an effective precursor to accurate data matching.

Data Quality Monitoring

The most common use case of Dataactics across our client base is continuous data quality monitoring and remediation. Often deployed to improve data governance, this solution enables clients to perform data quality monitoring on all critical data elements across the estate as well as federated DQ issues management, root cause analysis and remediation. Clients benefit from built-in DQ rules and AI / ML features including outlier / anomaly detection, auto rules suggestion and predictive data quality insights.

Dataactics ADQ offers sophisticated workflow, automation, and scheduling features for streamlined data quality management. Users can configure a data quality monitoring workflow through a straightforward, interactive process – automating the continuous monitoring and validation of data quality, with options for alert notifications on identified issues.

Additionally, ADQ's scheduling function allows for regular, timed execution of data quality jobs, ensuring continuous maintenance of data standards. These features collectively ensure consistent, high-quality data management with minimal manual effort, aligning seamlessly with organizational processes.

Data Issues Management

The system monitors data quality across various sources and systems, enabling timely identification of issues. Identified Data Quality issues are logged in a centralized repository where they can be assigned to responsible parties for remediation. When a data quality rule is violated, an alert is triggered and communicated to relevant stakeholders, such as data stewards. This alerting mechanism is highly configurable, allowing organizations to set thresholds, frequencies, and specific conditions for notifications.

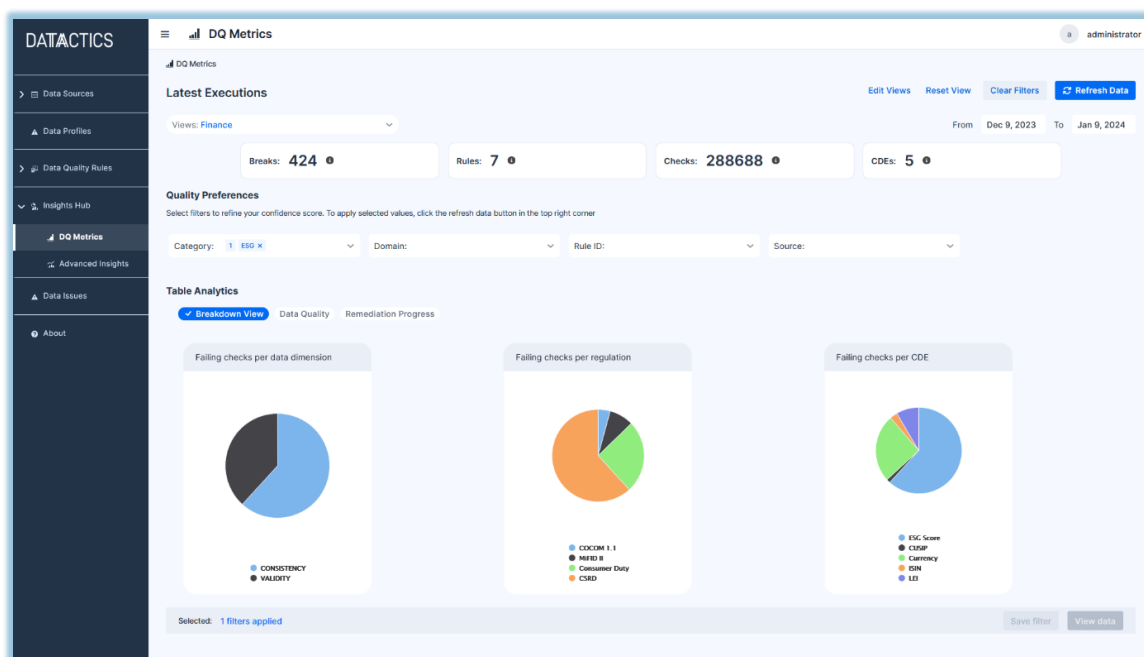
Data Quality Issues							
Data Issues by DQ Rule > FIN_0003 - DISABLED LEI verification							
Rule Data Quality Issues by Record 5							
Record Type		Winning					
Allow List		Filter					
Back							
Status	Assigned to	RULE_DESCRIPTION	PK	LEI	EntityLegalName	Address	Actions
Resolved	administrator	Matches invalid LEI codes with...	5451198	CMO2TCD2UNJPT8HG...	MARINE TRANSPORTATION ...	Elizabe	
Resolved	administrator	Matches invalid LEI codes with...	5557467	549300LBT3VIT54UY...	Regal Home Collections Inc.	BROOK	
Pending	administrator	Matches invalid LEI codes with...	5539814	OKXQCBALRQB7RU5...	Level 3 Financing Inc	Riverto	
Unresolved	administrator	Matches invalid LEI codes with...	5496712	EK80NVCUMJ3X3EH2X8...	ProLogis Inc.	SAN FF	
Unresolved	administrator	Matches invalid LEI codes with...	5541157	OELZXFKPQHXXLYXN...	Brenner West Capital Advis...	Dover	

Data Issues Remediation

The management of data quality issues in ADQ is designed to be collaborative and efficient. Identified issues are logged in a centralized repository where they can be assigned to responsible parties for remediation. This federated approach ensures that data quality issues are not siloed but rather managed across the organization, facilitating a holistic view of data health. The system supports collaborative resolution processes, including tracking, escalation, and reporting, ensuring that data quality is maintained at an optimal level across all data domains.

Data Quality Reporting

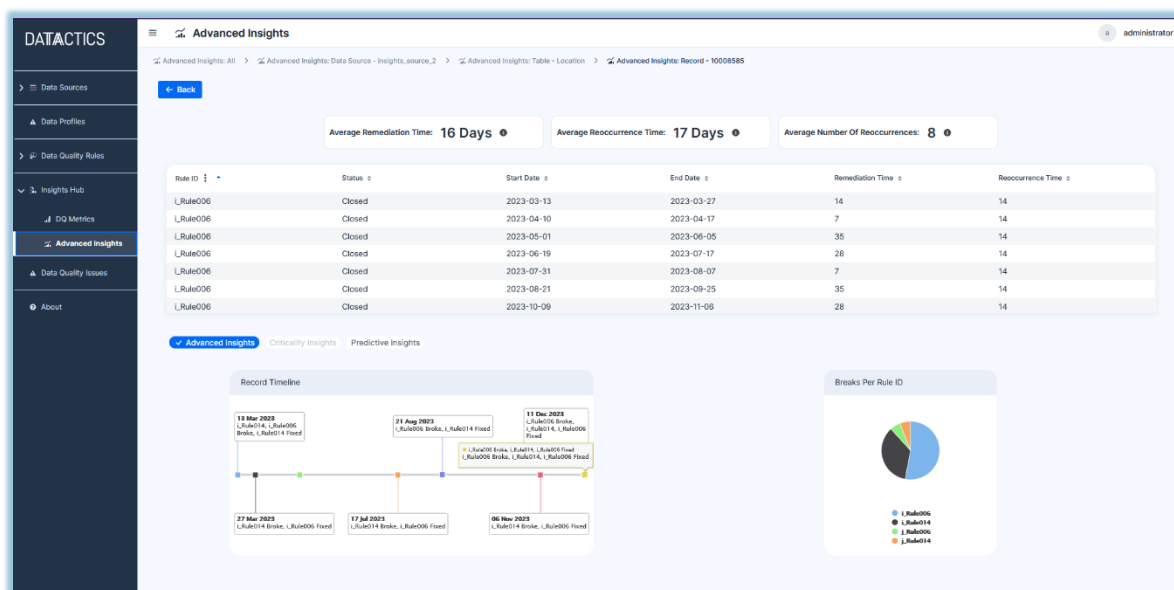
An important part of the Data Quality process is aggregating statistics from the data quality (DQ) validation checks to produce visual dashboard reports tailored to specific user / compliance requirements. Dataactics offers built-in data quality dashboards as well as integration with third-party visualization tools for comprehensive data monitoring. The built-in dashboards provide real-time insights into data quality metrics, highlighting issues like anomalies, duplicates, and compliance levels.



Users can customize these dashboards to focus on specific data dimensions and KPIs. For enhanced visualization, Dataactics seamlessly integrates with popular BI tools like [Microsoft Power BI](#) and [Tableau](#). This allows for the creation of more intricate and interactive visualizations, leveraging the advanced capabilities of these external platforms to further analyse and display data quality metrics and trends in a user-friendly and accessible manner.

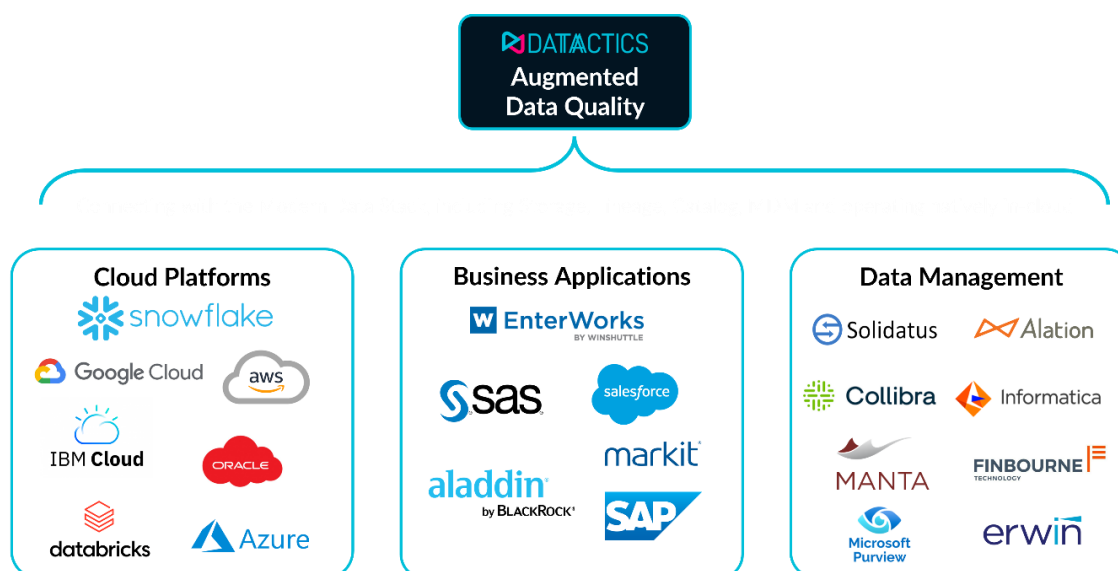
Predictive DQ Insights

In ADQ (Augmented Data Quality), Advanced Insights leverages machine learning and statistical analysis to offer predictive analytics on data quality. This feature goes beyond traditional monitoring by forecasting potential data quality issues, enabling proactive management. It analyses trends and patterns in historical data to predict future anomalies, inefficiencies, or errors. Advanced Insights also provide deeper analysis of recurring data quality problems, assessing their impact on business operations. This predictive capability enhances strategic decision-making, allowing organizations to address data quality concerns before they escalate, thereby maintaining high data integrity and supporting effective data governance.



Connectivity & integration

Dataactics supplies ODBC and JDBC access to relational DBMS. Integration with nonrelational structures requires light configuration through a microservice that is contained in the tool AWS S3, FTP, SFTP, FTPS. Flat file formats such as CSV, XML etc. as well as JSON are fully supported. The server hub application also provides Push and Get via REST API to connect with: source systems / database / data warehouse data lake / metadata management layer (lineage, business glossary & data dictionary).



Data Matching and Mastering

Better data quality makes for better data matching which is foundational to successful data mastering. Industry analysts at Gartner and Bloor in their 2024 reports point out that Dataactics is almost unique in that it incorporates features for data profiling, data scrubbing, matching and remediation in a single software system. We have invested heavily in the use of machine

learning to solve single view problems, particularly around profiling, rule suggestion, NLP match, and outlier detection. We combine this with our proven fuzzy matching and unstructured data capabilities to enable powerful automation, always with an option to co-pilot via manual override.

Dataactics and Master Data Management (MDM)

The Dataactics Augmented Data Quality Platform is designed to augment/enhance rather than replace any existing MDM solutions. With its in-memory processing technology, Dataactics can easily integrate with existing data persistence solutions (such as MDM systems) to provide the following advantages by configuring a low-code platform, with no software development or coding required:

- ✓ Data Discovery and Profiling of MDM content, including descriptive statistics, frequency analysis, pattern analysis, PII identification, duplication assessment and more.
- ✓ Continuous DQ monitoring over a large universe of DQ rules across DQ dimensions, following DCAM and other standards. Our AI Server module suggests suitable rules for underlying data and provides rich reports for business users to analyse patterns and severity of DQ issues. The platform offers a dedicated module for issue remediation, where the remediation effort can benefit from automations and accelerators.
- ✓ Fuzzy and NLP matching to assess and resolve duplication, with workflows to merge records into a golden record if required. The same matching logic can be used for data validation and enrichment when matching MDM information to external sources.

Artificial Intelligence & Machine Learning

Dataactics is a data quality and matching platform enabling organizations to profile, cleanse and match data. The combination of data quality, matching and unstructured data capabilities delivers clean, reliable and trusted data as a solid foundation for AI and analytics initiatives. Dataactics platform incorporates AI and Machine Learning capabilities to automate processes including:

- ✓ Profiling & outlier detection;
- ✓ Suggestion and auto-generation of data quality rules;
- ✓ NLP models for data matching;
- ✓ Human-in-the-loop data issues remediation;
- ✓ Predictive data quality insights.

Security

The Dataactics Platform is deployed inside the client's environment and data is processed in a safe staging area using a read-only copy so there is no risk of any data loss. The Dataactics Platform has role-based access so that only users with the correct level of authorisation can view outputs of the process that contain private data. Dataactics software can also be used to obfuscate sensitive or private fields of information.

Dataactics as an organisation is accredited with **Cyber Essentials Plus** and **ISO27001**.

Our Services

Dataactics is an experienced supplier of data solutions to government clients and we work best when we understand your specific challenges and work with you to build bespoke, tailored solutions. A number of clients have benefitted from Dataactics' in-house expertise to deliver custom data quality and matching solutions using the platform as a 'toolkit' to accelerate implementation.

Our G-Cloud 15 Services

We have detailed 5 different services on our G-Cloud 15 offering:

- **Augmented Data Quality by Dataactics**

This service uses the primary platform ADQ to enable public sector organisations to **profile, cleanse, monitor, report and match data from disparate sources**. Its business-user friendly UI enables self-service by business users. Built-in AI / ML features help to automate the setup and day-to-day management of data quality.

- **Data Matching by Dataactics**

This service offers the powerful combination of **Data Quality & Matching** to enable public sector organisations to build a foundation of **master data management**. The powerful matching capabilities and exceptional management workflow help to more rapidly build a single view of citizens / businesses across multiple, disparate data sources.

- **Data Readiness by Dataactics**

Dataactics Data Readiness helps public sector organisations **assess data quality, data maturity and data readiness** to unlock insight, improve reporting and deliver operational efficiency. This short, low-risk engagement helps organisations gain clarity on data challenges, costs and next steps without needing to invest in a full data solution. Our experts guide you through the entire process, starting with a workshop on the problem to be solved, accessing sample data, performing a proof of concept, and providing a roadmap to a production ready solution.

- **Dataactics – Data preparation for AI/ML/LLMs/Analytics**

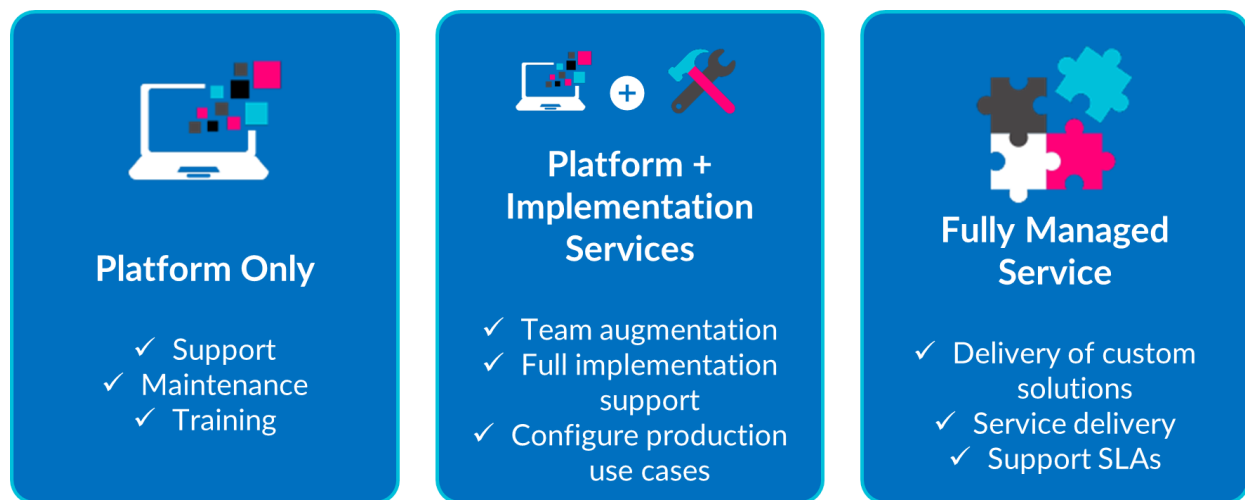
Dataactics Augmented Data Quality platform enables public sector organisations to automate **data preparation, data quality, data integration and enrichment processes**. It is used as a foundation to build a reliable base of information for more accurate analytics / AI models / LLMs and ultimately deliver improved and more efficient services.

- **Policing Data Preparation by Dataactics**

The **Policing Problem Book of 2025** asks: how can policing enable secure, efficient, and standardised data sharing across forces? Policing Data Preparation by Dataactics is designed to address this problem, by **preparing Policing Data for sharing** both between and within forces, and with other third parties as appropriate.

All of these services use the **Dataactics Augmented Data Quality (ADQ) solution** as their foundation and this platform will be an integral part of the technology stack in each service.

Engagement Model



Engineer + Tool

This flexible commercial option enables public sector clients to benefit from the Dataactics platform capabilities *and* our expertise. Short-term engagements whereby use of the software platform is incorporated within a professional services day rate.

Try before you buy

Public sector clients can avail of a paid Proof of Concept / Proof of Value / Pilot as a low-cost, low risk means of testing the efficacy of Dataactics platform and services. Benefits of this option:

- ✓ Low risk investment to test value the solution can add;
- ✓ Generate high impact results very quickly which you can use to form a decision and build an internal business case for production implementation;
- ✓ The work completed as part of a POV is not throw away and can be utilised should you decide to invest in a production licence.

Platform Installation

Clients can avail from as much or as little support required to guide them through the installation process. Dataactics provides in-house DevOps & Security Engineer resource to support clients through the platform installation process. Alternatively, clients can choose to manage the process themselves with documentation and support from Dataactics. Activities provided include:

- Pre-install prerequisite gathering;
- Conducting non-functional discovery;
- License entitlement alignment;
- Software setup and install;
- Handover to delivery team;
- Authentication and authorisation design;
- Application of authentication authorisation configuration.

Support

Datactics includes a standard support package for its products and services, including a Helpdesk during UK Business Hours. The following Product Maintenance Support services are provided as part of the annual support fee:

- Call Logging
- Triage problem management
- Resolution of issues
- Service reports and service management meetings (on request)

On receipt of a support issue, we will categorise it on a severity scale and aim to resolve within the timeframes as outlined in the Service Level Agreement we have in place with each client.

Training

Datactics offers free online training and accreditation to customers via the company website.

Classroom style training is also provided and can be tailored for each client's specific needs, with 2 standard courses available to all new clients:

- Foundation Software Training (3 days): catered for 'super users' or 'Authors including rule building exercises.
- Solution-Specific Training (2 days): further rule building and advanced functionality and operations.

Training guides, user manuals and all datasets needed for training will be provided. Training costs vary depending on numbers attending and further bespoke training can be provided on request. Consultancy days are available on request after go-live and may be used to provide advice and guidance on best practice.

Account Management

Datactics will assign an Account Manager to each new client with a view to providing continuity of service and ensuring that the Datactics platform delivers fully on business needs. The Account Manager is responsible for:

- Relationship management with key stakeholders/ budget owners throughout every stage of the programme and lifecycle of the client relationship.
- Dedicated reference and commercial point-of-contact throughout the programme.
- KPI & post-project service management.
- Ensuring regular cadence of meetings with various programme stakeholders.
- Exploration of other problem areas with the client to identify further use cases.
- Customer satisfaction management including independent surveys and case studies.
- Lifetime updates and upgrades management: what's coming, what's new, how to get it and benefit from it.
- Community engagement, driving up adoption, use and experimentation with the Datactics product set.
- Facilitation of client involvement in the Datactics product roadmap.

Realising DQ Objectives through the Dataactics Platform

The DQ objectives that clients look to deliver through implementing the Dataactics Platform are varied. Our clients often present these objectives using different language, some examples are:

- Artificial intelligence
- Automated record categorisation
- Data cleansing
- Data enhancement
- Data matching automation
- Data matching
- Data profiling
- Data quality firewall
- Data quality for record management systems (RMS)
- Data quality metrics
- Data quality reporting
- Data reconciliation
- Data re-engineering
- Data remediation
- Data standardisation
- Data workflow automation
- Machine learning
- Master data management
- Single customer view
- Single view of citizen data
- Single view of customer

Case Studies

The following case studies describe some objectives that our public sector clients had, and how these were realised through a successful implementation of the Dataactics Platform.

NHS BSA

The National Health Service Business Services Authority (NHSBSA), an Arm's Length Body of the Department of Health and Social Care, is responsible for providing platforms and delivering services that support the priorities of the NHS, Government and local health economies. Over £100 billion of NHS spend flows through their systems annually through the provision of national, at scale business services. This includes providing essential services to health and social care system providers, the NHS workforce, and citizens. The delivery of systems, making payments, and enabling access to health services all generate a wealth of data. With a strategy that includes being a data driven organisation, effective management of data assets is critical to enabling their success.

To support their vision, and ensure a robust, consistent and objective methodology for assessing data quality, the NHSBSA engaged with Dataactics to implement a data quality assessment tool. Based on the Government Data Quality Framework guidance to proactively document, understand and improve data quality, and empowered by Dataactics tooling, this has enabled their Data Governance team to create a series of customized rules across multiple data assets that assess data quality without their analysts requiring extensive coding expertise.

Through targeted data quality assessments, the NHSBSA have identified areas for improvement that will help drive efficiencies and optimise decision-making processes. The flexibility of the Dataactics' innovative rule-building studio, in particular the easily configurable out-of-the-box rule logic, has enabled the team to implement more complex and easier to troubleshoot rule logic than was previously practical in other hard-coded solutions.

A year post-pilot, NHSBSA continues to prioritise data profiling, targeting impactful opportunities to assess data quality and work collaboratively with their stakeholders to implement improvement actions for enhanced service delivery. This approach contributes to better informed decision-making, to delivering value and efficiency, to building trust in their brand and ultimately towards helping people to live longer and healthier lives.

NHS Supply Chain

NHS Supply Chain manages the sourcing, delivery and supply of medical consumable products for over 600 NHS trusts and healthcare organizations in England and Wales. It provides a single point of access to over 1,000,000 products ranging from bandages to sutures and wheelchairs to cleaning equipment which are available through an online catalogue

Dataactics helped the NHS Supply Chain to standardise and classify dense product information from 1000+ supplier catalogues. The Dataactics Platform standardizes terms and measurements within the data and white lists' variable product descriptions. The solution provides various degrees of matching available to the user; exact matching, fuzzy matching, regular expressions and key word matching. These specialist matching techniques enable the organisation to identify a more cost-effective supplier of the same or similar products as well as facilitate identification of new product lines. The result is the price matching team can immediately inform a trust of product matches and potential cost savings opportunities. The improved

response times have been instrumental in providing the trusts with an efficient and cost effective service.

Renfrewshire

Renfrewshire Health and Social Care Partnership are responsible for the delivery of adult social care services and all community health services for adults and children in the Renfrewshire area.

Through work with the Scottish Government and Public Health Scotland, it was identified that there was a gap within Renfrewshire's case management system of non-existent or incorrect Community Health Index (CHI) numbers which is a unique health indicator associated with each person in Scotland.

The Data and Technology Service was tasked with validating all CHI numbers within their case management system to match those on record by Public Health Scotland (PHS). Renfrewshire provides PHS with a routine Scottish Government quarterly return, allowing PHS to provide accurate CHI matching against the individuals on the case management system.

Renfrewshire used the Dataactics Platform to validate their CHI number records to build a custom solution that identified invalid or missing CHI numbers. This solution flagged over 27000 records and allowed for their automatic remediation.

Renfrewshire Health and Social Care Partnership now receive every quarter a matching list of those on the system against PHS records, which allows Renfrewshire to use the Dataactics custom solution to run against the updated list. By running this solution Renfrewshire are ensuring that they are capturing any new CHI numbers for records that are new on the case management system. At the same time, also continue to validate the data within the system to allow for remediation by the system or a data steward.

Having the Dataactics Solution allowed Renfrewshire to save 57 days' worth of manual remediation for 1 member of staff at a savings cost of £7,893.36. This allowed Renfrewshire to focus its staff on more meaningful activities and provide support to others within its partnership.

Home Office/Policing

Police Constabularies across England and Wales (43) were manually reviewing and categorizing crime records by assigning a particular flag based on information in a text description field. This was a laborious and costly task each month, but required by the Home Office as part of their Annual Data Requirement (ADR) returns. The returns were variable in their interpretation of the ADRs, making it difficult to make comparisons and assess patterns across the constabularies.

The National Data Quality Improvement Service (NDQIS), developed using the Dataactics Platform, uses semantic analysis techniques on crime records, automates the categorization, allowing for manual verification where required, and submits the ADR return once authorized. This reduces the time taken to generate the ADRs, provides accurate and comparable data for the Home Office, and allows the ONS to perform valuable insight and analysis.

The Dataactics NDQIS solution boosts smart decision-making and operational efficiency by enhancing data value and integrity.

Surrey County Council

In the event of a natural disaster such as flooding, Surrey County Council needed to rapidly identify and locate vulnerable persons who may require assistance to evacuate. Surrey CC needed to establish links between health, emergency services and the authority's own care services to ensure responders on the ground were equipped with relevant information from health and care systems. However, producing such accurate and timely information presented significant data management challenges, since data had to be linked from over 30 agencies and healthcare providers and strict data governance policies had to be adhered to.

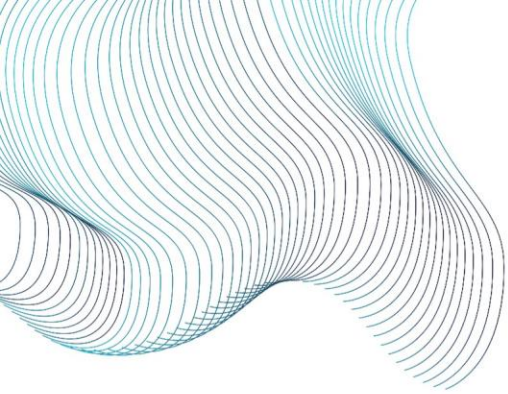
The council used the Dataactics Platform to build a data sharing hub which allowed relief agencies to share information during emergencies to ensure vulnerable people are protected. The loading, consolidation and standardization of large volumes of citizen data from disparate sources was automated using the platform. The system uses the resident's NHS number as a primary identifier and links with data shared from other sources to pull information including an individual's name, address and important medical information, such as whether they need a sterile environment, are in a wheelchair or have a mental health problem, to ensure the rescue services are prepared with the right resources.

Financial Ombudsman Service

The Ombudsman was utilising existing technology available to them (Microsoft Master Data Services, Microsoft SQL Server Manager, Power BI), but was looking to enhance their current technology by procuring a dedicated data quality platform. The data governance programme required a robust data quality framework to deal with: data quality issue management, data quality root cause analysis, and reference data management..

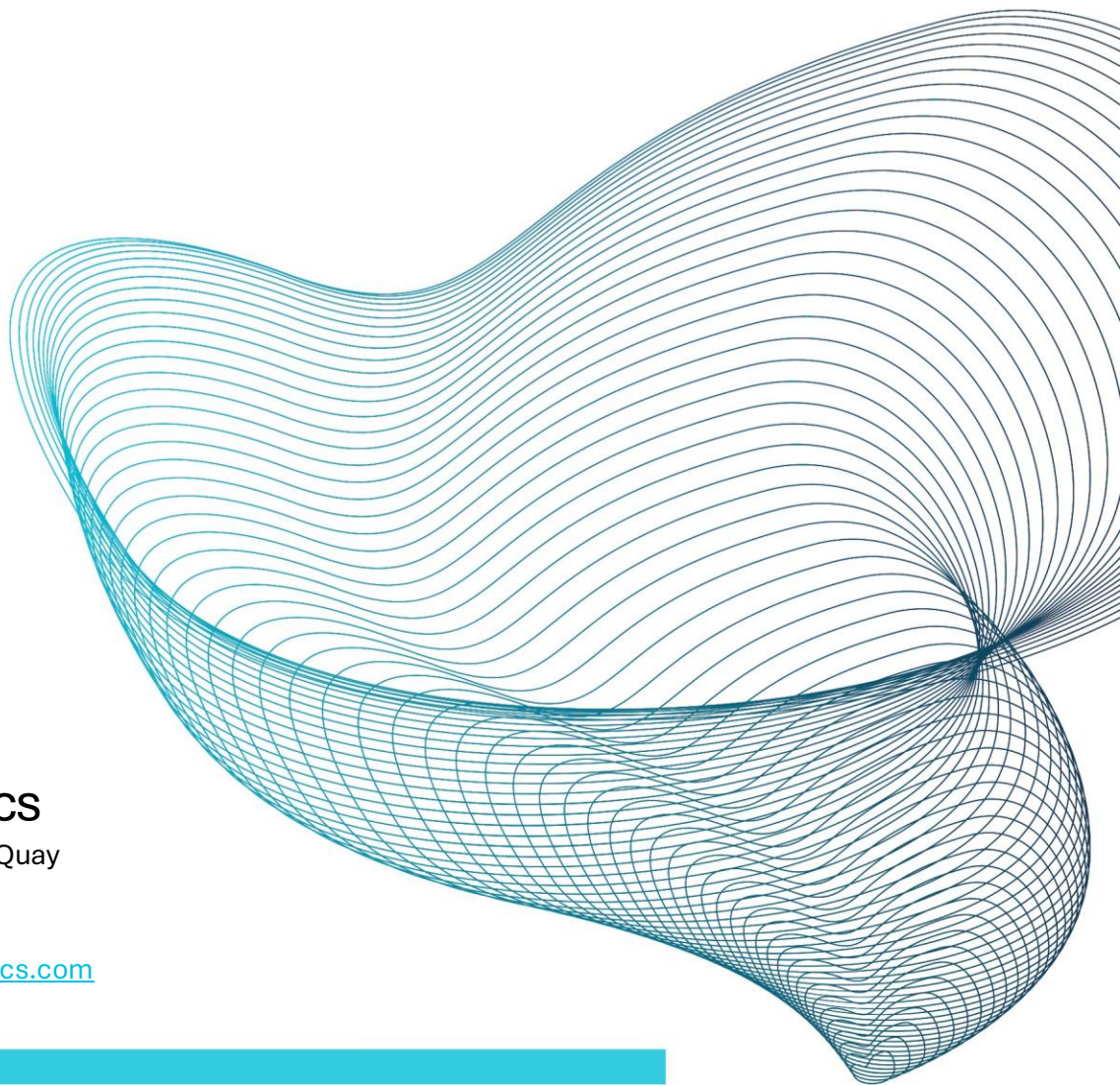
The Dataactics Platform provided a framework for: data profiling for the data governance team to determine which data quality rules to apply to which datasets; centralised repository of data quality rules and workflow automation; discovery, quantification and prioritisation of data quality issues; identification of duplicate records; cleansing, enhancement and validation of data; data quality monitoring across the Ombudsman's systems; extensive data quality reporting via interactive dashboards; remediation of data quality issues via a business-friendly user interface.

The end-to-end system was 'owned' and maintained by the Data Governance team with little involvement from IT resource. Information assets that were formally, properly, proactively and efficiently managed throughout the service resulted in improved confidence in the data from FOS employees, consumers and businesses.



Information contained in this document is, unless otherwise stated in this document, commercial in confidence and is not for onward sharing without the express permission of Datactics Limited.

© Datactics 2026



Datactics

One Lanyon Quay

Belfast

BT1 3LG

info@datactics.com

