

## Koios Group: Data Auditing

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Data is the lifeblood of the modern organisation. That said, the reality is that very few organisations have a comprehensive understanding of the accuracy, coherence or completeness of the data underpinning the systems and processes supporting their daily operation. Numerous independent audits across the private and public sector have identified the high levels of waste and losses arising through factors stemming from flawed data. The sources of this problem are varied, ranging from historically incorrect data inherited through legacy systems to sophisticated fraud. A 2008 survey of 70 councils across England identified that all of them incurred losses through flawed or inappropriate data, some of these being in excess of £5m per year.

The service can be used in many domains within local government, including; benefit fraud, data irregularities and data cleansing, among others. This will directly lead to an increase in data quality – in addition to saving money with regard to fraud detection. This is achieved using a revolutionary product x88 Pandora. The Koios Group service offering is being used in a major urban council for forensic analysis in the area of fraud detection. It is also being used by a number of accounting groups for similar purposes, and being strongly considered by a number of English local Councils for use in a number of different departments, depending on individual requirements.

Due to the large data volumes in most organisations Data Analysis tools only review a statistical sample leading to results that may not be 100% accurate. The results obtained through Koios' Data Auditing service is 100% accurate due to application using all of the data, rather than a sample which is the policy used by competitors.

Having access to 100% of the data allows Koios Analysts to quickly and easily find out where similar values appear in different areas of the data set. They can also highlight any exceptions in the data, e.g. a social security number should always belong to only one person and if this isn't the case the two different people would be highlighted. Changes of a person's address could also be highlighted to ensure that they have lived when and where they have said they have hence helping to combat fraud.

Traditional Data Analysis tools tend to do just that: analyse data. However x88 Pandora used by Koios allows the analyst to go beyond simple analysis through to the specification and execution of business rules. By executing business rules against the client's data the analyst can produce validated data specifications that can be tested repeatedly over different data sets as necessary.

The uniquely non-technical nature of Pandora's data transformation functionality allows Koios to concentrate on what they do best: analysing and understanding your data and improving your business.

This functionality allows the analysts to obtain quick answers to ad-hoc questions, e.g. find all people claiming benefits, group by their national insurance numbers (immediately spotting duplicate fraudulent claims!) and sort by their addresses (are they claiming from more than one

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address?). All of this takes place outside of a live database environment and without having to rely on an IT specialist's assistance in setting up the ad-hoc queries.

If the data is particularly sensitive, for example classified government information, the Pandora application can present a scrambled version of sensitive values. These values although obfuscated will have their syntax and semantics preserved so the KoiOS Analyst can still spot anomalies without knowing exactly what the values are. As mentioned above the client can then pick up the virtual notes left by the KoiOS Analyst to explore the issues further.

Following a number of years working with systems and data in international and UK government markets KoiOS Group have developed a service based capability aimed at addressing these issues. Our capability is founded on a thorough understanding of systems and processes. These are supported in their application by a unique, state of the art software application that enable us to conduct a thorough and comprehensive analysis through profiling all of an organisation's data within a single environment. The analysis identifies data anomalies and relationships across an organisation's systems providing a basis for the full investigation into areas such as financial inconsistency, business efficiency, duplication and fraud.

KoiOS Group services are based on a new, but proven application, x88 Pandora. KoiOS data services are aimed at data quality projects embracing data integration, data governance, master data management, data auditing, data migration, data quality, data compliance and fraud detection. Pandora provides ground breaking functionality for data integration specification, data inventory and ad-hoc data investigation.

KoiOS Group's Pandora based service enables analysts to profile, measure, analyse and prototype all of an enterprise's data. Data can be loaded from a number of different sources and analysed as a whole rather than as individual data sources. KoiOS analysts then derive a view of these data sources based on business requirements highlighting errors and anomalies that may have otherwise been hidden. All too often it is easy to duplicate, mis-key or otherwise generate subtly erroneous data. KoiOS's holistic data analysis identifies anomalies in an enterprise's data, for example by highlighting that there is one national insurance number applied to multiple people.

We would be happy to offer a demonstration to illustrate the power and range of our capability. We believe that we can offer significant benefits to any organisation in deriving a fuller understanding of their data and exploiting this to increase their operational efficiency and capability.

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