

Forensic Data Analytics

KPMG Australia

Forensic Data Analytics offers a blend of investigative and technical skills to solve complex issues in fraud, financial crime, remediation and disputes. We use advanced analytics and problem-solving techniques to help clients find the needle in the haystack.



Fraud and misconduct analytics

As part of an effective fraud risk management framework, organisations need to establish mechanisms to monitor ongoing fraud risk. KPMG's specialists can help organisations implement data driven analytical controls to assist in the early detection of possible fraud and misconduct. Our solutions can range from once off rules-based scans to repeatable, fully automated solutions implemented on cloud environments. This can be applied across a number of domain areas, including in the detection of accounts payable fraud, credit card fraud, insurance claims fraud, payroll fraud and grants fraud.



Analytics to support forensic investigation

Our specialists can apply data analytics techniques in support of a forensic investigation in verifying concerns or allegations of fraud, corruption and misconduct investigations. Instead of manually investigating all scenarios, data analytics can help investigators narrow down the data set to drive efficiencies in traditionally labour-intensive tasks. Our team can also assist in analytics to gauge the scale of the conduct in question, where intelligence suggests there may be systemic issues.



Anti bribery and corruption analytics

Data analytics is an important tool in the detection and management of bribery and corruption risks. We are able to bring KPMG's standardised data analytic routines augmented with external data to accelerate creation of bespoke rules tailored to our client's specific risks and circumstances. Leveraging some of the latest technologies, our teams can visualise relationships on data driven network graphs to illustrate potential patterns of corruption.



Forensic Royalties audit

Our Forensic royalties audit assess and recover potential royalty underpayments from various agreements with third-parties, including examination of contract interpretations, payment calculations, discrepancy identifications and recovery methodologies. We can help you to ensure payments received under the agreements align with the royalties owed. Conduct a thorough analysis that could stand as evidence in potential litigation and establish a transparent, robust debt recovery process.



Customer Remediation analytics

KPMG Forensic have conducted a number of highly complex customer remediations with regulatory oversight for our Financial Services clients. We bring the experience, subject matter expertise and analytical skillsets to identify the impacted customer cohort, calculate the quantum of impact over time and identify who to pay and how to pay as well as who to communicate with via the right channels. We have worked with multiple systems and large, disparate datasets to bring insights from data to the fore and make informed decisions for expeditious remediations



Scheme administration

The administration of class action settlements requires careful consideration of the legal instructions and analysis of data to ensure fair and equitable distribution of payments to group members. Forensic's data analysts can assist with the administration of class action schemes, including application of data matching routines and calculation of loss distributions.



Forensic Foresight

Forensic Foresight is a solution aimed at helping clients undertake continuous compliance monitoring of key risk areas such as employee misconduct, bribery & corruption and trade manipulation. The solution ingests both unstructured data (e.g. emails, instant messages) and combines this with data from core financial systems (e.g. accounts payable, expense management and payroll systems). Rules based analytics techniques are combined with advanced Natural Language Processing methodologies to help organisations identify potential cases of fraud, corruption, bribery or other forms of misconduct.



Cyber analytics

By applying our expertise in data analytics, we can support the Cyber Incident Response team through automation, log analysis and dashboards to help investigators glean insights into network logs, threat actors and security events. Data mining of log channels helps expedite the investigative process of identifying anomalies in user behaviour and other potential data breaches. Additionally, we can create data visualisations to paint a bigger picture of incidents of compromise including I.P addresses which can contribute to reporting and post-incident reviews of vulnerabilities.



Loss quantification

Forensic's Dispute Advisory team provides accounting advice and expert witness evidence to assist in resolving commercial disputes and insurance claims.

Our data analytics specialists help organisations and legal advisers develop analytical models establishing a factual position where facts may be in dispute, or to assess the reasonableness of instructions regarding assumptions to be adopted in calculations. We also help clients develop bespoke scenario models to inform legal and business decisions.



Financial crime analytics

Employing a data analytics driven review, we help financial institutions assess performance of current transaction monitoring (TM) scenarios by analysing historical alert data and performing alert correlation analysis to identify areas for optimisation. We also assist clients with building TM scenarios by conducting workshops to understand business requirements, performing a data quality and data availability assessment, performing customer segmentation and statistical analysis to calculate initial parameters and thresholds, and developing code for scenarios to identify suspicious transactions.

Our data analysts also work with leading industry vendors such as Quantexa to assist in translation of business requirements into implementable, technical rules.



KPMG ThinkPay and other payroll analytics

Australia has a complex industrial relations framework and wage compliance can be tricky. We help clients address challenges with wage and payroll compliance, providing services ranging from investigating whether employees were disadvantaged by non-compliant systems, optimising payroll processes and developing remediation calculations for underpayments. Our approach uses a blend of data analytics, legal and Industrial Relations specialists to help clients navigate through complex industrial instruments and regulations, quantifying the impact of non-compliance and identifying key areas of risk.



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