Procurement fraud & Corruption Data Analysis

Common data analysis methods

An outline of the common types of data analysis to identify the risk of procurement fraud and corruption including the typology that relates to each type of identified risk.

PROCUREMENT FRAUD DATA ANALYSIS

Entry	Typology	Description	Risk/Action
		VENDOR ONBOARDNG	
1	Double billing	Vendor Name	Duplicate company names
2	Fictitious vendor	Vendor Name	With similar sounding name as well-known brand
3	Cartel	Vendor Address	Address is the same as other vendors
4	Fictitious vendor	Vendor Address	Missing or invalid information
5	Fictitious vendor	Vendor VAT Number	Incorrect or incomplete VAT number
6	Fictitious vendor	Post / zip code	Missing or invalid post code
7	Collusive bidding	Telephone number	Same as other vendors or employees
8	Internal collusion	Vendor data audit log	Adding vendor data without authority
9	Corruption	Politically Exposed Person	Vendor linked to Government official or Politically Exposed Person
10	C of Interest Corruption	Vendor/employee matching	Check for matches or fuzzy matches of vendor/employee information
11	C of Interest Corruption	Consultant/sub-contractor/employee comparison	Check for matches in consultant/vendor and sub-contractor/employee
12	Collusion Corruption	Illicit adding of vendor to master vendor list	Can vendors be placed on eProcurement system without dual controls
13	Collusion Corruption	Deleting supplier from master vendor list to reduce competition	Can suppliers be deleted from master vendor data list without dual controls
		VENDOR BIDDING DATA	
14	Collusive environment	Same vendors submitting bids in projects	Schedule current and historical bidding data for identified colluding company patterns
15	Bid rigging	Nonresponsive vendor to Invitation of tender	Pattern analysis of current and historical non-responsive bids. Consider contacting vendor to clarify non-response
16	Bid rigging	Nonresponsive vendor	Pattern analysis of current and historical bids to assess if this is a common practice and pattern of same competing companies
17	Bid Suppression	Bidding company withdrawal from bidding process	Pattern analysis of current and historical bids to assess if this is a common practice and pattern of same competing companies
18	Cover bidding	Bids too high, ruling company out of selection	Pattern analysis of current and historical bids to assess if this is a common practice and pattern of same competing companies
19	Bid suppression	Bidding company making too many conditions within bid	Pattern analysis of current and historical bids including companies linked to bid rigging
20	Bid manipulation	Bid sent to unqualified vendor.	Analyse bids where vendor continually wins bid to determine whether bidding companies are qualified to compete
21	Bid rigging Collusion	Nonresponsive bidders	Verify how many cases were there non-competing vendors including type of contract/project
22	Bid manipulation	Vendor not qualified to complete requirement	Monitor category management, is there a change or addition in vendor category

23	Bid Rigging Manipulation	Manipulation of the bidding process	Annual analysis in which only one bid was received in tender process
24	Bid Manipulation	Manipulation of the bidding process	Short response deadlines against number of vendors response. Are there common winning vendors
25	Corruption	Manipulation of the procurement route	Single source or direct award contract where values or other selection criteria would require introduction of tender process
26	Bid manipulation Bid rigging	Manipulation of bidding process to ensure only one vendor responds	Percentage of bids where only one vendor responds. Is there a pattern of winning vendor and values of category spend
27	Bid manipulation Corruption	Short advertisement/tender response timescales	Short advertisement/tender response timescales against vendor information to identify common winner of tenders

ACCOUNTS PAYABLE

28	Collusion	Contract price the same as invoice value	Analyse and extract non duplicates from AP data. Examine why figures are different. Consider financial recovery
29	Collusion corruption	Split orders	Analyse PO/Invoice and authorisation/approval levels for split orders and regular transactions just below financial thresholds
30	Collusion	Vendor aggregates spend over financial threshold	Analysis of vendor spend data to establish if tender thresholds are being manipulated
31	Corruption Collusion	Payments diverted	Manipulation of bank account details. Audit of bank details input/update function
32	Fictitious works Corruption	Split orders	Check for round numbers i.e., $10,000 for goods, works or services from same supplier. Are they single source
33	False invoices	Annual payment comparison and trend analysis	Compare annual financial data to determine whether there has been significant increase, decrease or consistent payment totals to vendors
34	Bid manipulation	Dormant vendors	Identify whether dormant vendor is being used as part of RFQ process
35	Collusion Corruption	Regular authorisation of overpayments	Analysis of regular overpayments to vendors to determine if a specific individual involved or controls failure
36	Overbilling	Invoices more than Purchase Order/Contract	Comparison analysis between agreed and invoiced amounts
37	Overbilling	Invoice with inflated rates	Compare rates charged against agreed rates contained within contract
38	False Invoice Collusion	Invoices received without Purchase Order	Percentage of invoices received without requisition of purchase order. Have goods been received or services completed
39	Corruption	Invoices paid without Purchase Order	Percentage of invoices paid without requisition or purchase order. Have goods been received or services provided
40	Bribe payment	Advanced Payments	Single source supplier payments where procurement is not urgent
41	Bribe payment	Advanced Payments	Check of annual advanced payments against change of bank account details to verify if used to facilitate bribery payment
42	False invoices	Inflating invoice amounts	Compare resources on the ground, contractor time sheets against submitted invoices including scarce resources
43	Procurement Fraud	Spend analysis	Excessive spend or number of contracts for new vendor
44	Corruption	Payment analysis	Where organisation practice of paying suppliers late, analysis of suppliers that are paid early
45	Procurement Fraud	Change of bank account details	Changing vendor details and country of origin of company, two different companies
46	Procurement Fraud	Change of bank account details	Different vendor and bank account name
47	Procurement Fraud	Missing bank details	Missing banking information, therefore unable to track payments
48	Procurement Fraud	Wrong bank details	Vendor registered with a different bank account name in the system
49	Procurement Fraud	Duplicate details	Different vendors registered with the same bank account details
50	False invoices	Sequential invoices	Sequential invoice numbers from the same supplier
51	Double billing	Work tickets	Same work ticket billed for on multiple invoices.

52	Double billing	Work tickets	Same hours billed for on multiple tickets.
53	Fraud and Corruption	Inflating prices	Analysis of year-on-year purchase prices for excessive price increases
54	Fraud and corruption	Avoiding tender process	Multiple purchases of the same item/materials from the same supplier on the same day

ePROCUREMENT DATA			
55	Ghost company	Duplicate Vendor ID	Verify if done in error or is being used for fraudulent payments
56	Collusion Corruption	Vendor data audit log	Removing vendor data without authority
57	Asset Misappropriation	5 Way check	Verify requisition, purchase order, invoice, goods receipt, and asset register record to assess pattern in missing data
58	Procurement Fraud	Missing data	Missing data within eProcurement system may be used to hide the fraud
59	Corruption	Categories spend	Analysis of finance data to ensure that vendors are not being tasked for work and invoicing outside of the scope of contract.
60	Procurement Fraud	Delegated Procurement Authority	Check financial authority limits against contract value and invoices to assess pattern of avoiding oversight
61	Procurement Fraud	Non-catalogue spends	Increased percentage of non-catalogue spend that inflates the prices given by vendors
62	Procurement Fraud	Non-catalogue spends	Does the cost-plus percentage remain high as the price for goods/materials increases
63	Corruption Collusion	Categories spend	Increased percentage of year-on-year category spends for suppliers. Is there a significant increase outside the norm

ASSET MANAGEMENT			
64	Asset Misappropriation	High value items	Monitor high value items missing or documented as lost
65	Asset Misappropriation	Attractive or high quantity items	Monitor of attractive items or high quantity of the same items missing or documented as lost
66	Asset Misappropriation	Missing data	Missing data within warehouse and asset management where goods are missing/lost
67	Asset Misappropriation	Write off, damaged or obsolete materials	Analysis of disposal process against high value, attractive or high quantity of items
68	Product substitution	Regular reports of quality and product failure	Verify if parts are counterfeit or substituted products by analyzing normal failure rates and confirm with Original Manufacturer (OEM)
69	Asset Misappropriation	Misuse of single source procurement	Compare new materials described as lost against single source procurement
70	False invoices	Inventory comparison	Comparison of trucks and equipment charged against inventory.