



IDEA UK User Group

BDO's Use of IDEA and its future in the company

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OVERVIEW

- How we use IDEA as a firm
- What we have learned
- How we are using data analytics more broadly
- Future use of IDEA
- Implications of GDPR
- Questions?

HOW WE USE IDEA AS A FIRM

Computer Aided Audit Techniques (CAATs)

- Data analytics in internal audit is becoming increasingly important as the business landscape for most organisations becomes increasingly complex and fast paced.
- According to the Chartered Institute of Internal Auditors' (CIIA) professional practice standard 1220.A2, internal audits must “*consider the use of computer-assisted technology-based audit tools and other data analysis techniques when conducting internal audits*”.

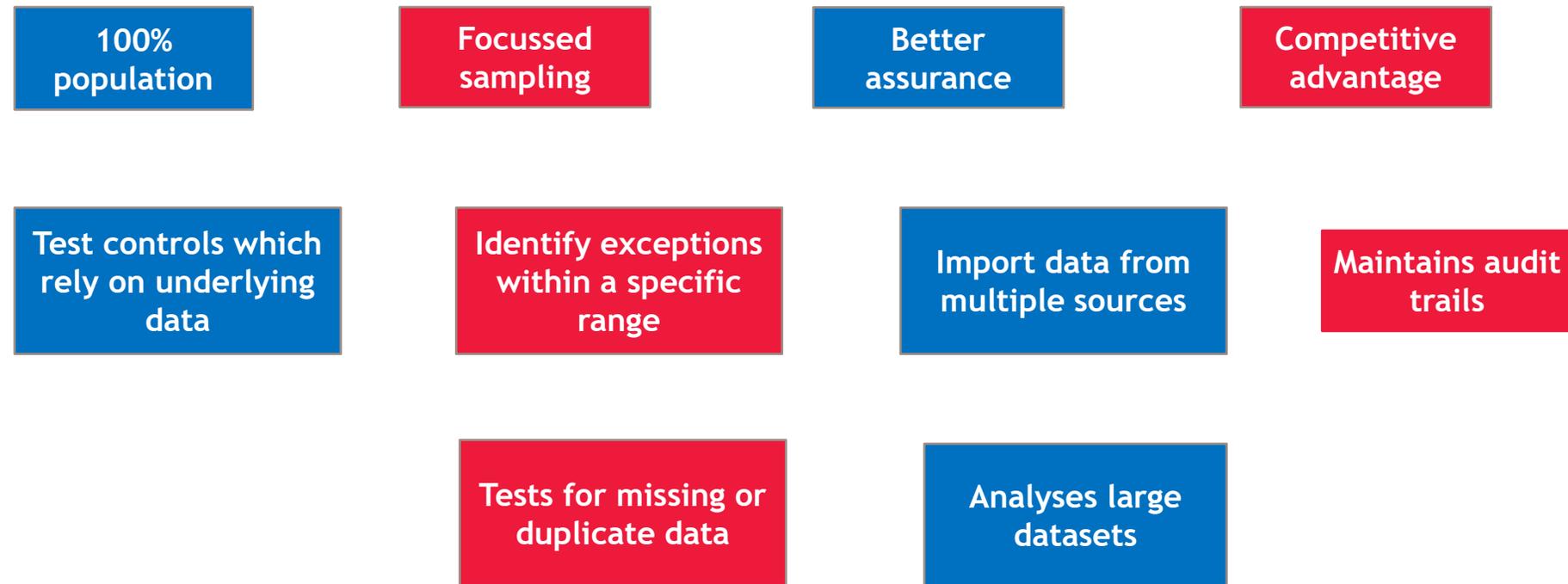
DATAANALYTICS

The use of data analytics will be considered.

- As a result, a section on the use of data analytics was added as a standard item in our internal audit terms of reference.

HOW WE USE IDEA AS A FIRM

What are the benefits of IDEA?





HOW WE USE IDEA AS A FIRM

Why do we use IDEA?

- A complete audit trail of all changes made to the data, tagged with the users Window's log-on details
- Ability to import data from multiple file formats
- Unlimited record size (which is not the case with Excel!)



HOW WE USE IDEA AS A FIRM

Typical IDEA tasks include:

- Compare, join, append and connect different files from different sources.
- Extract specific transactions, identify gaps (for example, in a cheque number sequence), or duplicates.
- Profile data by summarizing, stratifying, or aging the files
- Create useful file statistics automatically.
- Create samples using different sampling methods.

HOW WE USE IDEA AS A FIRM

The type of tests we do

CAATs for Internal Audit Suite of Standard Tests



CAATs for Internal Audit
Suite of Standard Tests
Draft V1

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HOW WE USE IDEA AS A FIRM

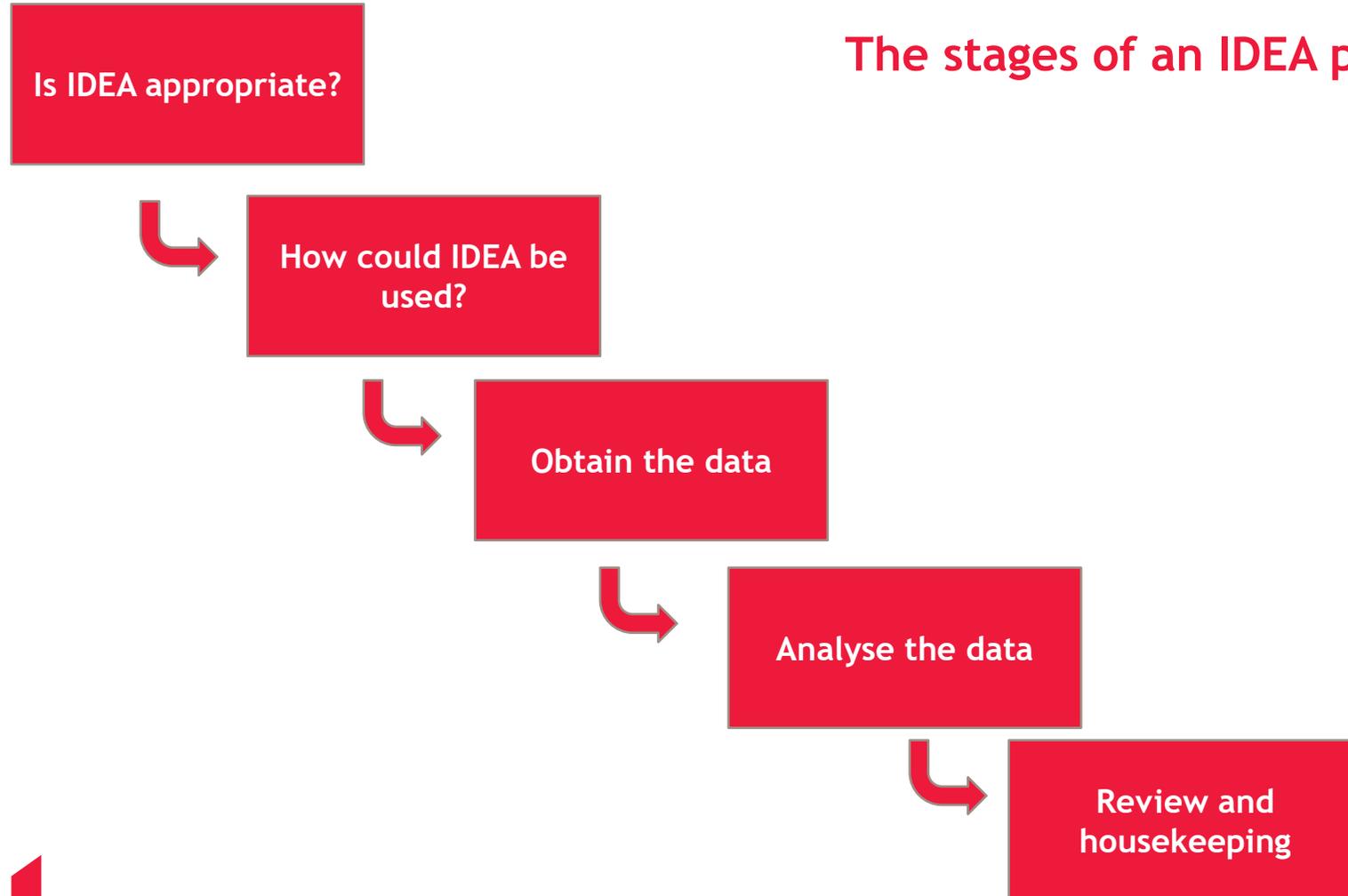
Example Accounts Payable tests that we would perform

- Duplicate supplier codes
- Blank supplier codes
- Duplicate supplier name
- Duplicate address
- Duplicate supplier name and address
- Blank supplier name
- Blank address
- Duplicate bank details
- Blank bank details
- Duplicate address and bank details
- Blank address and bank details
- Duplicate supplier name but different address
- Duplicate supplier address but different name
- Duplicate supplier bank details but different name
- Duplicate supplier name but different bank details
- Blank last payment date
- Last payment date before 2015
- Summarisation of payment types
- Supplier transactions without a supplier code in the standing data
- Supplier transactions created on a weekend
- Transactions with round sum amounts
- Summarisation of transaction types
- Top 20 supplier transaction
- Zero valued supplier transactions

Mandatory tests

HOW WE USE IDEA AS A FIRM

The stages of an IDEA project

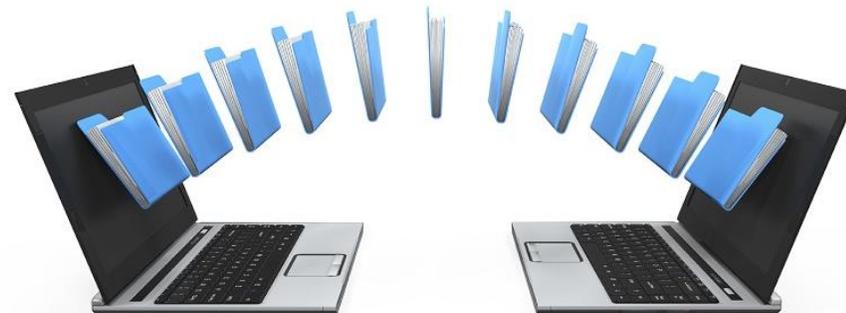


WHAT WE HAVE LEARNED

Getting the correct data is the most difficult part of an IDEA project

We need to ensure that we:

- Understand what we are trying to achieve
- Understand the data we need to achieve it
- Ensure the data provider understands what they need to provide
- Have scoped in enough time to receive the data, check it and confirm it's appropriate *before* you start the analysis





WHAT WE HAVE LEARNED

The correct data at the correct time; otherwise garbage in, garbage out

Considerations:

- Where is the data coming from?
- What format will the data be in?
- How will it be transferred?
- How do I know I have a complete set of data?

“CONTROL TOTALS!!!”

WHAT WE HAVE LEARNED

Initial processing

When you've received the data:

- Copy it to a suitable location on your machine
- Do an initial sense check
- **PRE-PROCESS THE DATA!!!!!!!!!!!!!!**
 - Delete totals
 - Delete information above headings
 - Delete information below data
- So that we are left with a series of headings and the data under each heading

WHAT WE HAVE LEARNED

Factors/constraints that limit the use of IDEA





WHAT WE HAVE LEARNED

Accounts Payable

- Identified a £25k duplicate payment which the client was able to subsequently recover

Payroll

- Identified a leaver that had been kept on the payroll and was still receiving payments up to £30k

Business Development

- Had three client wins recently where data analytics was included as part of the proposal/presentation

Gas Servicing

- Identified a number of gas properties included on the housing management system that were not present on the gas servicing data base and vice versa



WHAT WE HAVE LEARNED

Conclusions

- IDEA is a powerful, versatile and file interrogation tool that enables us to conduct data analytics as part of our audits.
- It is important that we receive the correct data prior to using IDEA.
- The data should be examined to ascertain what tests we can complete in line with assurance objectives.



HOW WE ARE USING ANALYTICS MORE BROADLY

Our Strategy

- BDO has a number of data analytics and data mining tools, such as IDEA
- As part of our strategy we are also developing a further suite of tools to enhance our analytics capability (e.g. BDO Advantage, bespoke tools and process mining tools) and a project is on-going on this.
- Project is split by sector and by common IT platform.

HOW WE ARE USING ANALYTICS MORE BROADLY

BDO Advantage

- BDO Advantage is a data analytics tool which is able to analyse a client's entire dataset.
- It provides powerful visualisations which help auditors to understand client transactions and identify outliers.
- Audit of journals was the first area for which the tool is being widely used. However, there are other uses. For example, accounts payables, revenue, inventory, and supply chain.

HOW WE ARE USING ANALYTICS MORE BROADLY

BDO Advantage

TECHNICAL FEATURES

PLATFORM RELIABILITY	A proprietary tool built on Qlik's leading edge data analytics software
DATA QUALITY	Assesses quality of data in key fields as its being loaded
USER FRIENDLINESS	Structured to gradually immerse users in the data and visual outputs
FOCUSED ANALYSIS	Manipulation of data and filters to focus on large or unusual items
AUDIT TRAIL	Insights into segregation of duty breaches, process overrides and staff loading peaks
SMART CONFIGURATION	Pre-configured tests to identify non-recurring duplicate entries and exceptional items
NOMINAL CODE	Full GL data set loaded to tool enabling extraction of detailed transactions from nominal code

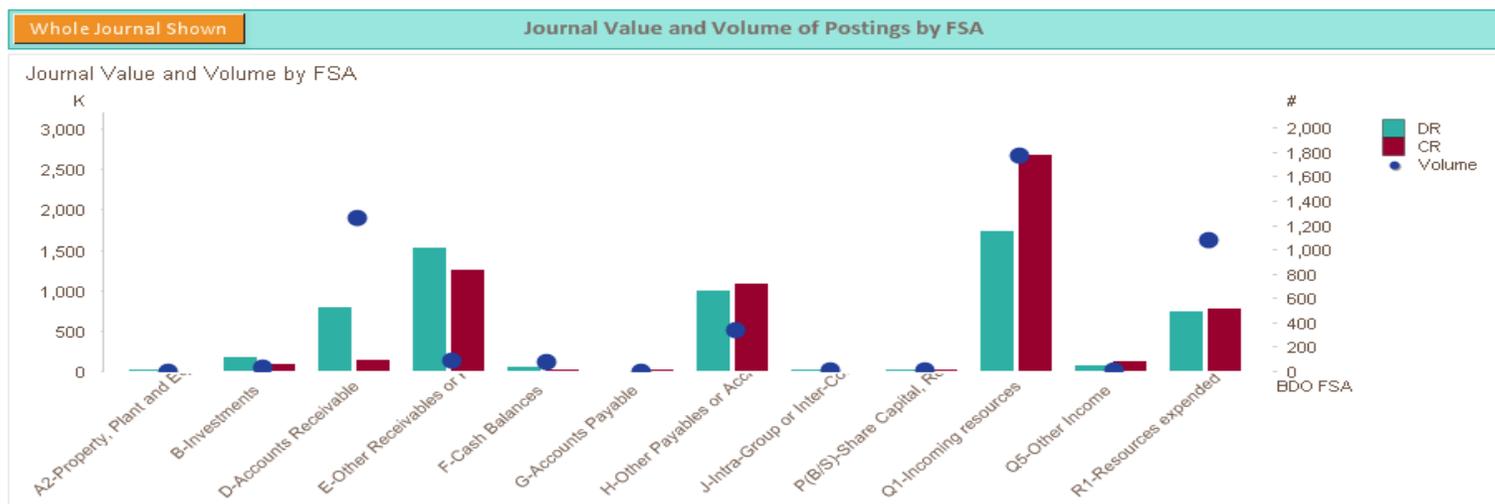
BENEFITS TO THE AUDIT

▶ Bespoke data analytics solutions that meet client / industry needs, underpinned by reliable technology
▶ Identify matters that may undermine completeness and accuracy of internal reporting
▶ Jointly explore trends to improve understanding of General Ledger (GL) transactional data and obtain new insights
▶ A focused audit where the amount of time finance staff spend on audit activity is greatly reduced
▶ Senior finance personnel have ability to make their own enquiries and 'mine' their own data
▶ Visibility of poor adherence to procedures / controls, and minimise risk of errors with internal reporting
▶ Reduction in time required to provide us individual nominal code extractions or balances breakdowns

HOW WE ARE USING ANALYTICS MORE BROADLY

Review of Journals to Incoming Resources

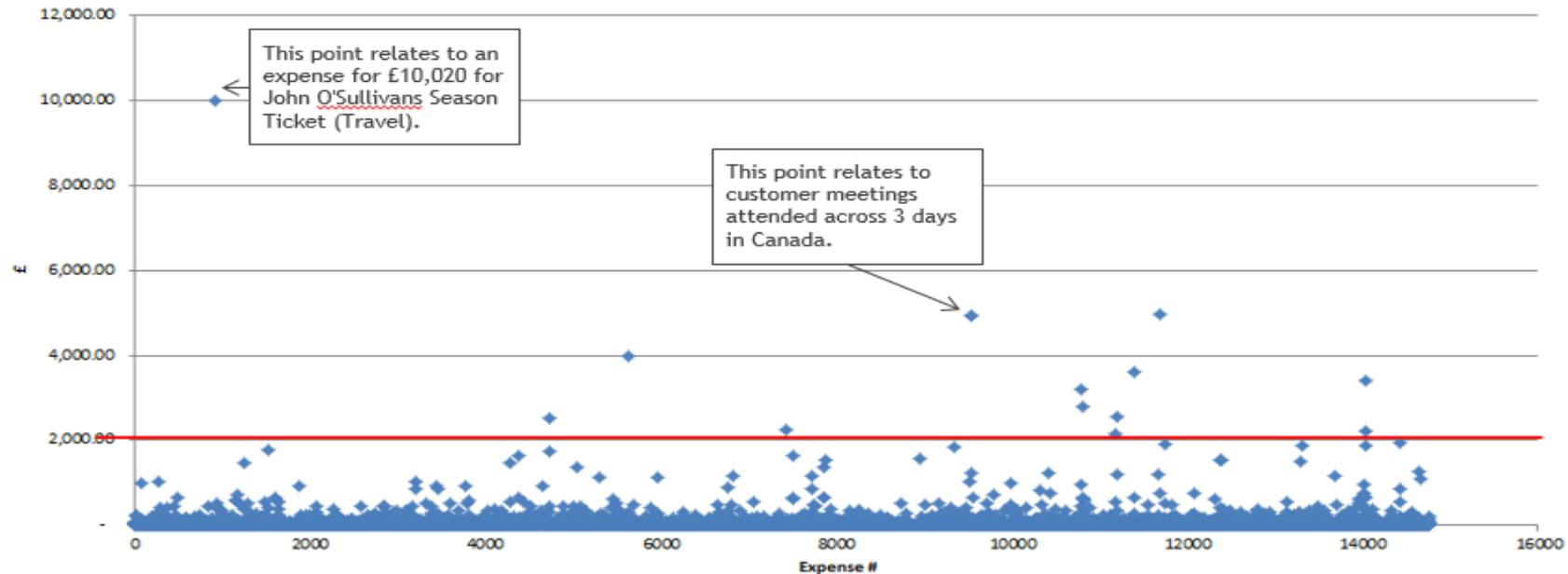
BDO Advantage was used to enhance manual journals testing to different income streams. The below graph shows the double entry posting for journals that have an element going to income streams. We reviewed the underlying accounting rational for each journal and focused testing on journals posted that were not expected as part of the sales cycle.



HOW WE ARE USING ANALYTICS MORE BROADLY

Expenses

To review the possibility of the manipulation of the expenses policy and therefore the possibility of fraud, *BDO Advantage* was used to plot each individual expense by value against authorisation limits. It was expected there would be peaks just before each limit if expenses fraud was occurring.





FUTURE USE OF IDEA

- All RAS staff have been trained - but some do not get it!
- Enforce use of mandatory tests through our quality review processes
- Agree sufficient budgets for IDEA use
- Development of test queries/scripts to automate IDEA tests allowing simple data drops
- Cross stream implementation into BDO services:
 - Forensics - Fraud analysis and investigation
 - Audit - Similar to BDO Advantage
 - Tax - Several applicable VAT tests



IMPLICATIONS OF GDPR

- Data cleansing to identify personal identifiable information in structured data
- Data summarisation to segment data into the 6 legal basis for processing information
- Data discovery - BDO's bespoke tool that can quickly identify data-sets which will be impacted by GDPR
- Identifying missing information in the data asset register.

QUESTIONS

